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TOTAL QUALITY MANAGEMENT: PERCEPTIONS OF SECONDARY SCHOOL TEACHERS/EDUCATORS ON TQM IN THE LOBATSE,SOUTH-EAST AND KANYE AREAS OF BOTSWANA.

MASTERS OF EDUCATION

(EDUCATIONAL PLANNING AND ADMINISTRATION)

BY

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DECLARATION

I PATRICK LESEGO MONGGAE declare that the dissertation for the degree of Masters of Education (M.Ed) at the University of North West hereby submitted has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and execution and all the materials contained herein has been duly acknowledged.

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ABSTRACT

The focus of this research study is to determine teacher's perceptions on Total Quality Management(TQM) in secondary schools in the Lobatse area,Kanye area and the South East District of Botswana.Lobatse is an urban area and this research was carried out in all the secondary schools of the town, whilst Ramotswa and Kanye are peri-urban areas. The schools in which this research was carried out consist of both Junior secondary schools and Senior secondary schools.TQM basically means conscious improvement, in this context on matters of education. Only well managed schools can provide quality education and "managed education" means quality education. School facilities,teachers,the principal, the students, learning materials, teaching methods, assessment and technology, forms the base in educational success in all corners of the global village. Therefore for the success of any form of education to be a reality, the above measures should always be available.

A survey in the form of a questionnaire was carried out with the intention to get views from teachers form the locations mentioned above as samples. The perceptions are not radical from each other in general on matters pertaining to how education is administered generally in Botswana.

However it is worth noting that to come up with a broad outline on important views from teachers, the questionnaire was systematically broken into subtopics each dealing with a specific area of interest in the profession. Those ranged from the biographical and demographical data that include among others ;gender, age category, school location, school enrolment, academic qualifications among others.

The study also dealt with all the measures that inculcate TQM as a tool to improve effectiveness, productivity and performance, the role of school management in the improvement of quality education, Total Quality Management principles and implementation of Total Quality Management in schools.

Total Quality Management is also equated to Work Improvement Teams(WITs) and the Performance Management Systems(PMS).In this a strong academic relationship was realized since all theses programmes emphasize efficiency and productivity at workplace. If there is any difference among the three the there is a thin line of that hence the different ways they have been coined.

Under Qualitative data, teachers were given a form to jot down their views and perceptions about Total Quality Management. This is a more open portion and views ranged from worries and concerns about the conditions of service that ranged from matters of accommodation, salaries and

advancement in education like being sent for further education and being sent for courses to update themselves with the latest technology needs so as to increase accessibility of information in the process of teaching and learning in the classroom.

Over and above other factors the research was a great success.

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can either be a combination of meeting client's needs or fitness for purpose/value for money (Bostingl,1992).

This chapter provides the rationale for the study, the aims of the study and thorough understanding of the problem under investigation. The chapter also attempt to come up with comprehensive and detailed information on the problem. The research design is given and terms relevant to the study are defined.

1.2 STATEMENT OF THE PROBLEM.

A ministerial consultative committee on education was set up in 2001 to look at why the education system of Botswana seemed to be stagnant and characterised by poor results. The committee was set up to look at the loopholes that were there in the education system of Botswana. The following were observed;

- The education system of Botswana is operating in a vacuum. It offers very little in terms of market and working expectations. Clients are looking for education that cannot offer immediate and rewarding employment as well as further education opportunities on completion of their learning. (Ministry of Education Consultative Report, Botswana, 2001).

- Parents do not have a significant role in the formulation of education policies; they are shown ready-made ideas/policies. (Ministry of Education Consultative Report, 2001).
- Board of directors especially in junior schools did represent neither students nor parents' interests. They turn to be there for personal interests. (Ministry of Education Consultative Report, 2001).

- Decisions from Senior Management Teams are imposed on teachers, students and parents, there is no consultation. (Ministry of Education Consultative Report, Botswana, 2001).

- There is no proper flow of information. The top-down flow of information, whereby instructions or orders from the top is the order of the day, for example, posting of teachers is not done fairly; some are sent to rural areas forever and are never transferred to other areas to widen their experience. (Ministry of Education Consultative Report, Botswana, 2001).
- Posting of teachers is still not done fairly. Rural areas experience serious shortage of qualified teachers whereas peri-urban centres do not experience the same thing. Some headmasters are sometimes forced to employ temporary teachers due to shortage of staff. (Ministry of Education Consultative eport, 2001).

- There is a gap between parents and teachers. The welfare of the students depends on the cooperation of the two. Teachers act as parents during school hours that in (loco-parentis). There is therefore no proper and well co-ordinated link between parents and teachers making Total Quality Management an impossible task or undertaking Parents' withdrawal from participating in school activities and in the academic performance of their children makes TQM to be more idealistic than realistic. In short there is inadequate linkage amongst all the stakeholders, everyone find themselves having boarded a train that they do not know where it is going – in the end objectivity is never reached. (Ministry of Education Consultative Report, Botswana, 2001).

Vision 2016 Pamphlet of Botswana (1997) has embarked on a broad based 'vision 2016'of which education is part of the issues dealt with. It is still however, very important to realise that there are problems with today's education system. Students are leaving or graduating from secondary schools, colleges and indeed universities under-prepared to meet the demands of the society. (Long term Vision for Botswana 1994). The problem has a serious negative effect to societies. Students become a burden because they are primed to become responsible and productive citizens. Such students are products of an education system that does not focus on quality; the end result is that they impact on social welfare costs. Most if not all come into collision with the criminal justice system. Due to the problems incurred, these students, who

are products of an education system that does not emphasise more on quality are in most cases not prepared to meet the needs of the next generation. As a result of all these negative factors, such students/citizens feel alienated from society.

Arcaro (1995) stipulates that TQM requires a change of approach. This entails a shift of attitudes and working methods. The value of TQM needs to be understood by staff in institutions if it has to make an impact. Change of approach is not only concerned about changing the behaviour and attitudes of workers. The way educational institutions are managed needs to be changed also. In such institutions emphasis should be there, meaning that an atmosphere of quality should be initiated and should be seen to be implemented. Bonser (1992), states that educational enterprises must find out where they are now, where they want to go, and change to management practices which will enable them to get there. Education needs to tailor its approach to quality management (Navaratman and Wallace 1994).

According to Arcaro (1995), two important factors are mandatory or necessary for staff to produce quality. Firstly, staff needs a suitable environment in which to work. They need the tools of the trade and they to work with the systems and procedures which are simple and which aid them in doing their jobs. The environment that surrounds staff has an effect on their ability to execute their job appropriately and effectively. Among the major environmental features are systems and techniques with which they work. Laying down good and workable procedures on its own does not produce quality. If procedures are poor and misleading or are never set in place, it makes producing quality extremely difficult. (Navaratman and Wallace, 1994).

Secondly, to do a good job, the staff needs encouragement and recognition of their successes and achievements. They need leaders who can appreciate their achievements and even train them to tremendous success. The motivation to do a good job comes from a good and an appreciative leadership style as well as an atmosphere that heightens self-esteem and empowers the individual (Sallis1996, Dale 1994, Greenwood & Gaunt, 1994).

Every system consists of processes, and the improvements made in the quality of those processes in large part determine the quality of the resulting learning outcomes,

earch outcomes and service outcomes. Many educational systems have not grasped e notion of constancy of purpose, process management and continuous improvement Olian and Rynes, 1991).

Domb (1996) argues that, a systematic approach to quality management is needed to implement an effective and efficient quality management strategy that can deliver notable service and consistently demonstrate quality. This means that organisations implementing quality must focus on total organisational transformation through quality management. Deming (1986) has helped the Japanese improve their quality and quantity by preaching that management, not workers, are the primary means through which improvements in quality and productivity can be made. He believed that managers have not learned to co-operate and co-ordinate well between themselves, their workers and organisations. Deming (1986), further argues that, the primary purpose for an organisation is to provide meaningful, satisfying jobs for employees. He stated that producing quality is the result of setting accurate standards for all the processes that yield an organisation's output, minimising variances from those standards, and then working to set higher standards once operations have been controlled.

Organisations must become more focused on building teams and employees who are more involved in planning ahead and whose members take more responsibility, for everything, especially with regard to customer service. Managers have to figure out how to motivate, co-ordinate and conduct these collections of individuals, whether in an organisation or in a school situation. TQM starts with articulating indisputable/clear and limited goals about where the organisation or the school should go (Deming 1986).

Bostingl (1992) argues that an effort to improve quality depends on employee attitudes, and the attitudes of employees depends on their work environment. It is only the management that can change the work environment. Managers need to create, manage, sustain and nurture the environment in which learning and value creation can occur. The organisation should support its employees, develop their skills and create enabling environment. Quality goes with productivity. Improvement that leads to increased productivity must also lead to increases, or sustain high levels in the quality

of the product or service. From design to implementation, every effort must be made to give a personality that dictates quality to each product and service. Everyone involved in the product must be trained and be willing to think about quality in all the organisations' operations (Murgatroyd 1993).

Sallis (1996), further argues that, without managers at every level and in every department working their best to ensure high productivity and quality, their best made plans will simply not bear fruit. Domb (1996)'s views are that improvements to both quality and productivity begin with a commitment from the top of the organisation to achieve total quality management, a commitment from all the people involved with a product to meet the quality standards set for it. Morgan and Murgatroyd (1994), are of the perception that quality management needs a substantial financial and management commitment during the early years of its implementation.

There is a real need to manage the systems and resources well in education and training. Several existing and emerging publications, discussions and debates among academics and non-academics regarding the application of quality management concepts and strategies in all forms of public and private education support the view that the quality movement in education is an international phenomenon and the quality of learning outcomes, products and services are equally as important as manufactured goods and services (Bostingl, 1992).

Morgan and Murgatroyd (1994) are of the opinion that a substantial number of modern day administrators, principals, teachers and managers in the educational sector are aware of what quality is all about and from this point of view quality in education is not a new concept any more. However, it is a fact that the implementation of quality involves a certain element of risk to the organisation even if it is approached systematically and sequentially.

The study was guided by the following questions:

1.How important is TQM in the improvement of the quality of education?
2.What are the challenges/barriers facing the managers in the implementation of TQM?

3.What are the ways/strategies that can be employed for the successful implementation of TQM?

1.3 Aims of the study: -

The aims of this research study can be operationalised from the above mentioned research question that provides the focus of this research:-

From the above mentioned questions that guide the study, the aims of the study will be operationalised as follows:-

Aim 1: - To determine from literature, the nature and scope of total quality management (TQM) in education.

Aim 2: - To determine empirically, teachers' views on Total Quality Management in secondary schools.

1.3 RESEARCH METHODOLOGY:

This research study was conducted through the following;

1.4.1 Literature Review:

In review of literature, a thorough study of primary and secondary sources will be made, with the intention of collecting information on the nature and scope of Total Quality Management (TQM) and how total quality management can be utilised as an instrument to improve the quality of education in Botswana's secondary schools.

A dialogue search will be done on the following terms:-

- Quality in education;
- Productivity in education;
- TQM and Education;
- TQM and Teaching;
- TQM and School;
- Education and Quality;
- TQM and School Management;
- TQM and Effective Schools;
- Effective and educational management;
- TQM and Productivity;

- TQM and Human Relations in Education;
- Quality and Education.

1.4.2 Empirical Research

1.4.2.1 QUESTIONAIRE

A questionnaire will be developed and pretested. The aim of the questionnaire will be to collect information from secondary school headmasters, deputy headmasters, heads of departments and teachers views on TQM principles to improve the quality of education in secondary schools inn the Lobatse area and the Southeast District of Botswana participated in the study.

1.4.2.2 Population and Sampling:

From a list of secondary schools in the Lobatse area (N=5), the South-East District (N=7) and Kanye area (N=7) a total of (N=19) secondary schools were engaged in this research project. In total from the nineteen secondary schools 14headmasters, 10deputy – headmasters, 15 heads of departments, 28 senior teachers and 133 teachers were requested to complete the questionnaire. A total number of (N=200), responded in the nineteen secondary schools in the Lobatse area, Kanye area and the South - East District of Botswana.

1.4.2.3 Data Analysis:

With the help of statistical consultant of the University of the North –West, computer statistical analysis will be employed. The computation of frequencies (*f*) percentages (%), mean *X*, Standard Deviation (*SD*) was conducted.

1.4 DEFINITION OF CONCEPTS:

Total Quality Management

Total Quality Management (TQM) refers to an organisation's wide effort to achieve quality. It is a philosophy about quality that involves everyone in the organisation in the quest for quality (Stevenson, 1996).

Total Quality Management (TQM) is a holistic approach to management that applies to all levels of an organisation, every relationship, every process. In essence TQM is

value driven placing a fundamental significance on values and purpose (Deming & Juran, 1996).

Quality

Quality refers to the degree of excellence, standard, grade or level (The Oxford Paperback Thesaurus, 1994). Quality refers to the totality of features and characteristics of a product or service that bare on its ability to satisfy stated or implied goals (Murgatroyd and Morgan, 1993).

There are popular alternative concepts of quality, among these are the following:

'Quality is fitness for use;

Quality is doing it right for the first time and every time;

'Quality is the customer perception'

'Quality provides a product or service at a price affordable a customer can afford'

'You pay for what you get (quality is the most expensive product or service' (Everett E.Adam, Jnr.Ronald J.Ebert, 1989).

TQM extends to suppliers and customers. The customer is the point of convergence and customer satisfaction is the driving force. In this case, the customer is the learner. Total participation is vital, because everyone in the organisation from political appointees on matters of education (Minister of Education), down to the parent of the learner must be involved and committed.

Secondary schools:

This term refers to post –primary schools. In the case of Botswana's education, there are Junior schools, which offer post –primary education from form one to form three (Junior Certificate in education) and then senior secondary schools which offer from form four to form five (Cambridge Certificates in education). Thus, secondary schools generally refer to schools that offer education from form One to form 5 with respect to their lineage.

District: -

The term district refers to a location in the Southeast of Botswana. Ramotswa is the administration centre. Secondary schools found in this district include the following; Kagiso Senior Secondary School, Baitlotli Junior Community Secondary, Ramotswa Junior Secondary School, Kelemogile Community Junior Secondary School, Taung Community Junior Secondary School, Mogobane Community Junior Secondary School and Baratani Community Junior Secondary School.

In the Lobatse area, which falls under a town council, schools found in this area/location include the following, Lobatse Senior Secondary School, Itereleng Junior Secondary School, Letsopa Junior Secondary School a swell as Baitirile Junior Secondary School.

In the Kanye area we have the following secondary schools; Bathoen Secondary school, Mathiba Secondary School, Mookami Secondary School, Ngwaketse Secondary School, Ntebogang Secondary School, Tlhomo Secondary School as well as Chichi Secondary School.

1.6 CHAPTER READINGS:

1. Orientation
2. Nature and Scope of total quality management
3. Research Methodology
4. Analysis and Interpretation of data
5. Summary, recommendation and conclusion

1.7 Summary

In this chapter, all the information that is contained forms the core or the backbone of this research project. A brief orientation to the study outlines the statement of the problem and formulating the aims of the study is further improved. The main focal point of the study is to determine teachers' views or perceptions on how total quality management (TQM) can be used in secondary schools as a tool to improve the quality of education in Botswana.

CHAPTER 2

2. LITERATURE REVIEW

2.1 Introduction

Total Quality Management is one of the most well coined concepts in education as in other fields like manufacturing, business ventures as well as the broad commercial world. Declining school performance is not caused by the inadequacy of traditional school administrative practices to meet today's requirements. We usually look for something wrong with teachers, children and parents, or teaching techniques and materials. Seldom we look for the cause on the human side of school management i.e. changes in the internal operations and outside circumstances of schools, and how these are impacting on the people involved -i.e. teachers, administrators, parents and students.

In the contemporary world, there is a lot of competition in all spheres of life and therefore total quality management has been coined as a way of meeting the needs or trying to meet the needs of workers, customers, and most of all to turn productivity or excellence from being an ideal thinking into a proper realistic endeavor. The manager at the top (in the context of education – the headmaster) and the middle manager (the teacher), must be seen to be operating within the parameters of quality education. The result should be good performance on the part of learners during the examinations. Total Quality Management has a great impact on the outcome of learners. Under this system, there is a need to have a top – bottom type of management techniques, as well as bottom – up strategies that leads to quality outcomes. The cause of declining performance lies in the challenging circumstances combined with inadequate management (Genck 1983).

In the absence of management techniques suited to these new circumstances and to the nature of education, most schools are in a situation of internal disruption that is demoralizing and damaging to performance and productivity (Genck 1983). The internal communication and teamwork essential to good schools is made difficult, sometimes impossible. There is no means of pulling together the efforts of the many

people involved. Therefore, naturally, performance drifts lower. In spite of the widely documented and perceived decline, neither complaining nor setting higher standards will help schools improve without the internal management practices that are required.

No institution can purchase TQM off peg. It has to be customized so that it harmonizes with and develops from the existing culture.(Sallis,1996) says that TQM should be developed from the existing good practice within the institution. Quality already exists in educational institutions, what TQM does is to build on existing on existing quality and develop it into continuous quality improvement. Industrial models can be drawn on to provide useful pointers and examples. However, it is important to ensure that any approach used is realistic, workable and affordable. It needs to be remembered that introducing total quality requires perseverance (Sallis, 1996). TQM is not something that can be introduced overnight. Nor is it a miracle cure. It does not provide instant success, nor does it solve all the problems. It will throw up new difficulties and challenges. It is a slow process.

Genck (1983) says that, some schools are performing well in spite of these circumstances. Some schools are functioning successfully, in every kind of community. What do these schools have in common? They have created a more participative and humane process of management that emphasizes performance and results as well as people and relationships. What are the key features of their management process? They evaluate performance, using information wherever possible, even in a field like education that sometimes defies any quantitative indicators. They accept responsibility for performance, organizing teachers and administrators to strife for and achieve good results. They maintain teamwork and constructive working relationships among teachers, administrators, and students in spite of universal pressure towards conflict and fragmentation (Genck, 1983).

As a result, these schools realize the ultimate objective of all education – the academic achievement and development of students. They sustain high levels of public confidence, parent and community satisfaction, staff moral, productivity and job satisfaction (Genck, 1983). Costs are reasonable and under control. They accomplish these things whether their community is black or white rural or urban and whatever their position on the socio-economic scale.

These schools produce a coherent and integrated approach to quality management that harnesses the commitment and goodwill of staff. Motivation, expertise and enthusiasm assure quality, not appraisal or inspection. The quality improvement programme must involve all who work in the institution. Everybody is responsible for the quality of the service they deliver, whether they institutional managers, teachers or staff in support roles. Harnessing commitment from staff and channeling it into improvement is a major aspect of TQM (Sallis, 1996). Quality systems must be vehicles must be vehicles for assisting staff to solve their problems not as a means of controlling them. It is all too easy to turn a quality system into a means of control rather than empowerment. It is important to remember that people produce quality, and to ensure that there are practical means of recognizing their achievement. Educationists need to keep in mind that the quality message is in essence extremely simple. Quality is about doing the ordinary things extraordinarily well.

The concept of Total Quality Management is indeed quite a broad one. The discussion will specifically focus on total quality management from the literature point of view. The views of different authors or writers shall be put forward with particular reference to the topic under discussion.

Further definition of the concept: - Total Quality Management.

The management teams within the school are currently faced with a great deal of pressure to achieve a range of 'performance' expectations in climate of increasing uncertainty, financial stringency and competition. Total Quality Management is a framework and set of practical resources for managing organizations in the 1990s and beyond. Based on sound principles and a strong body of experience. Total Quality Management provides a school based management team with the tools they need to become highly effective in meeting the goals of their stakeholders, and in creating a place that teachers want to work in (Stephen Murgatroyd and Colin Morgan 1993).

Navaratman K.K. (1994) argues that in the current context of dynamic change and the continuing emphasis on quality of education, there have never been a more critical time educational systems to demonstrate quality outcomes that are visible, portable and create value for money. Until recently, management in all forms of education,

from early childhood to primary and secondary through post – secondary education, has operated in an environment that was somewhat closed and protected such that the role of management was essentially a 'black box'.

Navaratman K.K. (1993), further goes on to argue that, however, significant changes in workplaces, reduction in public funding, international and intra-national competitiveness, and the insistence of paying customers on value for money are placing pressure on educational systems to display, explain, defend and improve quality of education.

The term 'administration' is used over 'management' in organisational management. The focus of 'customers' and 'suppliers' and their relationship are narrowly defined and misunderstood. Improvements in products such as, 'student learning outcomes' 'research outputs and 'nature of services' are emphasized over processes with little regard for, or understanding of, the contributing processes (Gupta, 1991).

Bonser (1992) argues that (higher) education institutions can meet the new challenges of the 1990s if they adopt the total quality approach that has been so successful in other types of organisations.

'Managed education' means a quality education. My perception of quality was represented by school facilities, teachers, principal, fellow students, learning materials, teaching methods, assessment and technology, as well as the surrounding economy, community and the political system. I also perceived that every school and its system could provide quality education, but some did and others did not (Navaratman K.K.1993).

Edward (1991) is of the view that there is a wide range of variation in terms of quality educational outcomes or achievements across schools, technical and further education colleges and universities. This variation can be partly explained by the demographic profile of students, funding and socio-technical, political conditions (Edward 1991).

Process improvement, training evaluation, management commitment and decision-making are integrated into the quality journey (Almaraz, 1994)

2.3 Theoretical Framework

2.3.1 What is Total Quality Management

Total Quality Management (TQM) is a holistic approach to management that applies to all levels of an organisation, every relationship, every process. This American concept was originally developed by two statisticians (Deming and Juran) working in the Japanese manufacturing industry. (Teu, 2000). TQM was rediscovered in America during the 1970's,moving to Britain in the 1980's. (Blandford 1997).

Blandford (1997) goes on to argue that, in essence, TQM is value driven, placing a fundamental significance on values and purpose. It is concerned with managing the interpersonal components of all organisations and acknowledges equally the interdependence between an organisation and its environment. Within a TQM organisation, people are trusted to work as professionals, and there is a strong emphasis on teamwork. (Teu, 2000). In contrast, there is a weak emphasis on hierarchy. Critically, the organisation sets clear goals that are communicated effectively. Therefore, members of the organisation have high expectations of themselves; the organisation is fit for purpose.

Parsons (1995) argues that the words 'Total Quality Management', or TQM, invoke a broad range of responses from managers, academics, and consultants. In addition, the literature does not always help either since there are many numbers of books and articles offering different perspectives and vintages. This is essential because the concept has grown and mutated over the years and, no matter how hard you try, it can no longer be reduced to one or more simple techniques - if it ever could. So, if you are confused, be comforted since you are probably in the majority. He further argues that TQM is all about transforming organisations so that they are totally dedicated to meeting the needs of their customers- both internally and in the market place. It requires that managers –especially senior managers-take an integrated, system approach to organising work and commit to managing by facts. TQM is not a substitute for a compelling vision and a viable strategy. Rather TQM assumes that such a vision and strategy exist and then provides a powerful mechanism for their implementation.

Blanford (1997) further stipulates that, the customer or the client is central to TQM, defined as the person or group in receipt of a product or service. The organisation only exists for the customer; there is no other purpose. Once the customer's needs are known, systems are established to manage all the processes. The emphasis is on prevention of mistakes and poor quality products. Those who have the responsibility to implement them, within clear organisational guidelines, define the appropriate procedures.

Navaratman (1993) is of the view that TQM in the context of education is that, 'my knowledge of education and experience tell me that a 'managed education' means a quality education. His perception of quality was represented by school facilities, teachers, principal, fellow students, learning materials, teaching methods, assessment and technology, as well as the surrounding economy, community and the political system. He also perceived that every school and its system could provide quality education, but some did and others did not.

Navaratman and O'Connor, (1993) go on to state that, Quality management is a set of concepts, strategies tools, beliefs, and practices which is aimed at improving the quality of products and services, reducing waste and saving costs. It is related to the way in which all employers of the organisation work and contribute to meet quality standards set by customers and to save money or to make profit. In fact, quality means different things to different people. This has created an intellectual debate among educators about the appropriateness of implementing quality in education. However, quality in education can be either a combination of 'meeting clients' needs' or fitness for purpose/value for money'.

Parsons (1995) further his view by stating the fact that, improving overall performance means you need to measure and manage at five key checkpoints. These represent what is known as the 'extended system' and comprise:

- Your Vendors and Suppliers;
- The Inputs or Resources Themselves;
- The Value Adding Processes That Convert Inputs to Outputs;

- The Outputs of Products and Services; and
- The Receivers of the Outputs-Your Customers;

Once the organisation embraces TQM, it is likely to spend much more time expanding and building for the future. It will certainly spend much less time catering to crises or doing things that nobody should be doing (Parsons 1997).

There is no one model for the structure of TQM organisations; what is important is that the structure should facilitate the task and process. The theoretical structure of a TQM organisation involves a coalition of autonomous teams able to interact directly with the customer and with each other. These are all linked to senior management teams responsible for the strategy. TQM leaders have a vision that is articulated to the organisation. Leaders are creative and creative, empowering people through delegation and training. TQM leaders emphasize change, leading their organisation to become changing rather than changed. The organisation becomes a learning organisation, integrating personal and organisational development. The emphasis of TQM is therefore on the development of people, leaders as well as followers, in order to achieve personal and organisational goals (Blandford (1997).

A management philosophy embracing all activities through which the needs and expectations of the customer and the community, and objectives of the organisation, are satisfied in the most efficient and cost effective way by maximizing the potential of all employees in the continuing drive for improvement. (Kawamba 1998)

2.3.1.2 TQM involves:(Kawamba, 1998)

- Strategic visioning;
- Customer focus, with emphasis on the customer-supplier relationship, both internally and externally;
- Continuous improvement as a philosophy;
- The commitment of everyone to quality improvement;
- The involvement of everyone in quality improvement;
- Considering training and education as an investment;
- A focus on process;

- The use of teams and teamwork;
- The use of appropriate tools and techniques that are reviewed regularly;
- Goal setting, measurement and feedback for all aspects of the business;
- A change in the culture of the organisation, i.e. the way people think and behave; and
- The inclusion of quality principles in product and service design.

2.3.2 Why get involved with TQM?

TQM is a philosophy and system for continuously improving the services and/or products offered to customers. Now that the technologies of transportation and communication have replaced national economic systems with a global economy, nations and businesses that do not practice TQM can become globally non-competitive rather rapidly. (Fitzgerald, 1999). This march towards non-competitiveness can be avoided if citizens are helped to become TQM practitioners. Therefore, the potential benefits of TQM in a school, district or college are very clear. (Fitzgerald, 1999,Teu 2001,Legotlo 1994).

- 1 TQM can help a school or college provide better service to its primary Customer-students and employees.

- 2.The continuous improvement focus of TQM is a fundamental way of fulfilling the accountability requirements common to educational reform.

- 3.Operating a no-fear TQM system with a focus on continuous growth and improvement offers more excitement and challenge to students and teachers than a 'good enough' learning environment can provide. Therefore, the climate for learning is improved. (Fitzgerald, 1999,Teu, 2001,Legotlo, 1996).

2.4 What are the essential elements of TQM in education?

Fitzgerald (1999), argues that, in a TQM school or college, improvement teams and

individuals are constantly working on improving service to customers. The concept of a service being 'good enough' is considered inadequate. Thorough understanding of the differences between traditional and TQM schools is best developed in a seminar, not in a simple written guide.

TQM places great emphasis on training, but as a means of enabling people to become learners, giving them tools to play their part in the improvement process. Being learning organizational requires providing constant training, but not simply for its own sake. Learning organisations train people with a view to improving job performance. An important aspect of both TQM and learning organisations is that they break down barriers by involving everyone in the development of new approaches. (Kawamba, 1998,Teu, 2000,Legotlo, 1996).

2.4.1 Awareness and Commitment for Everyone

The linguistic, kinesthetic, visual, and /or mathematical talents of a student will not be developed to their fullest potential unless EVERY member of a teaching –learning partnership promotes the highest possible quality at each step in the development process. A transformation from 'good enough' or traditional education (where marks or grades of 'A' and 'B' are good enough even if they do not represent best work) should begin with everyone being made aware of the potential and the elements of TQM.(Deming,1986,Teu,2001,Legotlo,1996). An excellent way to begin is with a total staff meeting with parents and school board members participating. The meeting can provide the following:

- A dynamic overview of TQM elements and potential by one or more presenters who have experienced both and

- A clear commitment from the school board, superintendent, and principal that they will fully support TQM efforts and that they do not expect (to use the language of W.Edwards Deming) 'instant pudding' results. (Fitzgerald, 1999, Teu, 2001).

2.4.1.2 A clear Mission

Managing continuous movement toward progressively higher quality standards depends on defining those standards. If a TQM steering committee is formed in a school, it should determine the answer to this question – Does the school have a clear, customer-focused mission statement and a functioning process for divisions and/or departments translating this statement into exit outcomes for graduates? If the answer is 'no', that problem must be addressed with local, state, national, and employer standards. These standards should emphasize developing students' abilities to solve real life problems rather than just memorizing subject matter. The latter does not represent quality for either students or employers (Fitzgerald, 1999, Teu, 2001).

2.4.1.3 A systems planning Approach

Traditional education has become excessively compartmentalized. Teacher X provides an English course; science teacher Y might focus heavily on a student's knowledge of scientific principles without paying much attention to developing that student's ability to use English principles in writing a technical report. Subconsciously, the student begins to view English as a 'course' instead of as skills to be USED. If higher levels of student competence are to be developed, there must be higher levels of system-wide and cross department PLANNING for instructional improvement in schools and colleges. Lack of system planning is a serious obstruction to higher quality in student learning. Compare this school- wide reading development plan in a middle school with what you know about many narrower traditional remedial reading programs. Of course such a system approach to learning improvement normally happens only if inter-department planning arranges it.

2.4.1.4 Teaming Replacing Hierarchy

The hierarchical organisations of yesterday are still dominant in too many businesses and schools. Such organisations tend to promote individual effort 'good enough' to satisfy a supervisor who sometimes knows less how to achieve quality than those he/she supervises. Cross-department teams can and do promote stronger improvement if they are:

- Given a clear mission and strong authority
- Supported rather than hampered by supervisors.

Support is a major element in the success or failure of TQM. If administrators, supervisors, and department chairpersons support task improvement teams, those teams can generate more motivation and improvement that can otherwise be achieved. If not, TQM cannot achieve its potential. In properly operated TQM programs, administrators and supervisors work diligently at:(Fitzgerald, 1999,Teu, 2001,Legotlo, 1996)

- Insisting on clear visions and missions;
- Coordinating among task or improvement teams; and
- Supporting the efforts and authority of improvement teams to the highest possible degree.

These are critical support actions. Unless administrators and supervisors fulfil them properly, task improvement teams can fail because of this system weakness.

2.4.1.5 Enablement AND Empowerment Replacing Fear

Traditional do-it-to-them evaluation systems by themselves generate fear and lack of initiative. Staff members focus on doing whatever is enough to keep the boss happy. However, if volunteer members of the empowered improvement teams are given opportunities to become experts and/or to use experts, that enablement generates excitement and dedication. School districts should support members of the quality improvement teams with funding and time for conferences, seminars, visits to other schools, use of consultants, planning and sharing with others, etc. Teams function best if team members are given the background and authority to make informed decisions. Each district and school should define and implement objectives of a strong focus on being a learning organisation, an organisation in which everyone is a learner on paths to quality improvement.(Fitzgerald 1999,Teu,2001,Legotlo 1996).

2.4.1.6 Focus on Mastery Learning

In traditional classrooms, teachers often follow this sequence:

1.Plan---------- (2 Teach----------3 Test (Fitzgerald, 1999,Teu, 2001,Legotlo, 1996).

The normal curve that usually results stands as testimony to the fact that many students fail to learn at the highest possible level in this system. The TQM alternative is:(Fitzgerald, 1999,Teu, 2001,Legotlo, 1996).

1 Plan -->2 Teach (DO)-->3 Check **-->4 Revised Teaching (ACT)-->5 Test**

According to the Shewart cycle, in the 'check' step, formative (not-for-grade) testing is used to determine which learning some students have missed. Then non-mastered material is re-taught in some different way or style. If advisable, the checking and revised teaching can be repeated more than once. Meanwhile students who have mastered the material move to enrichment learning or assist with instruction of those who have not achieved mastery. This system of mastery learning can result in much more complete learning for most students, in effect, a positive movement of the 'normal' curve. This improvement in learning is a basic purpose of TQM in the classroom. (Fitzgerald, 1999).

2.4.1.7 Management by Measurement

In the previous subheading above, you were introduced to an adapted Shewhart Cycle, a basic part of a TQM process. Be aware that measurement is very important in the marked steps of this cycle. For example, if a reading teacher used a new computer program in the ACT step to assist students having trouble, he or she might gather data in steps No.3 and No.5 and plot it in a scatter diagram to investigate the relationship between use of that program and final learning results.

If careful analysis showed that the new program promoted strong progress in reading, that would affect planning for future instruction. This management by data rather than by opinion allows objective pursuit of the two basic purposes of TQM in education:(Fitzgerald1999, Teu 2001,Legotlo 1996)

a. Improved learning; and

b.Improved cost effectiveness

2.4.1.8 Development of Student TQM Skills

In addition to using TQM to improve learning in general, every school district should specifically equip its students to understand and use TQM. This is a basic part of schools contributing to readiness for work in the global economy. Whether a school staff decides to integrate learning TQM into existing courses or to provide it as a separate course. It is important that students DO and not just study about TQM.Fitzgerald (1999), further argues that an excellent way to have students live TQM is to establish a system in which student assessment portfolios are dynamic records of constant improvement in which the student can take pride.

2.4.1.9 A transformation Plan

Under element No.1, an awareness presentation was recommended as the first step in considering transformation from traditional to TQM operation. Two other basic actions are recommended here:

- Form a TQM steering committee that---

- Develops a plan for supporting the staff in TQM implementation and
- Builds a positive connection between that committee and the traditional supervisors in the school and /or district.

- Use advice from consultants and/or from schools that have succeeded at TQM transformation.

The latter action is particularly important. People who learned things the hard way can save you much time and trouble with practical advice on such things as the importance of developing teaming skills, the value of limiting the number of major improvement task forces operating at one time, and the need to select improvement priorities carefully. Fitzgerald R.J. (1999).

2.5 Total Quality Management as a learning experience

Kawamba (1998) goes on to state that, it is generally recognized that TQM is not a technological process. The aim is to get everybody in the organisation to take pride in ensuring that customers (including internal customers) get what they need and expect. Eight of the twelve principles of TQM enumerated have to do with people and their attitudes. TQM assigns responsibilities for quality to all employees by proposing that they should no longer depend on inspection (Teu, 2001). It emphasizes that the need for constant improvement of planning, production and customer service processes. Where could such a comprehensive approach be undertaken other than in an organisation where everyone is constantly learning to do everything better?

An important requirement for TQM to work is the concept of 'driving out fear' (Deming (1986). This means that individuals and teams must be allowed to make mistakes and learn from them. No one will admit mistakes and learn from them. No one will admit mistakes if they work in a climate of 'management by blame.' They will never take risks and gain the learning that flows from doing so, whether these risks pay off or not. They will not innovate or be open to sharing ideas with their colleagues. A climate in which mistakes are used as learning experiences enables employees to own their mistakes and consequently innovate ways of rectifying them. This is the learning organisation in action. Kawamba, 1998), further argues that in a learning organisation, TQM efforts are far more likely to succeed because people learn how to set their own objectives, targets and measurements. They are party to what needs to be done.

2.5.1 Understanding the learning organisation concept

The phrase 'learning organisation' is used to describe the coming together of people in conditions where they are all continuously searching for ways of doing whatever needs to be done in a better way. To do so, it creates opportunities for its members to question, think and learn as well as challenge traditional ways of doing things and suggest improvement. (Kawamba (1998).

Kawamba (1998) further states that Learning organisations are continuously looking at the details of their actions in the light of the whole organisation, informed by a shared vision. People are alert all the time for signals, which show whether they are on the path to success in achieving their objectives. Feedback is critical because they need to know whether what is being attempted is working out. Openness and trust prevail, because without these, the best ideas will not surface and productive dialogue will be stillborn.

The learning organisation is a concept derived from the very nature of being human. Human beings are not static creatures: they are living, and the true nature of being alive is development and change. From the moment of birth, each human being is set on a path of change and development. Every microsecond of life yields new learning in the mind and spirit, from infancy even to extreme old age. It is never possible for a human being to say, 'I have arrived; I am totally what I will Always be'. Life is a journey and we are always on the move. That is what makes life such an adventure. (Van der Westhuizen, 1991).

2.5.1.2 Common features of a learning organisation

According to Kawamba (1998,6) a learning organisation has some of the following features:

- Organisational policy and strategy formulation, together with their implementation, evaluation and improvement, are consciously structured as learning processes.

- All members of the organisation share discussions on organisational policy and strategy. This means recognition of differences, airing disagreements, and tolerating and working with conflict to reach decisions

- Information systems, including information technology, are used to enable members to question current operating assumptions and seek information for

individual and collective learning about organisational norms, goals and processes.

- Individuals, teams and departments exchange information on expectations and feedback on satisfaction to assist learning and effective production of goods and services.

- Members with outside contacts act as 'environmental scanners' for the organisation and feed information back to other members.

- Organisational members engage in sharing information and joint learning with others outside the organisation, such as customers and suppliers.

- The management style in the organisation encourages experimentation, learning and development from failure to success.

- Resources and facilities for self-development are available to all. The organisation provides individuals with regular reviews of performance and learning needs, as well as timely feedback on performance and achieved.

2.6 Improving teaching Quality in an individual Class.

We may define good teaching as instruction that leads to effective learning, which in turn means thorough and lasting acquisition of the knowledge, skills, and values the instructor or the institution has set out to impart. The education literature represents a variety of good teaching strategies and research studies that validate them (Campbell and Smith 1997; Johnson et al.1998; McKeachie 1999). In the sections that follow, we describe several strategies known to particularly effective is discussed.

2.6.1 Use active learning in class

Most students cannot stay focused throughout a lecture. After about ten minutes, their attention begins to drift, first for brief moments and then for longer intervals, and by

the end of the lecture, they are taking in very little and retaining less. A classroom research study showed that immediately after a lecture students recalled 70% of the information presented in the first ten minutes and only20% of that from the last ten minutes (McKeachie 1999).

Students' attention can be maintained throughout a class session by periodically giving them something to do. Many different activities can serve this purpose (Bonwell and Eison 1991;Brent and Felder1992; Felder 1994a;Johnson et al.1998; Meyers and Jones1993), of which the most common is the small group exercise. At some point during a class period, the instructor tells the students to get in groups of two or three and arbitrarily designates a recorder (the second student from the left, the student born closest to the university, any student who has been a recorder that week). When the groups are in place, the instructor asks a question or poses a short problem and instructs the groups to come up with a response, telling them that only the recorder is allowed to write but any team member may be called on to give the response. After a suitable period has elapsed (which may be as short as 30seconds or as long as five minutes – shorter is generally better), the instructor randomly calls on one or more students or teams to present their solutions. Calling on students rather than asking for volunteers is essential. If the students know that someone else will provide the answer, many will not even bother to think about the question. (McKeachie, 1999).

Active learning exercises may address a variety of objectives. Some examples follow.(McKeachie,1999).

- Recalling prior material. The students may be given one minute to list as many points as they can recall about the previous lecture or about a specific topic covered in an assigned reading.

- Responding to questions. Any question an instructor would normally ask in class can be directed to groups. In most classes –especially large ones – very few students are willing to volunteer answers to questions, even if they know the answers. When the questions are directed to small groups, most students

will attempt to come up with answers and the instructor will get as many responses as he or she wants.

- Problem Solving. A large problem can be broken into a series of steps, such as paraphrasing the problem statement, sketching a schematic or flow chart, predicting a solution, writing the relevant equations, solving them or outlining a solution procedure, and checking and /or interpreting the solution. When working through a problem in class, the instructor may complete some steps and ask the students groups to attempt others. The groups should generally be given enough time to think about what they have been asked to do and begin formulating a response but not necessarily enough to reach closure.

- Explaining written material. TAPPS (thinking-aloud pair problem solving) is a powerful activity for helping students a body of material. The students are put in pairs and given a text passage or a worked out derivation or problem solution. An arbitrarily designated member of each pair explains each statement or calculation, and the explainer's partner asks for clarification if anything is unclear, giving hints if necessary. After about five minutes, the instructor calls on one or two pairs to summarize their explanations up to a point in the text, and the students reverse roles within their pairs and continue from that point.

- Analytical, critical, and creative thinking. The students may be asked to list assumptions, problems, errors, or ethical dilemmas in case study or design; explain a technical concept in jargon free terms. Find the logical flaw in an argument; predict the outcome of an experiment or explain an observed outcome in terms of course concepts; or choose from among alternative answers, designs, models, or strategies and justify the choice made. The more practice and feedback the students get in the types of thinking the instructor wants them to master, the more likely they are to develop the requisite skills.

- Generating questions and summarizing. The students may be given a minute to come up with two good questions about the preceding lecture segment or to

summarize the major points in the lecture just concluded. (McKeachie, W. (1999).

2.6.2 Use Cooperative learning

Cooperative learning (CL) is instruction that involves students working in teams to accomplish an assigned task and produce a final product (e.g., a problem solution, critical analysis, laboratory report, or process or product design), under conditions that include the following elements (Johnson et al 1998):

- Positive interdependence. Team members are obliged to rely on one another to achieve the goal. If any team member fails to do their part, everyone on the team suffers consequences.

- Individual accountability. All team members are held accountable both for doing their share of the work and for understanding everything in the final product (not just the parts for which they were primarily responsible).
- Face to face promotive interaction. Although some of the group work may be done individually, some must be done interactively, with team members providing mutual feedback and guidance, challenging one another, and working towards consensus.

- Appropriate use of teamwork skills. Students are encouraged and helped to develop and exercise leadership, communication, and conflict management and decision-making skills.

- Regular self-assessment of team functioning. Team members set goals, periodically assess how well they are working together, and identify changes they will make to function more effectively in future.

An extensive body of research confirms the effectiveness of cooperative learning in higher education. Relative to students taught conventionally, cooperatively-taught

students tend to exhibit better grades on common tests, greater persistence through graduation, better analytical, creative, and critical thinking skills, deeper understanding of learned material, greater intrinsic motivation to learn and achieve, better relationships with peers, more positive attitudes towards subject areas, lower levels of anxiety and stress and high self esteem (Johnson et al.1998; McKeachie 1999).

Formal cooperative learning is not trivial to implement, and instructors who simply put students to work in teams without addressing the five defining conditions of cooperative learning could be doing more harm than good. In particular, if team prefects are carried out under conditions that do not ensure individual accountability, some students will inevitably get credit for work done by their more industrious responsible teammates. The slackers learn little or nothing in the process, and the students who actually do the work justifiably resent both their teammates and the instructor. The following guidelines suggest ways to realise the benefits and avoid the pitfalls of cooperative learning (Felder and Brent1994; Johnson et al.1998; Mills and Cottell 1998;NISE 1997).

- **Proceed gradually when using cooperative learning for the first time.**

Cooperative learning imposes a learning curve on both students and instructors. Instructors who have never used it might do well to try a single team project or assignment the first time, gradually increasing the amount of group work in subsequent course offerings as they gain experience and confidence.

- **Form teams of 3 – 4 students for out of school assignments**

Teams of two may not generate a sufficient variety of ideas and approaches; teams of five or more are likely to leave at least one out of the group process.

- **Instructor formed teams generally work better than self – selected teams.**

Classroom research study show that the most effective groups tend to be heterogeneous in ability and homogeneous in interests, with common blocks of time when they can meet outside class. It is also advisable not to allow underrepresented populations (e.g. racial minorities, or women in traditionally male fields like engineering) to be outnumbered in teams, especially in the first two years of college when most students are likely to lose confidence and drop out. When students self select, these guidelines are often violated. One approach to team formation is to use completely random assignment to form practice teams, and then after the first class examination has been given, form new teams using the given guidelines. (Felder R.M. (1994a).

- **Give more challenging assignments to teams than to individuals.**

If the students could just as easily complete assignments by themselves, the instructor is not realizing the full educational potential of cooperative learning and the students are likely to resent the additional time burden of having to meet with their groups. The level of challenge should not be raised by simply making the assignments longer, but by including more problems that can call upon higher level thinking skills.

- **Help students learn how to work effectively in teams.**

Some instructors begin a course with instruction in teamwork skills and team building exercises, while others prefer to wait for several weeks until the inevitable interpersonal conflicts begin to arise and then provide strategies for dealing with the problems. One technique is to collect anonymous comments about group work, describe or two problems in class (the most common one being team members who are not pulling their weight), and have students brainstorm possible responses and select the best ones.

- **Take measures to provide positive interdependence.**

Methods including assigning different roles to group members (e. g coordinator, checker, recorder, and group process monitor), rotating the roles periodically or for

each assignment; providing one set of resources; requiring a single group product; and giving a small bonus on tests to groups in which the team average is above (say) 80%. Another powerful technique is jigsaw, in which each team member receives specialized training in one or another subtask of the assignment and must then contribute his or her expertise for the team product to receive top marks.

- **Impose individual accountability in as many ways as possible.**

The most common method is to give individual tests. In lecture courses, the course grade should be based primarily on the tests results. (e.g.80%for the tests and 20% for teamwork),so that students who manage to get free ride on the homework will still do poorly in the course. Other techniques include calling randomly on calling individuals to present and explain team results; having each team member rate everyone's contribution and combining the results with the team grade to determine individual assignment grades, and providing a last resort option of firing chronically uncooperative team members.

- **Require teams to assess their performance regularly.**

At least two or three times during the semester, teams should be asked to respond to questions like 'How well are we meeting our goals and expectations?' 'What are we doing well?' 'What needs improvement?' and 'What (if anything) will we do differently next time?'

- **Do not assign course grades on a curve.**

If grades are curved, students have little incentive to help teammates and risk lowering their own final grades, while if an absolute grading system is used they have every incentive to help on e another. If an instructor unintentionally gives a very difficult or unfair test on which the grades are abnormally low, points may be added to everyone's score or a partial retest may be administered to bring the high mark or the average to a desired level.

- **Survey the students after the first six weeks of a course.**

As a rule, the few students who dislike group work are quite vocal about it, while the many who see its benefits are quiet. Unless the students are surveyed during the course, the instructor might easily conclude from the complaints that the approach is failing and be tempted to abandon it.

- **Expect some students to initially resistant or hostile to cooperative learning.**

This point is crucial. Students sometimes react negatively when requested to work in teams for the first time. Bright students complain about being held back by their slower team mates; weaker or less assertive students complain about being discounted or ignored in group sessions; and resentments build when some team members fail to pull their weight. Instructors with experience know how to avoid most of the resistance and deal with the rest, but novices may become discouraged and revert to the traditional teacher-centered instructional paradigm, which is a loss both for them and for their students.

Cooperative learning is most likely to succeed if the instructor anticipates and understands student resistance: its origins, the forms it might take, and ways to diffuse and eventually overcome it. Felder and Brent (1996) offer suggestions for helping students understand why they are being asked to work in groups and for responding to student complaints. These suggestions may not eliminate student resistance, but they generally keep it up under control long enough for most students to start recognising the benefits of working in teams. (Felder and Brent 1996).

2.6.3 Assessment and evaluation of teaching quality.

Most institutions use only end -of –course student surveys to evaluate teaching quality. While student opinions are important and should be including in any assessment plan, meaningful evaluation of teaching must rely primarily on assessment of learning outcomes. Current trends in assessment reviewed by Ewell (1998) include

The question is effective teaching strategies are known and validated by extensi research (as they are), why not simply incorporate them into classroom instructi without an added layer of jargon. If all that is done is to choose a subset of TQ terms that on to known effective teaching strategies and then apply the strategies in single course-which is what most of the published studies in the educational literatu consist of –the TQM adds no value. Perhaps more to the point, TQM is a collecti strategy that has meaning only if it is agreed upon and implemented by the staff of a organisation. Applying TQM terms to instruction in a single course by a sing teacher may provide a good experience for the students, but it is not TQM. (Grandz and Gershon (1997).

Grandzol and Geshon (1997), further argue that in short, while improving the qualit of classroom instruction is a worthwhile goal-arguably the most important goal that university can adopt –there is no need to force –fit an industrial model or inven questionable analogies (e.g., students as 'customers') to achieve it. Identifyin problems with existing manufacturing practices and then applying a combination o sound economic and psychological principles to devise a better approach develope TQM. Improving teaching requires identifying problems with existing academi practices and then applying a combination of sound educational and psychologica principles to devise a better approach.

The proper use of any of the instructional methods described in the preceding section improves the quality of learning that occurs in the classroom. If several of the methods are used in concert, the potential for improvement is all the greater. The quality of an institutional teaching program may therefore be improved by persuading as many faculty members as possible to use those methods in their classes and providing them with the training and support they will need to implement the methods successfully. (Grandzol and Gershon,(1997).

It would be nice if we can stop right there, but the problem is more complex. The presumption in everything just said is that both faculty members and administrators at the institution in question generally agree on a definition of 'quality of learning' and on the importance of improving it. Unfortunately, this presumption rarely has a basis in fact. Much therefore remains to be said about how to improve an institutional

teaching program (as opposed to teaching in a single class), including the potential role of total quality management. (Grandzol and Gershon, 1997).

As noted in the introduction, many campuses have experimented with TQM, provoking a great deal of faculty opposition in the process and having relatively little impact on what happens in the classrooms. The conflict between the TQM advocates opponents reflects differences between the industrial culture where TQM was developed and the culture of the university. The conflict can easily turn what should be a united effort to improve the quality of education into a powerful struggle between faculty members and administrators. The consequence is that the introduction of TQM to the campus may work against the cause it was intended to promote. (Beaver, 1994).

It is not there anything wrong with quality management principles. We believe that they are firmly rooted in common sense and that systematically applying them is very likely to lead to improvements in university operations. However, undertaking the wholesale operation of a paradigm developed for one culture-industry-to another culture-higher education-has pitfalls. In important ways, the two cultures are as different as automobiles are from students, and steps that may be feasible in one environment may be entirely inappropriate in the other.[Beaver (1994)makes this point tellingly. Some of the ideas we present in the next section draw on his observations.] Perhaps more to the point, the rhetoric of total quality management contains terms that are offensive to many faculty members, and their resentment of attempts to apply TQM language to their profession provokes fierce opposition to TQM based strategies.

In the reminder of his section we review the cultural differences that give rise to the faculty opposition, and then suggest how the lessons of TQM may be applied to teaching program improvement in a manner much more likely to succeed.

2.6.4 Two different worlds

Every organisation, be it a company, a corporate division, a university, a college, or an academic department has both a stated mission, which is written for public consumption, and a true mission, which dictates how the organisation allocates

resources and rewards performances. The two missions may be the same or different. Primarily the organization's true mission determines the working definition's 'quality' within an organisation. The concept of the true mission is needed to explain the principal differences between the industrial and academic cultures that are related to quality management. (Bloom, 1984).

In industry, the true mission is relatively clear, and quality is relatively straightforward to define. In education, the true mission is complex and subject to endless debate, and quality is therefore almost impossible to define in an operationally useful manner.(Bloom,1984)

Whatever the corporate mission statement may say, the true mission of a for-profit company is to maximise profits (more precisely, some measures of profitability). Setting aside altruistic objectives that may motivate individual company personnel, such goals as zero defects, customer satisfaction, staff empowerment, etc., are to the corporate mind simply means to the end of maximizing profits. 'Quality' may be defined as any property of an industrial process or product that varies in a generally monotonic manner with profits. The goal of setting quality is therefore consistent with the mission of maximizing profits.(Bonwell,1991).

In education as in industry, the stated mission and the true mission may not coincide. The similarity ends there, however. The goals that constitute the educational mission of a university are extremely hard tin down to everyone's satisfaction. Is the goal to produce graduates who simply know a lot more than they did when they enrolled as freshmen? What is it that we want them to know? Do we wish to equip the students with the skills they will need to succeed as professionals? What skills would those be? Are they the same for all professions? Are we trying to produce 'educated citizens'? Whose definition of educated will we adopt? Plato's? Dewey's? Alan Bloom's? Is it our purpose to promote certain values in our graduates? Which ones? (McKeachie, 1999).

Agreeing on educational goals is only the first step toward formulating an academic mission, however. In the modern university, teaching is just one of the several important functions, the others being research, service to business and technology

(e.g., through faculty consulting activities), and service to the community and society at large. The true mission of the university might involve maximising research expenditures, tuition revenues, 'productivity' (rate of production of graduates divided by faculty size), the institution's ranking in U.S. News and World Report, national rankings of the football and basketball teams, and regional and national reputations of the undergraduate and graduate teaching programs. Many of these goals are unrelated and most of them compete for limited resources. Prioritizing them to arrive at a realistic teaching quality improvement program is a challenge unlike anything encountered in industry. (McKeachie, 1999).

In industry, quality is relatively easy to assess. In education, even if a definition of quality can be formulated and agreed upon, devising a meaningful assessment process is a monumental task.

Quality control managers can easily count the number of television sets in a production run that malfunction, or the percentage of silicon dioxide films deposited on semiconductor wavers that fall outside pre-specified quality control limits, or the weekly volume of complaints about the promptness and effectiveness of repair service calls. The lower those values, the higher the quality of the process being assessed.
But what are the measures in education? Assuming that the mission of a university includes the imparting of certain knowledge, skills and (perhaps) values, a meaningful assessment process must include measuring the degree to which the students have acquired those attributes. Assessing knowledge is relatively straightforward, but methods of assessing skills are complex and time-consuming to administer and valid means of assessing values do not exist. (Jensen, 1995).

In industry, the customer is relatively easy to identify and is always right, at least in principle. In education, those who might be identified as 'customers' contradictory needs, desires, and may well be completely wrong.

When attempt is made to introduce TQM on a campus, the term 'customer' probably provokes more faculty outrage than any other feature of the approach. Its use is taken as clear evidence that the proponents of the program do not understand the differences between an industrial organisation and an educational institution. (Jensen, 1995).

This inference is understandable. If I manufacture automobiles, the customers ar automobile buyers. If I produce semiconductor chips. If I own a restaurant, th customers are the diners. If a significant number of customers complain, it means tha I am not doing an acceptable job, and unless I improve in a way that reduces th number of complaints, I will suffer negative consequences. Admittedly, th shareholders and/or the board of directors might also be considering my customers but if the first group of customers is unhappy and I am operating in competitive market, the second group will eventually also be unhappy. (Bellamy, Evans, Linder, McNeill, Raupp, 1994).

If I am a faculty member, my 'customer'-who include hirers of graduates, university administrators, governing boards, state legislatures, research funding agencies, parents and students-want different and frequently contradictory things. Industry wants graduates who have good technical, communication, and teamwork skills and who can think critically and solve problems creatively. Administrators and governing boards want the university to have high national rankings (which are invariably based on research reputations), large amounts of external funding, and high 'productivity' turning out as many graduates in as short a period of time as possible and at the lowest possible cost. Legislatures want the universities want to responsive to the taxpayers' needs, which usually means having a strong but affordable undergraduate program. Funding agencies want results obtained quickly and cost effectively. Parents want low tuition and graduation in four years or less. Then there are the students. (Latzko, 1997).

Students at a university want a bewildering variety of different and often contradictory things. Some want teaching that emphasises the concrete and practical over the abstract and theoretical that will prepare them for their chosen professions; others want a rigorous education that will prepare them to enter top graduate schools and then go to research careers. Most dislike difficult homework assignments and examinations; a few welcome the challenge. Some like working in teams; others hate it. (Campbell, Smith, 1997)

Administrators who wish to make major improvements in the quality of their teaching programs should therefore provide incentives for faculty members to participate in the new programs such as salary supplements, travel or equipment funds, or release from service funds. They should also commit to faculty members who carry the principal burden of teaching and assessment in the new programs that they will have the same opportunities for tenure, promotion, and merit raises as their more research-oriented colleagues now enjoy, unless this commitment is made and honored, attempts to make a large-scale teaching improvement program are likely to consume an immense amount of time and effort and accomplish relatively little in the end. (Boyer 1990;Gassick et al.1997; Felder 1994b)

Here, then, is a view of what can be done to improve the instructional program at a university. Each step requires agreement of the faculty members who must implement it and the administrators who must provide the necessary resources.

- Faculty members define the knowledge, skills, and values that the graduates of the programme should have.

- With the assistance of experts in pedagogy and learning assessment, the faculty defines the instructional methods most likely to lead to the acquisition of the desired attributes, selects the methods needed to assess the effectiveness of the instruction, and estimates the resources (including provisions of faculty development) needed to implement both the instruction and the assessment.

- The administration commits to provide both the necessary resources to initiate and sustain the program and appropriate incentives for faculty members to participate.

- The faculty and administration formulate a detailed implementation plan.

- The faculty implements the plan.

- The faculty and administration assess the results and modify the plan as

necessary to move closer to the desired outcomes. (Rogers and Sando, 1996).

Rogers and Sando (1996) present models for teaching program assessment that include recommendations for all but step 3 of this list.

This six-plan sounds like a TQM model, and of course, it is. It can be put into effect perfectly well, however, in the context of the university culture, without ever mentioning customers, empowerment, bottom-up management, or any other TQM term whose applicability to education is questionable. Consensus on all of the issues involved in educational reform might or might not be achieved, but at least the dialogue would focus on the real issues rather than the semantic red herrings.

Our recommendations for improving teaching quality finally come down to this. Instructors who wish to improve teaching in a course should consult the literature, see which instructional methods have been shown to work, and implement those with which they feel comfortable. Total quality management need not enter the picture at all. An administration wishing to improve the quality of its instructional program should first make the necessary commitment to provide the necessary resources and incentives for faculty participation. Then, don't talk about TQM-just do it.

2.7 Installing TQM Education into the Design and Construction Profession.

The purpose and focus of this paper is to state a case for this premise and to discuss what goes into learning about TQM.

Part 1-Background on developing an educational Bok

2.7.1 Introduction

There is a need for TQM education in the construction company. In recent years, chief executives from different types of companies and industries have learned that new and better ways to manage their organisations must be explored. Competition from around the world has made inroads in both domestic and export markets. Meanwhile, customers have developed higher expectations of what is satisfactory to them. These

expectations apply not only to the products of manufacturing, but to the services of business and governments. The construction industry is a service industry and comes under this type of expectation. As a result of these expectations, a new concept of management called Total Quality Management has emerged. However, our construction and engineering educational programs have not yet responded to meet this need.

In the U.S., the manufacturing segment of the economy seems to have relatively menting formalised TQM since 1980.The procedure and methodology for applying TQM principles to manufacturing are well known and well documented. However, the same is not true for the design and construction industry. The BOK has not yet been developed for TQM education to the satisfaction of educators or practitioners.

The Unites States design and construction industry is presently at the point where the manufacturing industry was in 1980. That is just getting started with not much experience to draw from, and concrete results in the form of case studies. The lessons and theory pertaining to TQM learned from manufacturing industry can be applied to the construction industry in a rational, systematic fashion. The key elements to accomplishing this lie in education. Education programs should be devised in a manner that will allow members and organisations of the construction industry to educate, train, and implement TQM in their own companies.

Briefly, the concept of TQM encompasses ideas obtained from several different disciplines such as statistics, production, behavioral sciences, organisational theory, management science, marketing and cost accounting. To provide and equip students with the state-of-the-art theory, knowledge, and experience to meet this education challenge, Schools of construction need to create and adopt a new field of study called 'Total Quality Management.'

The intended purpose of this paper is to give the reader the information needed to make decision on how to meet the challenge of implementing TQM using education. The paper will describe what comprises the elements of TQM, and presents in Part II, a recommended content of courses and seminars proposed in the area of TQM to

comprise the BOK. One must understand that this area of Total Quality Management involves a process consisting of changes, developments, and innovations. It is not a simple rehashing of old methods; it is a complete, cultural transportation of a company's environs. (Deming, 1986).

2.7.1.2 General Aspects of TQM

er, these elements compose the basic theoretical ingredients that make up the information that must be included in TQM course work and training. Combining theory and the practical tools (like statistics) along with the experience of doing and observing TQM will give us the content for TQM education and training. The following nine elements were chosen for discussion in the paper. (Deming, 1986;Teu, 1997;Legotlo, 1996).

- **Quality Management Status Surveys.**

The first step a company must take to start a TQM process is to take a 'snapshot' of their current level of quality. A rational decision on how to implement TQM can then be made. This is the important first step that upper management must take but often overlooks. There is always a gap between how top management believes work is done, and how it really is done. (Legotlo, 1996;Teu, 1997;Deming, 1986).

- **Education and Training**

A basic element of a TQM process is education and training. Both are necessary due to the process' requirement for a participative, disciplined and organized approach to identification and problem solution. In addition, the process has the requirement for the collection and evaluation of both qualitative and quantitative information.(Deming,1986;Teu,1986)

Deming goes on to emphasize that employees need training in teamwork, interpersonal relations, communications, process improvement, and job related

technical skills. Senior and upper management need training first. Education and training programs are then required for all employees to understand quality process responsibilities and their relationship to completing assignments effectively. The initial training period is usually one or two weeks with organisations that are leaders in TQM providing about five days of training per year per employee. (Lew. & Hayden Jnr.1992).

te Quality Policy

The following reflect the content of Corporate Quality Policy:

- Emphasis should be on prevention not correction
- Predetermined use of Project Peer Review for management and/or technical validation
- Atmosphere of problem identification and solving encouraged...'don't shoot the messenger...'
- Immediate correction for non-conforming work
- Information feedback will be sent 'upstream' to work flow process control points for continuous process improvement. (Deming, 1986).

- **Upper Management Involvement**

Quality must start at the very top of the organisation. It is well documented that without upper management support, involvement, and leadership, a TQM process takes longer and cost more to implement. This means that all C.E.O' s must become educated in the principles of TQM, committed to TQM implementation, and provide an example to their organisation. The key points that the upper management must do are as follows:(Teu, 2001;Legotlo 1996)

- Undergo the quality education and training with the employees.
- Endorse the concept of TQM.
- Assist in the development of corporate quality policies and goals.

- Actively lead the way by participating in the activities of the company quality steering committee and company training.
- Provide the required resources of time and money to permit improvement. Understand that this is difficult due to the initial sizeable investment in training, which generally has no immediate results.
- Provide appreciated and sincere recognition for those who contribute to the quality mission.(Legotlo,1996;Teu,1997).

- **Improved Communications**

This is a critical part of the TQM working structure. When we draw lines around a position in an organisation chart, we are creating an island. The more blocks created, the more levels of management that we create, the more difficult we make it to communicate. Communication must be facilitated among these blocks which are commonly known as purchasing, personnel, comptroller, estimating, equipment maintenance, warehousing, marketing, engineering and project management so that information flows freely and willingly throughout the project site.(Lew & Hay,1992).

- **Customer Satisfaction**

Internal client flow is the first place to start to ensure customer satisfaction. In TQM, the concept of the 'customer' must be defined in a broader sense. Normally, we tend to think of the customer as someone external to the company who receives the service or product. In the TQM concept, you must include anyone who receives a product or service from another. Within your company, there are customers. A superintendent at a construction site is a customer of the warehouse, the equipment shop, the personnel department, the scheduling section, the purchasing department, etc. (Deming,1986;Legotlo,1996;Teu, 2001).

Shools must learn that customer satisfaction is a philosophy that enters the entire organisation and governs all the work that is done. It becomes the highest goal of each employee. To be sure that customer expectations are being met, a school must have a

program that determines items of dissatisfaction and feeds this information back to the school management so that the source of the problem can be eliminated. This measuring of customer satisfaction must be done for both external and internal (employees). The basic philosophy to be taught here is that quality starts and finishes with the voice of the customer. (Teu, 2001;Legotlo, 1996)

- **Process Improvement**

ss involved for the identification of problems and potential solutions. In construction, a major project might include the interaction of the preparation of shop or fabrication drawings, the placement of concrete, the fabrication of structural steel, and the manner in which a project manager deals with the members of the project team on these interrelated sub-processes. (Legotlo, 1996;Teu, 1997;Deming, 1986).

Deming, 1986;Legotlo1996 and Teu 2001 Again, TQM places its emphasis on prevention, not only correction of problems. Sole dependency on downstream inspection ceases. In TQM, inspection efforts are intended to be directed at prevention by providing information to management on errors and deficiencies that will be used to identify problems. Teams can then examine these problems so that the process itself can be improved. This thinking puts a positive rather than a negative emphasis on inspection. (Teu, 2001,Legotlo, 1996).

TQM requires that the working element of Process Improvement be taken in a systematic and professional manner. Quality Improvement Teams are trained in new analytical tools, communications, and teamwork dynamics so that they can work together to solve problems effectively. Only well trained personnel can accomplish what is needed to measure and quantify information. The concept of measurement is critical to TQM, since without it, one cannot verify improvements. (Legotlo, 1996,Teu, 2001).

- **Focus on Employees**

TQM enables every employee to have significant potential to make improvements in processes that only they are intimately familiar with. The employee potential can be tapped by using a combination of the following:

- **Orientation**, provide new company employees with a meaningful orientation on the Company, its customers, and the company's quality policies.

- **Education and Training,** as described earlier, emphasising quality, customer satisfaction, teamwork, communications and other job related skill.

- **Work environment**, employers must provide a safe, clean stimulating work environment, that includes three basic needs of opportunity, challenge, and recognition.

- **Employee suggestions**, these can be obtained by encouraging a two ways communications within the organisation.

- **Communication barriers**, these must be broken down both inside end outside of the organisation.

- **Employee Involvement**, this can be accomplished by encouraging employee participation in planning, problem solving and decision- making.

- **Recognition System**, this is a program to recognise achievements in quality made by employees. (Deming, 1996).

2.7.1.3 Quality and Innovation forTQM.

This course will examine the best practices in management that encourage and foster quality and innovation. The terms quality and innovation represents the rallying cries for the changes in management known as TQM. These are major changes in the

traditional management thinking and practices and are well underway. Some of the major topics to be covered in the course are:

- The quest for quality. Study why quality is crucial and how to achieve it.
- Incentives, motivation and compensation to achieve innovation.
- People and Organisation. Examine management relations with employees and unions, employee involvement and training with Focus on Employees and Improved Communications.

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  revolution knowing that this is not the accounting system but a management system.
- Customer Oriented. Discuss the concept of customer driven marketing as opposed to 'brand image oriented' marketing.
- Innovation. Study the possibility for the enhancement of innovativeness in a company.
- Reduced cycle times. Examine methods to reduce cycle times by emphasising speed and accuracy in all processes, notably Process Improvement and Supplier Improvement.
- Baldridge Criteria. Investigate ways of improving Baldridge criteria as a key corporate strategy step for TQM.
- Benchmarking. Review the need to adopt and adapt the current best practices, wherever they may be found. (Deming, 2001).

2.7.1.4 Special Topics in Quality and Management

This course will examine current styles of management and then will introduce the concepts of TQM and its related continuous improvement tools. The idea is to introduce students to various improvement tools and elements of TQM and then use them to attack real problems. The topics to be covered in the course are as follows:

- Identifying, measuring, and eliminating organisational complexity.
- Examine the Plan-DO–Check-Act (PDCA) model of continuous improvement.
- Policy Deployment, which is the application PDCA to strategic planning.

- Quality Function Deployment (QFD), which is the application of PDCA to new developments and techniques.
- The seven new tools of data analysis.
- Outside Case Study. (Deming, 1986).

The theory of Total Quality Management is very essential as it is based on well-outlined theories written by great management gurus such as, Dr. W. Edwards Deming, 1986.Juran emphasizes on quality improvement as well as Crosby. Their s-ar e -wor war s-pro uctivity, qual , efficiency. With this, other great writers came and added more into these theories in the likes of Teu and Legotlo especially in the area of education and management. Deming's fourteen points for management are follows;

2.7.1.7 Deming's 14 points for management

1. Create constancy of purpose toward improvement of product and service.
2. Adopt the new philosophy. We can no longer live with commonly accepted levels of delays, mistakes, defective materials, and defective workmanship.
3. Cease dependence on mass inspection. Require, instead, statistical evidence that quality is built in.
4. End the practice of awarding business because of price tag.
5. Find the problems. It is management's job to work continually on the system.
6. Institute modern methods of training on the job.
7. Institute modern methods of supervision of production workers. The responsibility of the foreman must change from numbers to quality.
8. Drive out fear, so that everyone may work effectively for the company.
9. Break down barriers between departments.
10. Eliminate numerical goals, posters, and slogans for the workforce, asking for new levels of productivity without providing methods.
11. Eliminate work standards that prescribe numerical quotas.
12. Remove barriers that stand between the hourly worker and his right to pride of workmanship.
13. Institute a vigorous program of education and retraining.

14.Create a structure in top management that will push everyday on the above 13 points.(Lew, & Hayden Jnr.(1992).

2.7.1.8 Juran's 10 Steps to Quality Improvement

Step 1. Build awareness of the need and opportunity for improvement.

Step 2. Set goals for improvement.

Step 3. Organise to reach the goals (establish a quality council, identify problems, rs).

Step 4. Provide Training.

Step 5. Carry out projects to solve problems.

Step 6. Report Progress.

Step 7. Give recognition.

Step 8. Communicate results.

Step 9. Keep Score.

Step 10.Maintain momentum by making annual improvement part of the regular systems and process of the company. Lew, J., & Hayden B. Jnr.(1992).

2.7.1.9 Crosby's 14 steps to Quality Improvement

Step 1. Make it clear that management is committed to quality.

Step 2. Form quality improvement teams with representatives from each department.

Step 3. Determine where current and potential quality problems lie.

Step 4. Evaluate the quality awareness and personal concern of all employees.

Step 5. Raise the quality awareness and the personal concern of all employees.

Step 6. Take actions to correct problems identified through previous steps.

Step 7. Establish a committee for the zero defects programs.

Step 8. Train supervisors to actively carryout their par of the quality improvement program.

Step 9. Hold a 'zero defect day' to tell all employees realise there has been a change.

Step10. Encourage individuals to establish improvement goals for themselves and their groups.

Step 11.Encourage employees to communicate to management the obstacles they face in attaining their improvement goals.

Step 12.Rcognise and appreciate those who participate.

Step 13.Establish quality councils to communicate on a regular basis.

Step 14.Do it all over again to emphasise that the quality improvement program never ends. (Lew & Hayden Jnr. (1992)

2.7.1.10 Conclusions and Recommendations.

TQM uses a scientific, prevention-based approach to quality improvement. The key to releasing the workers knowledge. Tapping this potential is accomplished through a systematic process that depends on educating the entire organisation in a unique TQM process that is tailored to fit that organisation. The educational process is accomplished with strong management involvement, participation and guidance and by employee empowerment. Again the crucial element in the process becomes the required extensive training for management and employees on subjects like interpersonal relations, teamwork, customer satisfaction, structured problem solving, continuous process improvement and statistics and other technical skills. Management and employees then learn to work together in interdisciplinary teams to improve the process that has been selected for study. In the construction industry, the continuous processes include design, construction and administrative activities. (Deming, 1986).

No substantive change is ever made without first real senses of discomfort with the way things are. A quick summary of the 'way things are' include the following':

1. Global market place that is becoming more accessible, competitive and challenging than ever before in the history of our profession.

2. The client market place is less forgiving, more demanding and rapidly becoming more unwillingly to accept 'close enough' much longer.

3. The 'Quality Age' is upon us, as evidenced by the still invisible movement towards the institutionalisation of quality systems, guided by ISO 9000, in North America and the Pacific Rim. (Deming, 1986).

The lessons and theory pertaining to TQM learned from the manufacturing industry can be applied to the construction industry in a rational, systematic fashion. The key to accomplishing this lies in education. Education devised in a manner that will allow members of the construction industry to educate, train and implement TQM in their own companies. A list of recommendations concluded from this paper are given below:

1.Conduct an inventory of schools that teach courses or portions in TQM.

2.Prepare a set of standards and guidelines for consistency in the course content of TQM.Deming, 1986).

2.8 TQM/CQI Philosophy and Practices

Today, a TQM-based management philosophy includes not only the core TQM/CQI concepts but also supporting concepts directly related to continuous improvement. These supporting concepts are natural extensions of a TQM/CQI philosophy in an organization. (Scherkenback, 1986).

2.8.1 Central Core Concepts

- The concept of a system and systems analysis
- Process variability, including common cause and special cause variation.
- Statistical process control and control charts to identify special cause variation
- PDCA cycle to improve processes continuously by reducing common cause variation.
- Tools to identify the root cause problems of processes and to assist in implementing new processes. (Scherkenback, 1986).

2.8.1.2 Supporting Concepts

- Emphasis on customers, both internal and external, and their needs.
- Employee issues including:

- Empowerment
- Teams, including cross-functional and self directed teams
- The value of employees
- Emphasis on education and training (Deming, 1986).

2.8.1.3 The Concept of a System

Deming (1986,p.319) defines the system as the entire organisation. Deming's system is composed of management; management philosophy; employees; citizens of the country; all facets of government, including the laws, taxes, trade barriers, et cetera; foreign governments; customers; shareholders; suppliers; environmental constraints; banks, and other financial entities. He believed strongly that the components of the system should work together like a symphony orchestra. He even believed that competitors formed part of the system and so taught the Japanese in the early 1950's.This probably a major reason for the synchronization and cooperation of Japanese industry and America's difficulty in penetrating that market today.

2.8.1.4 Processes and Process Variability

The concept of process variability forms the statistical process control. For example, if a basketball player shot free throws in practice, and the player shot 100 free throws everyday, the player would not get exactly the same number of baskets each day. Some days of the player would get 84 of 100,some days 67 of 100,some 77 of 100 and so on. All processes have this kind of variation or variability. (Deming,1986).

The process of variation can be partitioned into two components. Natural process variation, frequently called common cause or system variation, is the naturally occurring fluctuation or variation inherent in all processes. In the case of basketball player, this variation would fluctuate around the player's long-run percentage of free throws made. Whereas, special cause variation is typically caused by some problem or by extraordinary occurrence in the system. In the case of a basketball player, a hand injury might cause the player to a larger than usual number of free throws on a particular day. (Deming, 1986).

2.8.1.5 Customer focus

A major tenet of TQM/CQI philosophy is the emphasis on the customer. This customer focus occurs because customers define what quality is in a product or service. External customers are those who buy or consume the final product. Internal customers are those in the production system who depend on others and others and other processes upstream from them. If process A produces material for Process B, then Process B is an internal customer of Process A. If A's quality declines, it most certainly will affect B's quality. (Schoenfield, 1993).

2.8.1.6 Employee Issues

Schoenfield, (1993), goes on to argue that, a final principle of TQM/CQI is the emphasis on the value of the employee. For continuous improvement to work people must work together in teams and they must know how to solve problems and make decisions. They are empowered to make process related decisions because they are closest and know it best. This means employees need new skills—team-leading skills, problem-solving skills, decision-making skills, and personal interaction skills. This requires a significant continuing investment in education and training. Employees with these skills are valuable and are treated as such-with the respect and dignity commensurate with being a highly valued part of the organisation.

2.8.1.7 The Concept of the Customer in Higher Education

Universities have a variety of customers. One definition of a customer is that of 'a buyer of a product or service.' Students take classes, consume meals, sleep in residence halls, buy books and use many services for which they pay tuition and fees. The student certainly fits this definition of the word customer. The businesses and professions that employ the graduates are also customers, as is the public.(Stubblefield,1995).

Universities have an almost infinite variety of customers as well. As we have seen, internal customers of a service are those individuals or entities whose product or

service depends on that service. For example, the payroll department is a customer of the computer centre because without the computer and the computer centre the payroll is not produced. The dean's office is a customer of the accounting department because the dean's office needs timely, accurate financial information to make appropriate decisions. (Stubblefield, 1995).

Most frequently, external customers have the freedom to choose their supplier, and in fact do so. This is, for the most part, not true for internal customers. They are stuck. They must use their service rovider ecause it is their onl - is lack of competition frequently breeds contempt for internal customers. (Teeter, 1993)

Teeter (1993 goes on to argue that when one begins to treat a person or entity as an external customer, one's attitude toward that person or entity changes. A customer is important. A customer is vital to the survival of the organisation. The customer can choose another supplier if the quality of the service or the product is inferior or deteriorates.

One of the most important aspects of TQM/CQI –focused organisation is that departments begin to treat other departments as important customers by trying to meet the customer's needs and time schedules. This simple concept has a revolutionary effect on the relationships that exist within a traditional organization.(Schoenfeld,1993).

The idea of the student being the student being the customer of a professor is a concept that takes many faculty members a while to assimilate. Certainly, the student/faculty relationship is obviously more complex than that of a simple customer-supplier relationship. Yet, clearly one dimension of this relationship involves the student as a customer. The student is buying the professor's course and has the unmistakable right to expect certain things for his/her money: relevant course content, fairness, access, expertise, and a reasonable learning situation. If a faculty member views the student as a customer, it is likely that the faculty member will become tolerant, more interested in implementing ways to improve the learning process, more accessible, and more student friendly.

Many faculty members say that the student is not the customer, but is the product.

However, upon closer review, it becomes clear that the student is not the product; the product is the learning of the students. Learning is a team effort between the professor and the student. Jointly, they produce a product—the learning of the student. Both parties are responsible participants in that process.

2.7.3 Attitudes necessary to utilize this methodology to improve classroom instruction

- en mind
- A willingness to change
- A willingness to learn some new things –none of which are rocket science— about continuous improvement: SPC, CQI/TQM theory, process improvement tools, planning tools
- A willing to take some minor risks and give up some control
- Willingness to carefully monitor/assess/evaluate the teaching/learning process
- A willingness to assume a new role, that of learning facilitator—in the teaching /learning process.
- A willingness to learn about some new instruction techniques and how to use them effectively
- A willingness to try new and innovative teaching/learning strategies: discarding those that prove to be ineffective and keeping and improving those that work. (Cornesky, 1993).

2.7.4 What will be the likely effect?

- A new spirit in the classroom
- A reduced emphasis on grades; an increased emphasis on learning and outcomes
- Higher expectations by students of what they can learn
- Students leaving the classroom wanting to continue to learn
- An increase in student performance with reduced variation
- Teams helping each other learn; teams helping the professor to continue to learn (Chaffe & Sherr, 1992).

2.7.5 How one can get started

Read some of the articles cited in the references at the conclusion of this paper. The undated Tribus and Barr articles are particularly worthwhile. Research the topic for yourself. Be as concerned about teaching/learning process as you are about your course content.

Talk to faculty members who are trying different strategies of instruction. Discover e effect these strate es have had on th - - mbers' classes. Educational research clearly shows that only a few instructional strategies will lead to large (greater than two standard deviations) increases in student learning. These include the use of a mastery-learning model with re-teaching and retesting, instructor or peer tutoring, collaborative/participative learning (e.g., teams), and the uses of new technologies such as multimedia and the Internet.

Just do it. Try a new method for teaching a course topic. You needn't do a whole course. Remember, improvement comes systematically. Apply the PCDA model. Measure the resulting student learning. If you feel it works and can be further refined, continue to do so. If it clearly doesn't work, try something else. Ask the students if something is working or not and what they think might work. Use their ideas. After all, they are the customers. (Chaffe & Sherr,1992;Legotlo,1996,Teu,1997).

- **Climate**

Many faculty members would be encouraged to pursue a TQM/CQI approach to teaching/learning if a continuous improvement model was being practiced consistently within the rest of the school. For a substantial cross-section of faculty members to adopt the new philosophy in the classroom, credible examples of success in other areas would increase the probability of acceptance. For this to happen, the institution must make a long-term commitment to the philosophy; otherwise, adoption would be but a small fraction of what could be possible. Chaffe, &Sherr, 1992).

For a TQM/CQI philosophy to be adopted by a professor requires some risk taking. For faculty members to take risk, a climate must exist in which risk taking is

encouraged. This means that faculty members must trust the leadership and that the leadership must a genuine interest in what is happening with individual faculty members. Faculty members must feel valued and must believe that what they are doing is important to the college or university leadership.

- **Support Resources**

For a faculty to adopt a continuous improvement model in teaching/learning, g is essential. The following topics are prerequisit

- Knowledge of continuous improvement theory and practice
- Using quality tools to improve teaching and learning
- Knowledge of which instructional techniques and strategies work in different instructional situations.
- Training on how to select the most appropriate technique for a particular topic and audience and how to effectively utilize that technique.
- Measuring the performance of instructional processes(Chaffe & Sherr,1992).

- **How this can be accomplished.**

A teaching and learning centred with the appropriate expertise, the right funding, and a mission centred on a continuous improvement model for teaching and learning can be the focal point for faculty members to change their teaching/learning paradigms and to successfully implement a continuous improvement model in their classroom.(Aguayo,1990).

For such a centre to be successful, the following ingredients must be present:

- The mission of the teaching and learning centre must be centred on the continuous improvement of teaching and learning, and focused on disseminating techniques that work with students.
- The university community must view the expertise in the centre as experts.
- The center must be adequately funded so that faculties with needs outside the

expertise of the center can have their needs met elsewhere with funding from the center.

- The center should rely on existing faculty expertise and organized support clusters comprised of faculty who are at various stages of the continuous improvement process to assist new comers in learning what TQM/CQI is all about.
- The center should rely on existing faculty expertise and organized support clusters comprised of faculty who are using particular teaching techniques

technique.

- The center must have state-of-the-art facilities, including computer resources with ties to electronic instructional resources outside the university, and staffed with personnel who know how to access these resources to solve a particular problem.
- The center must be center-focused and practice the TQM/CQI philosophy in its own management and operation. (Baugher,1993).

- **Some Concluding Thoughts**

Our goal, as educators, must be to change our teaching/learning process from one which is dependent on inspection to obtain quality to one in which the teaching/learning process itself guarantees quality. Application of the TQM/CQI philosophy can move us toward that goal. Adoption of TQM/CQI in he classroom will occur on two levels—individual faculty adoptions and large-scale institutional adoptions. (Baugher, 1993).

2.8. TQM and Organisational Development

While Total Quality Management has proven to be an effective process for improving organisational functioning, its value can only be assured through a comprehensive and well thought out implementation process. The purpose of this chapter is to outline the key aspects of the implementation of large-scale organisational change that may enable a practitioner to more thoughtfully and successfully implement TQM. First, the

context will be set. TQM is, in fact, a large-scale systems change, and guiding principles and considerations regarding this scale of change will be presented. Without attention to contextual factors, well-intended changes may be adequately designed. As another aspect of context, the expectations and perceptions of employees (workers and managers) will be assessed, so that the implementation plan can address them. Specifically, sources of resistance to change and ways of dealing with them will be discussed. This is important to allow a change agent to anticipate resistance and design for them, so that the process does not bog down or stall. Next, a model of im lementation will be resented inc ion of key principles. Visionary leadership will be offered as an over riding perspective for someone instituting TQM. In recent years the literature on change management and leadership has grown steadily, and applications based on research findings will be more likely to succeeded. Use of tested principles will also enable the change agent to avoid re-inventing the proverbial wheel. Implementation principles will be followed by a review of steps in managing the transition to the new system and ways of helping institutionalise the process as part of the organization's culture. This section, too, will be informed by current writing in transition management and institutionalisation of change. Finally, some miscellaneous dos and don'ts will be offered. (Milakovich, 1991;Swiss, 1992).

Members of any organisation have stories to tell of the introduction of new programs, techniques, systems, or even, in current terminology, paradigms. Usually the employee, who can be anywhere from the line worker to the executive level, describes such an incident with a combination of cynicism and disappointment: some manager went to conference or in some other way got a ' great idea' (or did it base on threat or desperation such as an urgent need to cut costs) and came back to work to enthusiastically present it, usually mandating its implementation. The 'program' probably raised people's expectations that this time things would improve, that management would listen to their ideas. Such a program usually is introduced with fanfare, plans are made, and things slowly return to normal. The manager blames unresponsive employees, line workers blame executives interested only in looking good, and all complain about the resistant middle managers. Unfortunately, the program itself is usually seen as worthless:' we tried team building (or organisation development or quality circles or what have you) and it didn't work; neither will TQM'. Planned change processes often work, IF conceptualized and implemented

properly; but, unfortunately, every organisation is different, and the processes are often adopted 'off the shelf' 'appliance model of organizational change': buy a complete program, like a 'quality circle package,' from a dealer, plug it in, and hope that it runs by itself' (Kanter, 1983,249). Alternatively, especially in the under funded public and not for profit sectors, partial applications are tried, and in spite of management and employee commitment do not bear fruit. This chapter will focus on ways of preventing some of these disappointments.(Kanter,1983).

anned change implementation

and suggest specific TQM applications. Several assumptions are proposed: (Chaudron, 1993) 1.TQM is a viable and effective planned change method, when properly installed; 2.not all organisations are appropriate or ready for TQM; 3.preconditions (appropriateness, readiness) for successful TQM can sometimes be created; and 4.leadership commitment to a large scale, long term, cultural change is necessary. While problems in adapting TQM in government and social service organisations have been identified, TQM can be useful in such organisations if properly modified (Milakovich, 1991;Swiss, 1992).

2.8.1 TQM as Large Scale Systems Change

TQM is first glance seen primarily as a change in an organisation's technology its way of doing work. In human services, this means the way clients are processed the service delivery methods applied to them and ancillary organizational processes such as paperwork, procurement processes, and other procedures. But TQM is also a change in an organisation's culture its norms, values, and belief systems about how organisations function. Finally, it is a change in an organisation's political system: decision making processes and power bases. For substantive change to occur, changes in these three dimensions must be aligned: TQM as a technological change will not be successful unless cultural and political dimensions are attended to as well (Tichey, 1983).

Many researchers such as Hyde, 1992;Chaudron, 1992) have noted that TQM results in a radical change in the culture and the way of work in an organisation. A fundamental factor is leadership, including philosophy, style, and behavior. These

must be congruent as a leader presents them. Many so-called enlightened leaders of today espouse a participative style that is not, in fact, practiced to any appreciable degree. Any manager serious about embarking on a culture change such as TQM should reflect seriously on how she or he feels and behaves regarding these factors. For many managers, a personal program of leadership development (e.g., Bennis, 1989) may be a prerequisite to effective functioning as an internal change agent advocating TQM.(Chaudron,1992; Hyde,1992).

Other key considerations have to do with alignment among various organisational systems (Chaudron, 1992;Hyde, 1992). For example, human resource systems, including job design, selection processes, compensation and rewards, performance appraisal, and training and development must align with and support the new TQM culture. Less obvious but not less important will be changes required in other systems. Information systems will need to be redesigned to measure and track new things such as service quality. Financial management processes may also need attention through the realignment of budgeting and resource allocation systems. Organisational structure and design will be different under TQM: layers of management may be reduced and organisational roles will certainly change. (Tichey, 1983).
In particular, middle management and first line supervisors will be operating in new ways. Instead of acting as monitors, order-givers, and agents of control they will serve as boundary managers, coordinators, and leaders who assist line workers in getting their jobs done. To deal with fears of layoffs, all employees should be assured that no one will lose employment as a result of TQM changes: jobs may change, perhaps radically, but no one will be laid off.
Hyde (1992) has recommended that the system of 'disperse and transform should not replace, midlevel managers.' This no layoff principle has been a common one in joint our management c ange processes suc as qua ity o wor ng i e projects or many years.

Another systems consideration is that TQM should evolve from the organisation' strategic plan and be based on stakeholder expectations. This type of planning and stance regarding environmental relations is receiving more attention but still is not common in the human services. As will be discussed below, TQM is often proposed based on environmental conditions such as the need to cut costs or demands for

increased responsiveness to stakeholders.(Hyde,1992).

A manager may also adopt TQM as a way of being seen at the proverbial cutting edge, because it is currently popular. This is not a good motivation to use TQM and will be likely to lead to a cosmetic or superficial application, resulting in failure and disappointment. TQM should be purpose oriented: it should be used because an organisation's leaders feel a need to make the organisation more effective. It should be driven by results and not be seen as an end in itself. If TQM is introduced without consideration for real organizational needs and conditions, it will be met by skepticism on the part of both managers and workers. We will now move to a discussion of the ways in which people may react to TQM. (Pruger & Miller, 1991

2.8.2.1 People's Expectations and Perception

Many employees may see TQM as a fad, remembering past 'pads' such as quality circles; management by objectives, and zero based budgeting. As was noted above, TQM must be used not just as fad or new program, but must be related to organisational problems, needs and outcomes. Fortunately, Martin (1993) has noted that TQM as a 'managerial wave' has more in common with social work than have some past ones such as MBO or ZBB, and its adaptations may therefore be easier.

In another vein, workers may see management as only concerned about the product, not staff needs. Management initiatives focused on concerns such as budget or cost will not resonate with beleaguered line workers. Furthermore, staff may see quality as not needing attention: they may believe that their services are already excellent or that quality is a peripheral concern in these days of cutbacks and multi problem clients. For a child protective service worker, just getting through the day and perhaps mitigating the most severe cases of abuse may be all that one expects. Partly because of heavy service demands, and partly because of professional training of human service workers, which places heavy value on direct service activities with clients, there may be a lack of interest on the part of many line-workers in efficiency or even effectiveness and outcomes (Pruger & Miller, 1991;Ezell, Menefee, & Patti,1989).This challenge should be addressed by all administrators (Rapp & Poertner,1992),and in particular any interested in TQM.

Workers may have needs and concerns, such as lower caseloads and less bureaucracy, which are different from those of administration. For TQM to work, employees must see a need (e.g., for improved quality from their perspective) and TQM may help. (Pruger Miller, 1991;Ezell, Menefee, &Patti, 1989). Fortunately, there are win-win ways to present this. TQM is focused on quality, presumably a concern of both management and workers, and methods improvement should eliminate wasteful bureaucratic activities, save money, and make more human resources available for core activities, specifically client service.

2.8.3 Sources of Resistance

Implementation of large-scale change such as TQM will inevitably face resistance, which should be addressed directly by change agents. A key element of TQM is working with customers, and the notion of soliciting feedback/expectations from customers/clients and collaborating with them, perhaps with customers defining quality, is a radical one in many agencies, particularly those serving involuntary clients (e .g, protective services) (Hyde,1992). Historical worker antipathy to the use of statistics and data in the human services may carry over into views of TQM, which encourages the gathering and analysis of data on service quality. At another level, management resistance to employee empowerment is likely. They may see decision-making authority in zero sum terms: if employees have more involvement in decision-making, managers will have less. In fact, one principle in employee involvement is that each level will be more empowered, and managers lose none of the fundamental authority. There will undoubtedly be changes in their roles, however. As noted above, they will spend less time on control and more on facilitation. For many traditional managers, this transition will require teaching/training, self- reflection, and time as well as assurances from upper management that they are not in danger of being displaced.

Resistance in other parts of the organization will show up if TQM is introduced on a pilot basis or only in particular programs (Hyde, 1992). Kanter (1983) has referred to this perspective as segmentalism: each unit or program see itself as separate and unique, with nothing to learn form others and no need to collaborate with them. This shows up in the 'not invented here' syndrome: those not involved in the initial

development of an idea feel no ownership for it. On a broader level, they may be employee resistance to industry examples used in TQM terms like inventory or order backlog (Cohen and Brand, 1993,122).

2.8.4 Dealing with Resistance.

Several tactics can be helpful in dealing with resistance to TQM implementation. Generally, they have to do with acknowledging legitimate resistance and changing tactics based on it, using effective leadership to enroll people in the vision of TQM, and using employee participation.

A useful technique to systematically areas of resistance is a force field analysis Brager & Holloway, 1992). Kurt Lewin as an assessment tool for organisational change originally developed this technique. It involves creating a force field of driving forces, which aid the change or make it more likely to occur, and restraining forces, which are points of resistance or things getting in the way of change. Start by identifying the change goal, in this case, implementation of TQM. Represent this by drawing a line down the middle of a piece of paper. Slightly to its left, draw a line that represents the current state of the organisation. The change process involves moving from the current state to the ideal state, an organization effectively using TQM. To the left of the second line (the current state), list all forces (individuals, key groups, or conditions) that may assist in the implementation of TQM. They, may include environmental pressures leading to reduced funds, staff who may like to be more involved in agency decision making, and the successful application s of TQM elsewhere. On the other side, list restraining forces that will make the change implementation more difficult. Examples may be middle management fear of loss of control, lack of time for line workers to take for TQM meetings, and skepticism based on the organisation's poor track record regarding change. Arrows from sides touching the 'current state' line represent the constellation of forces. Each forced is then assessed in two ways: its potency or strength, and its amenability to change. More potent forces, especially restraining ones, will need greater attention. Those not amenable to change will have to be counteracted by driving forces.

Table 2.1

Exhibit 1provides an example:

Exhibit 1A force field Analysis	
DRIVING FORCES	**RESTRAINING FORCES**
Environmental pressure leading to reduced funds	Middle management's fear of loss of control
Staff who may like to be involved in agency decision making	Lack f time for line workers to take time for TQM meetings
Successful application of TQM elsewhere	Skepticism based on the organisations poor performance regarding change.

(Brager & Holloway, 1992)

The analysis of the force field involves looking at which driving forces may be strengthened and which restraining forces may be eliminated, mitigated or counteracted. If it appears that, overall, driving forces are strong enough to move back restraining forces, adoption of TQM would be worth pursuing. The change plan would include tactics designed to move the relevant forces.

It is also important to note and validate any points of resistance which are, in fact, legitimate, such as the limited amount of staff time available for TQM meetings. Klein (cited in Bennis, Benne, & Chin, 1985) encouraged change agents to validate the role of the 'defender' of the status quo and respond to the legitimate concerns raised. This will allow appropriate adaptations of the TQM process to account for unique organisational circumstances. Sell TQM based on the organisation's real needs, note legitimate risks and negatives, and allow improvements in your own procedures. This should enhance your credibility and show you openness to critically looking at the process.

Another way to address resistance is to get all employees on the same side, in alignment towards the same goal. Leadership is the mechanism for this, and specific models known as transformational or visionary leadership (Bennis & Nanus, 1985) are the most effective. Research on change implementation (Nutt, cited in Robey,

1991) has identified four methods. The first,' intervention' involves a key executives justifying the need for change, monitoring the process, defining acceptable performance, and demonstrating how improvements can be made. This was fond to be more successful than 'participation,' in which representatives of different interest groups determine the features of the change. Participation was found to be more successful than 'persuasion' (experts attempting to sell change they have devised) or 'edict,' the least successful. Transformational or visionary leadership, the approach suggested here, is an example of the intervention approach. This would involve a leader articulating a compelling vision of an ideal organisation and how TQM would help the vision to be actualised. These principles will be discussed in more detail in a later section, as a framework for the change strategy.(Bennis & Nanus,1985).

A powerful way to decrease resistance to change is to increase the participation of employees in making decisions about various aspects of the process. There are actually two rationales for employee participation (Packard, 1989). The more common reason is to increase employee commitment to the resultant outcomes, as they will feel a great stake or sense of ownership in what is decided. A second rationale is that employees have a great deal of knowledge and skill relevant to the issue at hand (in this case, increasing quality, identifying problems, and improving work processes), and their imput should lead to higher quality decisions. (Vroom and Yetton, 1973).

A manager should consider any decision area as a possibility for employee participation, with the understanding that that participation is not always appropriate (Vroom and Yetton, 1973). Employees or their representatives may be involved in decision areas ranging from the scope and overall approach to the TQM process to teams engaged in quality analysis and suggestions for improvements. They may also be involved in ancillary areas such as the redesign of the organisation's structure, information system or reward system. Involvement of formal employee groups such as unions is a special consideration that may also greatly aid TQM implementation.

A change agent should understand that, overall, change will occur when three factors (dissatisfaction with the status quo, desirability of the proposed change, the practicability of the change) added together are greater than the 'cost' of changing (time spent in learning, adapting new roles and procedures, etc.) Beckhard and

Harris1987). This is represented in the formula in Exhibit II. Any key group or individual will need a level of dissatisfaction with the status quo, must see a desired improved state, and must believe that the change will have minimal disruption. In other words, the change (TQM) must be seen as responding to real problems and worth the effort or the cost in getting there. Modifying these variables may create conditions favouring change. The change agent may try to demonstrate how bad things are, or amplify others 'feelings of dissatisfaction; and then present a picture of how TQM could solve current problems. The final step of modifying the equation is to convince people that the change process, while it will take time and effort, will not be prohibitively onerous. The organization as a whole and each person will be judging the prospect of TQM from this perspective. A variation of this is the WIIFM principle:' What's in it for me?' To embrace TQM, individuals should be shown how it would be worth for them.

Exhibit II: Resistance To Change

C =(A+B+D) > X

C = Change

A =Level of dissatisfaction with the status quo.

B =Desirability of proposed change

D =Practicability of the change

X =Cost of changing

(Sugarman, 1988).

A final possible area of resistance, the 'not not invented here' syndrome may be seen after TQM is successfully adopted in one part of the organization and attempts are made to diffuse it, or spread it to other areas. Such resistance may be prevented or reduced in three ways. First, the general techniques mentioned above should be helpful. Second, each new area (Program, division, department) should have a new assessment and contracting process: different circumstances should be expected in each part of the organization (Chaudron, 1992). Finally, a general principle of TQM implementation mentioned below is relevant here: every TQM application should be uniquely adapted: don't use 'off the shelf' models or try to standardize all aspects of the process.

2.8.5 Implementation Principles and Processes

Specific of TQM implementation will be discussed in two ways. First, a model for organizational transformation through visionary leadership will be presented. A full implementation of TQM does, as was emphasized earlier, represent a significant change in the cultural and political economy of an organization and a comprehensive change strategy is therefore required. After discussion of a change model, several do's and don'ts culled from the literature on TQM in the public sector and the human services will be reviewed.

2.8.6 Current Reality and Preconditions

A preliminary step in TQM implementation is to assess the organization's current reality: relevant preconditions have to do with the organization's history, its current needs, precipitating events leading to TQM, and the existing employee quality of working life (Sugarman 1988). If the current reality does not include important preconditions, TQM implementation should be delayed until the organization is in a state in which TQM is likely to succeed. The force field analysis discussed above is one useful tool in reviewing the current situation. If an organization has a record of accomplishment of effective responsiveness to the environment, and if it has been able to change the way it operates when needed, TQM will be easier to implement.(Sugarman,1988) If an organization has been historically reactive and has no skill at improving its operating systems, there will be both employee skepticism and a lack of skilled change agents. If this condition prevails, a comprehensive program of management and leadership development may be instituted. A management audit (Sugarman, 1988) is a good assessment tool to identify current levels of organizational functioning and areas in need of change. An organization should be basically healthy before beginning TQM. If it has significant problems such as an unstable financing base, weak administrative systems, lack of managerial skill or poor employee moral, TQM will not be appropriate. (Sugarman, 1988).

However, a certain level of stress is probably desirable to initiate TQM: people need to feel a need for a change. Kanter (1983) addresses this phenomenon by describing

building blocks that are present in effective organizational change. These forces include the departures from tradition, a crisis or galvanizing event, strategic decisions, individual 'prime movers,' and action vehicles. Departures from tradition are activities, usually at lower levels of the organization, which occurs when entrepreneurs move outside the normal ways of operating to solve a problem. A crisis, if it is not disabling, can also help to create a sense of urgency that can mobilize people to act. In the case of TQM, this may be a funding cut or threat, or demands from customers or other stakeholders for improved quality of service. After a crisis, a leader may intervene strategically by articulating a new vision. Of the people to help the organization deal with it. A plan to implement TQM may be such a strategic decision. Such a leader may then become a prime mover, which takes charge in championing the new idea and showing others how it will help them where they want to go. Finally, action vehicles are needed: mechanisms or structures to enable the change to occur and become institutionalized. TQM processes and models of employee participation are such mechanisms.(Osborne & Gaebler(1992).

Essential or desirable preconditions may be identified in two areas: macro and micro. Macro factors include those that are concerned with issues such as leadership, resources, and the surrounding infrastructure. Micro issues have to deal with internal issues such as employee training and empowerment and organizational processes such as quality assurance. These are listed in Exhibit

Table 2.2

MACRO	MICRO
Crisis	Top management support
Leaders championing new ideas	Customer focus
Continuity of political leadership	Long term strategic plan
Healthy Civic infrastructure	Employee recognition and training
Key leaders having shred vision and goals	Employee empowerment and teamwork
Trust among those in power	Measurement and Analysis of products and processes
Outside resources	Quality Assurance
Models to follow	

(Osborne & Gaebler, 1992).

At the macro, level Osborne and Gaebler (1992,3267) have listed several 'factors supportive of fundamental change' which showed up in their research on reinventing government. These factors, summarized in exhibit III, are consistent with research cited earlier about effective organizational change. It should be noted that Osborne and Gaebler researched governmental organizations only; but several factors, including leadership and long term perspective, are relevant in not for profit settings as well. Kanter as a driving force of change also identified the first factor, a crisis. Next, Osborne and Gaebler noted the importance of leadership. Such leaders are usually at the executive level of the organization, where they can champion new ideas and protect risk takers. At the political level, a continuity of leadership is desirable: a long-term commitment is necessary, and politicians are often not willing to adopt this perspective. A healthy civic infrastructure is also valuable: an organization in a community with citizens, community organizations, and businesses committed to the public welfare is more likely to be able to engage in large scale change. Further more, key leaders in the community having a shared vision and goals, and a level of trust among those in power (e.g., executives and union leadership), are valuable. Outside resources, in the form of help from foundations consultants, civic organizations, or other governments, will usually be necessary. Finally, while there is no best way to implement particular change efforts, it does help to have models to follow: other organizations that have implemented change can offer useful guidance and reassurance that change is possible. At least half of these factors were present when 'wholesale reinvention' occurred. Many of these factors are present in successful case studies of TQM and other large-scale change.(Kanter,1983).

On the micro level, the U.S. Federal Quality Institute identified several key factors related to successful TQM. First, as many researchers have noted, top management support is necessary. This is typically represented partly through strategic planning regarding TQM. Second, a customer focus is an important pre condition; since TQM often involves improving quality form a customer's point of view. Employees or their representatives (i.e., unions) must be involved early, particularly in addressing employee training and recognition and employee empowerment and teamwork issues. Attention to these issues is important in changing the organizations culture in the direction of teamwork and a customer and quality focus. The measurement and

analysis of products and processes and quality assurance are final elements that need attention (cited in Hyde, 1992). Assessing these factors and private sector implications, Hyde (1992) listed the following implications regarding TQM implementation in the private sector. First, basic quality management systems have to be developed. These need to be accessible to all levels, and, in fact, must be designed and implemented with employee involvement. More specifically, any unions in the organization must be substantively involved. Consistent with a systems perspective, budgeting and resources allocation systems will need to be realigned to fit with the TQM culture: TQM cannot be used as a mechanism to simply cut costs or rationalize cutbacks. The same is true of human resource management systems: work may be redesigned to implement self directed work teams; performance appraisal and compensation systems may be change to reward team based performance; and massive training for managers, supervisors, and workers will be necessary. Finally, thoughtful attention needs to be paid to the ways in which customer feedback is used. (Hyde 1992).

2.8.7 Visionary Leadership

With these principles and preconditions in mind, the following implementation steps will be discussed: using leadership to articulate a vision of the future for the organization and how TQM fits into it, designing a comprehensive change process, implementing TQM & related new systems, and ensuring institutionalisation. (Norman & Keys, 1992).

As was emphasized earlier, leadership is a key element in successful implementation of large-scale change (Norman & Keys, 1992): the leader shows the need and sets the vision, defining the basic purpose, goals, and parameters or requirements of TQM. The leader needs to take a long-term perspective, and must be able to motivate others to stick with the process during the early stages when resistance and obstacles may seem insurmountable. The preferred leadership style would be a participative one, so that staff may be involved in the design of the specific elements. This may seem in contradiction to the earlier stated preference for and intervention' approach as opposed to traditional participative decision-making. In the former, the leader is, in fact directive regarding the big picture and overall goals, i.e., establishing PDM. Once that strategic direction has been determined, a participative style may be used on

implementation details. Prior to this decision, of course, the manager should study TQM, talk to others who have used it, and perhaps attend a preliminary training session. This is important in order for the manager to accurately assess the fit between TQM and his/her style. This will be necessary in establishing an organizational culture that is compatible with TQM, nurturing and re-in forcing continuous quality movement (Cohen and Brand, 1983,118).

In designing a comprehensive change process, the leader must acknowledge the existing organizational culture (norms and values, managers' leadership philosophies and styles at all levels) to ensure a good fit. TQM also needs to be congruent with or aligned with other organizational processes, including reward systems, financial & information systems, and training systems.

Implementing TQM essentially involves organizational transformation: beginning to operate in new ways, developing a new culture. This also includes redesigning other systems, as has been described above. Such change, while difficult, is possible in the public sector, in spite of Swiss's (1992) reservations (Packard and Reid, 1990)

2.8.8 Steps in Managing the Transition

Beckhard and Pritchard (1992) have outlined the basic steps in managing a transition to a new system such as TQM: identifying tasks to be done, creating necessary management structures, developing strategies for building commitment, designing mechanisms to communicate the change, and assigning resources.

Task identification would include a study of present conditions (assessing current reality, as described above); assessing readiness, such as through a force field analysis; creating a model of the desired state, in this case, implementation of TQM; announcing the change goals to the organization; and assigning responsibilities and resources. This final step would include securing outside consultation, training, and assigning someone within the organization to oversee the effort. This should be a responsibility of top management. In fact, the next step, designing transition management structures, is also a responsibility of top management. In fact, Cohen and Brand (1993) and Hyde (1992) assert that management must be heavily involved as leaders rather than relying on a separate staff person or function to shepherd the

effort. An organization wide steering committee to oversee the effort may be appropriate. Developing commitment strategies was discussed above in the sections on resistance and on visionary leadership.(Cohen and Brand,1993).

To communicate the change, mechanisms beyond existing processes will need to be developed. Special all staff meetings attended by executives, sometimes designed as input or dialogue sessions, may be used to kick off the process, and TQM newsletters may be an ongoing communication tool to keep employees aware of activities and accomplishments.

Management of resources for the change effort is important with TQM, because outside consultants will almost be required. Choose consultants based on their prior relevant experience and their commitment to adapting the process to fit unique organizational needs. While consultants will be invaluable within initial training of staff and TQM system design, employees (management and others) should be actively involved in TQM implementation, perhaps after receiving training in change management which they can pass on to other employees. A collaborative relationship with consultants and clear role definitions and specification of activities must be established.(Cohen & Brand,1993).

2.8.9 Institutionalisation of TQM

Ledford (cited in Packard & Reid, 1990) has proposed a model including four processes that are forces that determine whether a change will persist through the phases of institutionalisation. These processes are concerned with the congruence among these variables: the change (TQM) with the organization, the change with the other changes initiated at the time, the change with environmental demands, and with the level of slack resources in the organization. TQM needs to be congruent with the organizations current culture, and with the other changes occurring in the organization. In this period of diminishing resources, organizations are likely to be trying to cope, by downsizing or other methods. In some organizations, there are some increasing demands for quality or client service improvements. Many such changes are likely to be driven by environmental demands, and TQM may be more likely to be successful than at times of less environmental pressure. Unfortunately, the fourth

element, slack resources, is less likely to be present: Extra resources (money and staff time) are less likely to be available. The challenge is to find a way to find the initial investment outlay to start a process that will pay off in the long term.

Overlaying one another, but compatible, change model, may also enhance institutionalisation: the learning organization (Senge, 1990). This involves, at both the micro and systems levels, staff always learn how to do better and management learning how to be more responsive to staff and the community. Leaders help staff to develop their own visions and align these with the organization's vision of quality.

Bechard and Pritchard (1992) emphasised top management commitment to the change, and Cohen and Brand (1993) apply this specifically to TQM by recommending finding and nurturing a core group that is interested in organizational change. They also emphasise the importance of personal leadership and example: managers need to apply TQM in their daily work and to get the people to think about and use the concepts and tools. Ongoing monitoring, and action research to make changes as needed, will be required. And, once again, the system perspective must be noted: TQM must be built into other systems, particularly those involving planning and rewards. Leaders should expect a long-term process, including a transition period. They will need to be persistent, using constant reinforcement, for example, through continuous training.

Cohen and Brand,(1993), suggest that TQM should eventually be made an 'invisible' part of the organization, permeating all areas and the responsibility of everyone. TQM may be instituted organization wide or stated in one unit or program and then expanded. Diffusion occurs as TQM is spread from its initial application to other units. Dynamics of resistance mentioned earlier will have to be addressed at this stage.

2.8.10 Some Do's and Don'ts

Following are some dos and don'ts that are based on experiences with TQM in the public sector and the human services. Many are drawn from Cohen and Brand (1993), Hyde (1992), and Chaudron (1992).

- **Don'ts**

First, don'ts 'do's in TQM': a canned approach is likely to be met with scepticism and ultimately fail because it is not adapted to the uniqueness of a particular organization. TQM is particularly susceptible to this phenomenon, because some adherents adopt almost a religious fervour, (they have been described by one observer as 'Deming Lemmings' (Reid, 1992).'Deming as demigod' is another way this phenomenon has been described: a statement takes on an added aura when prefaced by 'Dr. Deming said...'(Chaudron, 1993). Don't copy any particular model but use relevant basic principles such as an emphasis on quality, continuous analysis of tasks to improve performance, and work with suppliers to enable the organization to start with high quality supplies. TQM should be seen as a process, not a program. It should be integrated into ongoing agency operations, and the focus should be on an organization can accomplish its goals and objectives. At the tactical level, don't overemphasize techniques such as statistical process control and the use of charts. Focus instead on the systems the analysis and improvement of processes not on statistics or individual variations.

Whereas a centralised steering committee or group of executives often drives some large-scale organizational change efforts, in TQM it may be best not to centralize the effort and establish a separate quality management bureaucracy ('qualiticrats', according to Hyde). Don't believe that top management support is necessary at first, as is axiomatic in organizational development. While an organization needn't start TQM at the top, successes in particular units or programs should set the stage for diffusion in other directions. Change from below may be appropriate for those at lower levels who want to initiate TQM. It may work best to start TQM with a temporary task force and then hire trainers, expose staff, and hope that managers will be motivated to learn more. People responsible for leading shouldn't devote full time to TQM; they should maintain their work as well. Cohen and Brand believe that people doing it best teach TQM day to day in their work. Implement it gradually to ensure meaningful culture change, and use frequent feedback to ensure that change isn't just superficial. There is no need for a 'grand plan' (a quality council, etc.); just start where the organization is.

- **DOs**

Perhaps the most important 'do' worth repeating is to involve employees in the decision making process, at whatever stage or levels possible. As a specific aspect of this, advance negotiations and discussions with any unions present should occur. Create 'atmosphere of amnesty' (Cohen & Brand, 1993,202) so workers and managers feel free to share improvement needs. Tell people what the quality standards are so that inspection and review isn't necessary. Emphasize client feedback and both quantitative and qualitative performance tracking. Make sure quality teams have the necessary tools and resources, such as training, facilitation, and time to meet. In large organizations, regional offices in particular will need lots of support in order to keep the process alive and thriving. (Cohen & Brand, 1993).

Several suggestions may be given to managers. First, understand the direct service work of your organization.' Management by walking around' is a useful way to get in touch with direct service workers and their needs. Practice what you preach: use TQM on your own processes. Meet frequently with middle managers regarding their personal efforts to use TQM. Focus on the nature of the work and try to establish the employees' minds excitement about a new way of working. TQM training will be needed for all involved work groups. Also, horizontal and vertical communication training may be useful to get groups communicating with each other. Team building is a core element of the process, to ensure employee involvement and effective problem solving. Build analysis into the culture:' stop and think how we work,' according to Cohen and Brand. Insist on objective measures of results. Look for visible improvement, but not optimisation; and try to generate some quick results in terms of time or money saved. Constantly check with employees to assess their comfort with the process. If people are feeling threatened, slow down. Human resource aspects such as team functioning and analysis must be kept in balance. Prevent or watch for schisms between TQM and human resources functions or other parts of the organization.

In summary, first assess preconditions and the current state of the organization to make sure the need for change is clear and that TQM is an appropriate strategy.

Leadership styles and organizational culture must be congruent with TQM. If they are not, this should be worked on or TQM implementation should be avoided or delayed until favourable conditions exist.

Remember that this will be a difficult, comprehensive, and long-term process. Leaders will need to maintain their commitment, keep the process visible, provide necessary support, and hold people responsible for the results. Used imputs from stakeholder (clients, referring agencies, funding sources, etc.) as possible; and, of course, maximize employee involvement in design of the system.

Always keep in mind that TQM should be purpose driven. Be clear on the organizations vision for the future and stay focussed on it. TQM can a powerful technique for unleashing employee creativity and potential, reducing bureaucracy and costs, and improving service to clients and the community.

2.9 TQM in Developed Countries

Total Quality management has also been an instrument of progression in the field of education in developed countries. Their education systems have developed as a result.

2.9.1 TQM in Britain is analyses as follows;

The British education system has gone through a process of unprecedented change. Much has been imposed on the system by the central Government. Some of the initiatives align well with the principles of Total Quality. Others have conflicted with basic principles and created a real tension for schools trying to apply continual improvement. (Brown low, 1994).

Many applications of Total Quality are being reported across the U.K. These are spread across the spectrum of educational establishments. Often these initiatives come with different labels such as school Improvement or effectiveness, but they embrace many of the underlying principles of Total Quality. Hamblet School in St Helens was one of the first special schools to officially introduce TQM (Brownlow, 1994) but

many others have close to the spirit of the philosophy for a long time. The ideal of focusing on the individual's wants and needs is more second nature in this environment. In addition, special schools are less constrained by the national curriculum and are often allowed to be more innovative. The level of commitment from teachers is usually very high. Similarly the concepts of Total Quality, particularly based on the teachings of Deming are generally well received in primary schools. The more progressive primary schools have been developing collaborative; project based learning approaches for many years. Some have even questioned regard and punishment concepts and moved away from grading and ranking to concentrate on intrinsic motivation (Brownlow, 1994).

Ironically Government initiatives designed to improve quality by concentrating on standards and testing, have forced most of these pioneers to abandon their work and return to 'chalk and talk' and 'teaching to the test'. Many primary teachers have a fundamental belief in the same principles articulated by Deming but they are frustrated by a national system that seems to driving them backwards. (Weller, 1993).

Many secondary schools in Britain have been making gains. Somervale Comprehensive School, Midsomer Norton, has been implementing TQM for years. Avon Training and Enterprise Council supported them, a Government funded organization aimed at improving prosperity by increasing investment in education and training throughout the community. Somervale, exchanges students with Mt. Edgecumbe High Schools, started with a strategic review involving all stakeholders, including students. This identified the critical process for improvement. Improvement teams involving parents, teachers support staff and students were established and facilitated through a cycle of Process Improvement (Marsh, 1993). A major breakthrough occurred when some teachers, support staff, students and parents went through a training process spread over six months to become facilitators. These people then went on to lead improvement initiatives in many areas. One of the most successful was the complete redesign of the process for reporting with parents and students and students (Marsh, 1993).

There are many other examples of secondary schools implementing TQM across the country. Another innovator is Westwood St Thomas School in Salisbury. They have

used Total Quality Management to engage 150 stakeholders in Strategic Planning. They too, use the tools in the classroom. Most of these schools realise that they are at the start of a long process and that there are no quick fixes (Marsh, 1993). Sometimes the impetus for Total Quality Management comes from the educational establishment. Leading Total Quality, employees such as Rank Xerox, ICL and the Royal Mail have been assisting local schools to start implementation of TQM in education and community that exist to promote TQM nationwide. Other bodies such as Local Education Authorities and Training and Enterprise Councils have been acting as catalysts. The British Deming Association has taken a lead, mentoring many schools throughout Leicestershire (Davies &West-Burnham, 1997).

2.9.2 Total Quality Management in America

The use of TQM as a school restructuring paradigm has been recently applied and has yielded varying degree of success. Schmoker &Wilson (1993) noted that the theory behind Deming's (1986) management principles 'provides a template, an overreaching body of principles that can promote intelligent action towards improving schools'. TQM has produced high positive results in promoting student achievement, self-esteem and motivation. It has increased teacher morale and self-esteem, and renewed teachers' professional commitment through empowered teams (Schmoker & Wilson, 1993;Murgatroyd &Morgan, 1993).

Weller (1993) points out that TQM is enjoying an increased acceptance in American schools because the Principles of Deming are easily adaptable to education. They can absorb and modify that which is producing positive results in the classroom. TQM has appeal to both educators and the public with its trust towards achieving excellence through cost effective means.

Bostingl (1992) finds TQM to be important for school revitalization for its 'new conceptual framework' and its new synthesis of knowledge about leadership and psychology which allows educators to incorporate the research proven practices of prior reform movements (e.g. effective schools) and leadership theory (human relations movement) into Deming's principles of quality management.

TQM also applies the knowledge of systems theory through the promotion of social interactions within a school's 'interconnected networks' by emphasising team work

and group decision making (Schenkat, 1993). English (1994) notes that Deming's theory (1986) on leadership is research-based and coming out of the work on organizational development and the behavioral science theories has directed application for educational leaders. Found within Deming's fourteen points of Quality Management is a new leadership paradigm, based on congruent sets of assumptions, beliefs, and practices. In his 1993 volume, Deming maintains that 90%of the problems in any organization lie with the management system. To correct the system, management must adopt a new set of beliefs and attitudes about the practice of leadership. Instead of blaming people for organizational failures, management needs to examine the root cause of the problems, which is the management system itself in United States of America.

'Fixing' the system means changing the way management views its purpose, its role and responsibilities and its interactions with the organization's human resources.
Weller & Hartley (1994) examined Deming's (1986) fourteen points of Quality Management and found direct application to the research leadership behavior in effective schools. Successful Georgia superintendents are not dictators, but human engineers who design pathways for the success of others, remove barriers of job efficiency, and facilitate the work of their subordinates by providing the necessary time and resources required to do their job. Superintendents in Georgia's TQM school systems have adopted the philosophy that 'everyone is a leader' and that leadership is not limited to appointment or authorization. In order for people to be truly productive and maximise their talents, they need freedom to innovate and explore, and not to be restrained by the fear or failure. These superintendents report that goal oriented teams, empowered to solve problems and make decisions over their work environment, reduce dissonance in the work place through consensus management.

In these TQM schools, principals and teachers set their own performance targets and are accountable through their own goals and not through top management/administrative regulations or self-developed goals. In these schools systems, the responsibility of the principals is to be committed to TQM principles, mode Deming's fourteen points of quality, and more importantly provide the necessary time and resources for teachers to work the fourteen points of quality (Weller and Hartley, 1994)

Georgia's school superintendents, like their counterparts experience a general decline in student enrolment and an increased reluctance of local taxpayers to increase property tax dollars to pay for education. Fiscal shortfalls have resulted in fiscally insolvent school systems over the past decade and have triggered the downsize staffs and reduce instructional programs such as fine arts and other elective courses. Public and student dissatisfaction with these practices have increased the demand for school administrators to be more cost effective in their spending.(Weller and Hartley,1994). It has forced many superintendents to focus on identifying inefficient practices in their school systems. TQM became the fiscal management philosophy which helped many Georgia school systems cope with their economic crisis by identifying areas of wasted resources and the inefficient use of human capital in developing practices to turn ineffective, high cost programmes into efficient, low cost quality-producing operations (Weller, 1995).

Chappel (1994) notes that the Deming's (1986) quality principles in over 400 public school districts with many of these districts using TQM to reduce costs and increase quality performance in administrative and business services.

Case studies in Alaska, New York, Texas, and California reported by Schmoker &Wilson! 1993) closely parallel the findings of Weller & Hartley (1994) and relate the highly successful outcomes of TQM regarding gains in student achievement scores for both at risk and traditional students, increased student self-esteem, and greater pride in doing one's best. Decreases in student dropout rates, student absenteeism, and cases of vandalism were also reported. Teachers have reported higher morale, enhanced self-concept, and renewed commitment to teaching through their participation on empowered teams. Schmoker & Wilson emphasize the point that TQM is not just another educational faddish scheme to cosmetically enhance the outcomes of schooling, but a management paradigm that really works. They state that the emphasis on customer satisfaction, continuous improvement, and the Fourteen Points provide a structured, systematic strategy for restructuring and constitute American educator's best hope to revitalize education (Schmoker & Wilson, 1993) Sallis (1993) and Ross (1993) agree with Schmoker & Wilson's observation about he value of TQM for school restructuring when they concur that Deming's Fourteen

Points (1986) are the key components to organizational revitalization, success, and pre-eminence for the 1990s and beyond.

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2.9.2 Total Quality Management in Developing Countries

Introduction

The focus of this section is on a general overview of Total Quality Management in developing countries. Specific examples of two countries are our main focus, namely South Africa and Zimbabwe.This is an attempt to show how some schools attempted to deal with Total Quality Management (TQM).

2.9.2.1 Total Quality Management in South Africa

South Africa is currently facing problems in schools. These problems have lack of quality management as a common denominator. According to Steyn, (1995), the following were noticed;

- High dropout rate of pupils
- A shortage of people who are trained in science and technology
- Students leave or graduate from high school under-prepared to meet the demands of society.
- Increase in industry expenditure on training that is seen as industry responding to the failure of schooling (Steyn, 1995).
- Increasing concern that education does not equip children for employment.
- Poor basic education

- The ever increasing demands for literacy, numeracy and social skills
- Poor pupil performance

Results of implementing TQM in South African schools

A number of schools that have implemented TQM principles indicate tremendous improvements in various spheres in the South African education system. The following great changes have been realized (Rappaport, 1993;Tribus, 1990;Moore, 1993;Schargel, 1993):

- Morale and motivation have improved
- Teachers have become facilitators and not task masters
- Membership of School Governing Bodies (SGB) has grown
- Schools have raised large sums of money for new additional programmes or services.
- Requests for admission to institutions have increased
- Pupils have become more involved in after school activities
- The curricular were developed to motivate pupils intrinsically to do their best
- TQM has led to general academic improvement in schools (Steyn,1995;Hayward, 1997;Haquet, 1995).

2.9.3 Total Quality Management in Zimbabwe.

Zimbabwe is one of the countries that opted to employ Total Quality Management as way of improving their education system. It is very important to note that not all schools in Zimbabwe attempted to use Total Quality Management in their school management practices. This style of management was, and is still largely concentrated in both the established private and public schools that are convinced of its efficacy in school improvement (Dzvimbo, 1994).

2.9.3.1 Total quality management research in Zimbabwe

Focus is on a general discussion of Total Quality Management (TQM) in Zimbabwe to try to show how some schools attempted to cope with problems of increased access, declining human and financial resources, equity, quality, school effectiveness and efficiency (Dzvimbo, 1994). At both the primary and secondary levels, there were excessive demands for access into the education system. Not all schools in Zimbabwe attempted to use TQM in their school management practices. The private schools tend to be missionary and selective in their admission criteria.

Such schools regard TQM as a strategic mechanism of managing schools when the education sector, educational markets and its internal environments are changing rapidly. The changes were mainly due to the cultural, religious, moral, and political factors in both the state and civil society as from 1980 onwards. The need for market rationality in the economy is equally putting pressure on schools to effectively and efficiently manage their institutions since budgetary allocation to schools are declining.(Dzvimbo,1994).In the private schools, the issue of democratic school governance and accountability to pupils, teachers, parents and school boards is making it imperative for principals to devise better and more efficient styles of school management such as TQM (Dzvimbo,1994).

2.9.3.2 Reasons for adopting Total Quality Management in Zimbabwe

- **The democratic imperative**

Both the democratic imperative and the need to improve the quality of graduates from primary and secondary schools pushed some schools in Zimbabwe to introduce various forms of TQM. Professionally, some school principals were committed to client needs and the desire to meet those needs by utilizing and mobilising knowledge and skills to meet the professional imperative. (Dzvimbo, 1994).

- **Diminishing resources**

Since independence, Zimbabwean schools are competing for resources, teachers, pupils and survival in a turbulent political and economic environment. In fact, under the current economic plan, there is an emphasis on decreasing government expenditure for social services. Budgetary allocations were reduced from 45.6% in 1990 to 38.5% during the 1995/96 financial years. (Dzvimbo, 1994).

- **Accountability**

Zimbabwean schools were also moved to adopt TQM concepts because of the need to continually interact with its clientele and other stakeholders. The drive for quality was towards improving the quality of service being provided by schools. The imperative was also closely linked to the desire for accountability especially in private schools where stakeholders were contributing more money than in public schools towards the education of their children. (Dzimbo, 1994).

Fees for the rural areas are the lowest because 75%of Zimbabwe's population resides in rural areas .In addition to these fees, schools are allowed to charge school 'levies' which have resulted in large differentials among schools in the country. Wealthier parents are able to pay for the education of their children. Consequently, their schools have better facilities and are able to attract the best teachers. In the final analysis, such

schools overall continue to produce better results. (Dzvimbo, 1994).

- **Schools as social systems**

The need to view the school as social systems was also responsible for the adoption of TQM concepts in some schools. In such schools, it was generally accepted that the school principal and senior management in general would of course drive the TQM process, but it would be the responsibility of teachers, parents, pupils and other stakeholders. In the process, quality would be built into the school activity. Such a process was largely responsible for the development of school cultures that enhance a culture of teaching and learning in schools. In fact, such schools are well known for their distinctive school culture of teaching and learning in schools. In fact, such schools are well known for their distinctive school culture, value systems and excellent performance at public examinations (Dzvimbo, 1994). The notion of a school's value and believe system are also similar to the notions of assurance germane to the world of commerce and industry. Thus schools that adopted TQM were also concerned with the view to making sure that vision and culture building and a commitment to high standards in teaching and learning would permeate to all levels of the schools. In the process, the concept of quality teams or circles as articulated in TQM were established among teachers and partnerships were also built with local communities.(Dzvimbo,1994).

- **School based staff development.**

School-based teacher development was seen by the school principals who adopted TQM as one of the most important strategies of making sure that teachers learned from each other and, in the process, adopted a collegial approach to teaching and learning. This was also seen as the best mechanism for establishing effective teamwork among teachers that was conducive to a collaborative approach to decision-making. In the majority of the institutions, school-based staff development or self-study focused on developing autonomous teachers who would be transformative intellectuals.

- **Results of TQM in Zimbabwe**

Successful and effective schools that use TQM in Zimbabwe value team work among teachers especially in the areas of curriculum improvement, classroom instruction and extra-curricular activities in the school. Emphasis in such schools is on collegiality among teachers in the realisation of a school's instructional and non-instructional goals. These schools operate as learning organizations and focus on the language of hope and possibilities. They are visionary and anchored in a genre of discourse that privileges the concepts of emancipation, liberation and democracy in which emphasis is on the inquiring teacher as a responsible and reflective practitioner. Observations, dialogue, interaction, responsibility, openmindedness, analysis and shared meanings become the hallmarks of teachers as reflective practitioners even in the true Dewean sense of reflectivity (Dzvimbo, 1994).

- Effective schools in Zimbabwe that emphasise school quality by focusing on team work among teachers have the following characteristics:

- There is emphasis on shared aims, norms, beliefs, values, collective involvement and a common direction as encapsulated in the school's mission statement and in some cases, the strategic plan;

- The teams are committed to situational leadership styles rather than focusing on hierarchy and power within the school;

- Every teacher has a sense of belonging to the school. They feel that they are part of the school management and its management.

- The goals and tasks that the teams of teachers are supposed to achieve are clearly articulated, practical and achievable;

- A process of feedback is in-built into the operations of the teams of teachers as life-long learners; and

- They create opportunities to develop a comprehensive, open, collaborative and shared language for describing, analyzing and refining the multiplicity of the discourse practices of teaching and learning (Dzvimbo, 1994).

2.9.4 Summary

Total Quality Management in education requires a commitment to customer satisfaction and a commitment to creating an environment in which staff and students can do their best. Schools that have not started implementing total quality management can benefit a lot from this chapter, since a brief guideline in implementing total quality management in schools has been outlined.(Dzvimbo 1994).

2.9.5 TQM and related programmes in Botswana

Introduction

There are similarities between Total Quality Management, Performance Management Systems (PMS) and Work Improvement Teams (WITs). They all aim at improving productivity, efficiency, productivity and quality in the work place including the education system in Botswana. Although coined differently they generally aim for the same objectives mentioned above. They form the pillars of every advancement in the economy of the country and its people.

2.9.5.1 Botswana National Productivity Centre (BNPC).

In 1988, representatives from the business community and private sector organizations held a meeting to assess the manner in which Batswana execute their duties in order to improve the economy of their country. There had been a realisation

that there was lack of productivity in the workplace, and there was a need to re-examine several factors such as management, policies, technology and employer/employee relations, etc. The government, private sector organizations and labour unions formed a tripartite agreement to drive home the message about productivity movement. Subsequently, a delegation was dispatched to seek advice from countries that have excelled such as Singapore, Malaysia, the United States of America and others, in order to learn from them how they have become success story in the productivity business. The government realised the importance of forming teams known as Work Improvement Teams (WITS) that are found in the civil service and local government. In 1993,the Botswana National Productivity Centre was established as the custodian of the productivity movement. (Botswana National Productivity Handbook, 1994).

What does BNPC do?

BNPC has three core departments namely;

Productivity and Quality Programme

The programme promotes productivity by reaching out to various organisations through seminars, electronic and print media, kgotla (ward) meetings, consultation with government officers, workers, private sector organizations, schools, councils, leaders such as MP's, chiefs, entrepreneurs and manufacturers and the general public. We undertake to ensure that by 2003,60% of Batswana will be aware of basic productivity and quality concepts and practices. (Botswana National Productivity Handbook, 1994).

Public Service Programme

This programme carries out reforms within the public service. The aim is to bring about change in management procedures, and efficiency in customer service. The programme is directed towards the leadership because if leaders are not productive, work could suffer and ultimately fail to be carried out. The Programme also helps the government to improve its procedures, especially efforts to reduce waste and misuse of government property, as well as to ensure that the public service becomes highly

efficient. (Botswana National Productivity Handbook, 1994).

Enterprise Support Programme

Research on economic issues indicates that entrepreneurs have an important role to play. This programme aims to enhance the performance of industries in general. The programme produces booklets that analyze the state of the economy and productivity in Botswana. BNPC encourages industries and government to undertake research from time to time that could help gauge our weaknesses as well as the impact we are making. (Botswana National Productivity Handbook, 1994).

If we are not productive what will happen?

- Poverty would increase. About 47% of Batswana live below the poverty datum line, and if we do not increase our productivity, these statistics would grow.

- People would lose their jobs. Presently, 21%of the population is unemployed, and if we do not increase productivity, this figure would increase. Industries are down sizing their workforce, and this means that those who are still employed need to work harder to retain their jobs.(Botswana National Productivity Handbook,1994).

- If we do not make any effort to be productive, we would be unable to compete with other countries to produce quality best products.

- We are too dependent on diamonds, which may one day be depleted. Cattle are also dying because of drought, while the arable sector is under performing. Tourists go to other neighboring countries, and so we loose out on the benefits accrued there from. This means that we have to work harder.

The government cannot meet all our needs and expectations. We should strive to be self-reliant and re-engage the spirit of teamwork and assisting each other.

Expected outputs of BNPC programmes

- The level of productivity awareness should have risen from 7% to 60% by 2003.

- To cultivate a culture of delivering good and efficient service within the public service as well as in the hospitality industry.

- To assist the business sector to achieve high performance by using productivity and quality's best practices.

- To encourage everybody to be productive, in order to have prosperous nation (Botswana National Productivity Handbook, 1994).

What is productivity?

Productivity means efficiently utilizing resources that are available to you in order to have a high premium.

The right attitudes and goals to improve job performance

The 5B's.

Botlhaga (Innovation) working with less Supervision, self-motivation

Bofefo (responsiveness) time management, Timely customer service, abiding by Agreements, reducing the time of Waiting for service

Botswerere (excellence) beauty, quality, cleanliness,

Art, creativity

Botho (courtesy) humility, patience, Perseverance, kindness

Bonatla (diligence) completing work in a highly efficient manner, high returns, customer delight.

Productivity emphasises the attitude that seeks to continuously improve work in order to increase efficiency, such through policy changes, improving labour procedures, providing quality service, the use of modern technology as well as teamwork. (Botswana National Productivity Handbook, 1994).

If Batswana could strive to serve our country well, we would be able to compete in the global economy, by selling our products and skills with confidence. This means that we should change our attitudes towards work, re-mould ourselves, and find new skills and ways of bringing prosperity to our country.(Botswana National productivity Handbook,1994).

Some attitudes that impede progress in Botswana

- Abuse and waste of utilities such as water, electricity, telephones, paper, vehicles, funds as well as misplacement of human resources.

- Waste of time through selfishness, gossip, bootlicking and realistic tendencies that work against the spirit of humaneness

- Autocratic style of leadership. Docile workers who fear to speak against intimidation. A leader should welcome advice, and criticism that is constructive and aims to improve productivity.

- Lack of consultation with fellow employees. Working alone can retard progress and sometimes place customers at the receiving end, if the person in charge of giving service is not available or does not want to assist them. A leader should hold meetings (possibly monthly) with fellow employees to consult and brief each other, so that they know directly the issue that affect their welfare at work.

- Lack of resources such as office space, computers, vehicles, etc., to facilitate work.

- The attitude of equating the job done to the salary you get. We should stop being mediocre, and producing inferior goods, if we want high salaries. Managers should respect workers, and vice-versa.

- We must change rules and procedures that are not favourable to the satisfaction of customers, because they are the ones we serve. We should not be steeped in old procedures that are no longer effective.

- We must work as a team, and recognise the role of every individual in improving job performance. Remember that laziness works negatively against industry and the whole economy of Botswana. It is tantamount to corruption. Should you be paid for being corrupt? The public pays you, and at the same time you want a salary increment. Is that not fraud? (The Productivity and Quality Programme, Botswana National Productivity Handbook, 1994)..

2.9.6 Vision 2016

TQM is a global process with little or no dichotomy between it and Performance Management System (PMS) as well as Work Improvement Teams (WITS) which are enshrined in the Vision 2016. (Long term Vision for Botswana Handbook, 1997).

What is Vision 2016?

Botswana finds itself in a period of history when social attitudes and values around the world are changing at an unprecedented rate. Within the country itself, the pace of urbanisation and increasing contact with diverse foreign cultures has accelerated this. In the future, the people of Botswana will need to adapt to the challenges of global society while retaining the positive aspects of their cultural values that distinguish them from other nations. (Long term Vision Handbook, 1997).

It is appropriate after thirty years of independence to take stock of our past aspirations, and the extent to which we have realised them. At the same, we should formulate our aspirations and dreams for the future. What kind of society would we like Botswana to be by the year 2016,when we will be celebrating our fiftieth anniversary of independence? This vision should guide our strategic thinking and policy making in the coming years, and should form a rallying point around which all Batswana can unite. (Long Term Vision for Botswana, 1997).

The vision 2016 will envisage all citizens of Botswana fully embracing and actively managing the process of change. This cannot be change for its own sake, but rather a transformation across the broad spectrum of the social, economic, entrepreneurial, political, spiritual and cultural lives of Batswana.The document present a long term Vision for the year 2016,when Botswana will have been an independent nation for 50years.It identifies the major challenges that will need to be met in order to realise the Vision, and proposes a set of strategies that will meet them. (Long Term Vision For Botswana, 1997)

The strategies proposed here is a starting point for a new direction for Botswana that builds upon our strengths and upon the common desires of the people. We must now begin the process of refining and fine-tuning the strategies and turning them into concrete and implement able programmes that will make the Vision 2016 a reality. The document is now offered to the public and government and non-governmental organizations, and the private sector in general for incorporation into their

programmes and plans. This will begin the process of implementing the ideas and aspirations that are expressed here, and to bring the Vision 2016 to the forefront of national thinking with pride and confidence in our future (B.Gaolathe, Minister of Finance, and Presidential Task Group Convenor, and Head of Commission, 1997).

2.9.6.1 Botswana Public Service Productivity Reforms

The Directorate of Public Service Management has introduced several reforms namely Work Improvement Teams (WITS), and Performance Management System (PMS) amongst others. These reforms are aimed at improving efficiency and productivity in the civil service. (Public Service Management Journal, 1999).

2.9.7 Work Improvement Teams (WITS)

The WITS program began in 1993 as part of the national productivity movement. The WITS concept is a people centered Management approach in the public sector, which seeks to foster team spirit, teamwork, commitment to work and mindset that continuously seeks optimum performance. The belief is that even the best can be improved upon. In this regard, the WITS program aims at instilling service, system, group efficiency and effectiveness as well as quality consciousness in the civil servants. To this end, WITS is geared towards developing employees in the context of the organization, because they become committed to and gain pride in their work.(Public Service Management Journal,1999).

It must also be emphasized that the WITS concept is an integrated strategy, which endeavors to develop human beings in their own right. As the individuals participate in various WITS activities, they gain knowledge, skills and experience and positive relationships. All these make employees better human beings than they would be if they were not involved in WITS, in WITS they learn what it means to relate well with other people.(Public Service Management Journal,1997).

In WITS, managers at all levels have a crucial role to play. Without their involvement, Wits cannot be effective. Low management commitment and lack of Guidance mean low-spirited WITS. In turn, inactive WITS indicate that their management is also inactive or disinterested in WITS. (Public Management Journal, 1997).

WITs' Mission

WITs' mission is to cultivate, nurture and sustain a positive work culture, such that all public officers take pride in owning their work, and through this, continuously seek to raise productivity in the public service, and in turn, constantly contribute to the betterment of Botswana's social and economic well being.(Public Service Management Journal,1997).

WITs Objectives

The aim of the strategy is to raise or improve productivity in Public Service. The strategy emphasises people, stresses, participative leadership and teamwork, emphasises a strong client orientation and stresses a mindset that seeks optimum performance. The Directorate of Public Service Management is committed to creating a more awareness of the WITs strategy and its benefits, as well as to enhance the implementation of the programme. (Public Service Management Journal, 1997).

2.9.8 Performance Management System (PMS) in Public Service

To manage performance is much more than merely telling a person what to do and then to 'police' them until it is done. Managing performance is an integral part of any manager's job, and should become a key part of their management style. (Public Service Management Journal 1999).

For a manager, at any level in the organization, to effectively manage performance they should establish clear job objectives, outputs and standards for those they supervise. This results in the development of Key Results Areas (KRAs) and Key Performance Indicators (KPIs), to guide the organization, department, division, etc

and the individual employee. Managers should also monitor and measure performance on a regular basis, and continuously provide constructive and value adding feedback to those supervised. Furthermore, it is no doubt the responsibility of managers is to provide coaching; guidance and support to ensure the supervised achieve their objectives. They should review and appraise performance to ensure focus on achieving goals and objectives.(Public Service Management Journal, 1999).

Performance Management System (PMS) is a change in quality Management process that facilitates management of performance at all levels in an organization, or ministry/department in the case of the public service. It is holistic and integrated system for managing, monitoring and measuring performance. The PMS is a process that fosters the achievement of defined goals and objectives, where employees of an organization, individually or collectively, are held accountable for results in their area of operation. The focus of the system is on customer satisfaction and continuous and sustained productivity improvement. (Public Service Management Journal, 1999).

Government intention for introducing the PMS in Botswana.

The government intention for introducing the performance management process in the public service is to ensure the latter delivers on agreed plans, improve and sustain productivity at all levels, and inculcate a culture of performance, accountability for results as well as focus on specific outputs. The public service needs a holistic and sustainable approach to improve productivity and achieve set goals and objectives, as opposed to previous fragmented 'one shot' initiatives. These single initiatives are good but do not only are unsustainable, they also to a large extent do not address all area of the organization AED Final Report, Nov.28, 1996). (Public Service Management Journal, 1999).

Objectives of the PMS

Objectives and aspirations of a system like this one are many and varied and very much depend on the organizations intentions for introducing the system. For the public service, we would like to narrow down to three key objectives for introducing the PMS.

Firstly, the PMS is designed to improve individual and organizational/ministry performance in a systematic and sustainable way. Goals and objectives, with relevant measures and standards, are set for the ministry, departments divisions, etc, and cascade down to the individual employee. In this way individual or team performance translates into ministerial performance translates into ministerial performance at every level. Regular (quarterly) performance reviews provide the organization and individuals with the opportunity to reflect on their progress in as far as the goals and objectives are concerned, and can then work towards the realisation of the same. There are no surprises at the end of the normal appraisal period. (Public Service Management Journal, 1999)

Secondly, the system will provide a planning and change management framework, which is linked to budgeting and funding process. The effective planning process will be used to enhance ministries and departments' ability to achieve their strategic obligations, and the budget and other resources will reflect and support these initiatives. In other words, every budget, whether at ministerial, departmental or unit level, will be representative of the actual plans in place. (Public Service Management Journal, 1999).

Finally, yet importantly, the PMS is designed to enhance Government capacity to provide efficient service delivery and manage at higher levels of productivity. If ministries and departments or the public service meets its obligations within agreed planning period, at set and agreed budgets and performance standards and outputs, efficiency will be enhanced, and by extension, the Government service delivery to the public and the economy in general, will be improved. (Public Service Management Journal, 1999).

Implications of introducing the PMS in the Public Service

The PMS is a leadership and people driven process for managing change and improving productivity. Commitment to, involvement in, ownership of, and driving of

the system are the ultimate responsibility of the Permanent Secretary or the head of the Department. It requires the Chief Executive Officer (CEO) to sponsor the process, enrol their management team, who in turn should enrol their respective employees. A very clear and working communication strategy would ensure that the entire organization is enrolled and take ownership and use of the system (Kotter, Harvard Business Review, March-April, 1995).

The system also stresses the need for the ministry's leadership and or management to work as a strong team with a clear set of values or principles to guide them. They all are working towards a common goal and they need each other to achieve this. The leadership team will also develop, oversee and ensure the success of the PMS implementation programme or plan in their organization. If they want the system to work for them, they must all work for the system.

The PMS does not affect the organization/ministry and its employees only; it also affects other critical areas in the economy. It embraces all stakeholders in its implementation and management framework, and thus leaves no one outside. Stakeholders involved include all employees, other ministries/departments, businesses, the public, politicians, employee representatives, Government, etc. The public service is providing a service to the economy, and therefore needs the imput and involvement of the above mentioned to ensure it delivers the required service at the expected levels and within the stipulated budgeting and time constraints. (Public Service Management Journal, 1999).

Benefits of the system

Normally, a well-implemented performance management process is beneficial to the organization, its managers and employees. The organization is able to grow and satisfy both customers and the shareholders. Management directs and manages the organization at a higher level of efficiency, characterised by performance management and sustenance skills and values. Employees develop a sense of belonging and attachment since they view themselves as an integral part of the organization.

But more specifically, the PMS is beneficial in that there is integration in the organization, characterised by a shared vision, common values, communicated strategy and a universal focus on outputs. Everybody knows and understands where the organization is going, why and how it is taking that direction, how they fit into the picture, and what is expected from them.

There are clearly defined set of standards or requirements for ministries, department, divisions, units and individual employees. They all know what is expected of them in terms of performance or achievement. There are no surprises for anybody at any given time.

The system facilitates and encourages open communication in the organization. Communication between management and employees is enhanced, and more importantly, they jointly derive outputs and plans of action (Sibson et al., June1998).

Customer/client needs are addressed and there is a greater and committed effort to satisfy these needs. The organization is responsive, through a regular feedback process, to the needs and aspirations of the customer. The organization thus provides the required service(s), and not what it perceives the customer wants. Due to the fact that PMS is holistic, integrated and self-sustaining in design and approach, it therefore facilitates the use of IT and other performance improvement initiatives like the re-engineering, restructuring, performance related pay, WITS, etc, in the organization (AED Final Report, Nov.28, 1996).

The benefits of Performance Management Systems are innumerable, but we hope that the aforementioned will perhaps provide a clear picture of what to expect once the system is effectively used.(Public Service Management Journal,1999).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter three outlines the method of the study. It explains the rationale behind the methodology employed, how the research was conducted and what steps were taken to ensure the validity and reliability of the study. The aim of the study as stated in chapter one, was the guiding force in this investigation It aims at investigating teachers' perceptions on total quality management (TQM) can be used as a tool to improve the quality of education in secondary schools in the South – east District, Kanye area and the Lobatse areas of Botswana.

3.2 RESEARCH TOOLS

According to Borg and Gall (1989), the questionnaire and individual interview are the most common instruments used for data collection in survey research. In the empirical investigation of this study the questionnaire will be used as a tool to collect data.

3.2.1 QUESTIONNAIRE AS A RESEARCH TOOL

A questionnaire is used as a tool for data collection. Distribution by hand is the best form of survey in carrying out an educational inquiry. According to Legotlo (1996), the most important aspect of this type of data collection is that the questionnaire is one of the most outstanding means of communication between the respondents and the researcher. It is an effective device that enables respondents to answer questions.

3.2.1.1 Advantages of a questionnaire

The questionnaire was employed because of the following advantages (Legotlo, 1994: 162 – 163):

- Anonymity of respondents; the respondents names are not given.
- Ease of processing; the questionnaire could be carefully structured and pre-coded, and few open ended questions are used.
- Homogeneous stimuli: the stimuli provided are identical since questionnaire are identical

3.2.1.2 Disadvantages of a questionnaire

Like other strategies for data collection, the questionnaire has some disadvantages such as; (Legotlo, 1996; Teu, 2001)

- Representativeness; high non response rate is common;
- Impersonal: may cause some frustrations to some respondents;
- Negative attitudes to the questionnaire: questionnaires are commonly used these days and some respondents might have negative attitude towards them; and
- Availability of address of the sample population poses some problems.

Despite these advantages, handing the questionnaire is still commonly used to collect data. Researchers have found out a number of factors and several aspects of design and layout in securing a good response rate to a postal questionnaire (Cohen & Manion, 1985:105; Borg &Gall, 1989: 430) and these are:

- The appearance of a questionnaire is vitally important. It must look easy and attractive.
- Clarity of wording and simplicity of design are essential. Clear instructions should guide the respondent;
- Contents of the questionnaire should be arranged in such a way as to maximise co-operation;

- The subject of sub-lettering the questions is a useful technique for grouping together questions to do with a specific issue; and
- The wording of a self-completed questionnaire is of paramount importance and that pre-testing is crucial to its success.

If these factors are carefully considered and great care taken in the construction of the questionnaire and its administration, then more favourable responses could be attained.

3.2.2 Questionnaire and Construction

The measuring instrument has the greatest influence on the reliability of the collected data; hence great care was taken in the construction of the questionnaire. A well-designed questionnaire boosts the reliability and validity of the data to acceptable standards of tolerance (Borg, 1989). Even though the questionnaire is commonly used as a tool for data collection, there is some criticism against its use.

Some of the rules for constructing a questionnaire as indicated by Borg & Gall (1989:430 – 431) are:

- Clarity, items should mean the same to the respondents;
- Short items are preferable;
- Negative items should be avoided;
- Double barrelled items which require the subject to respond to two separate ideas with a single answer should be avoided; and
- Biased questions should be avoided.

3.2.2.1 Development of Questionnaire items

The main aim of the questionnaire is to gather information on teacher's perceptions and how total quality management (TQM) to improve the quality of education in secondary schools.

This instrument was successfully used to determine teachers' perception on:

3.2.2.2 Format and content of the questionnaire

The questionnaire was divided into four sections See Appendix A). Section A (Questions 1 – 7). The purpose of these questions was to gather biographical and demographical information about each respondent. This information is essential to understand information about each respondent. This information is essential to understand the background profile of the respondents.

Section B (Question 8.1 – 8.26). The objective of these questions will be to gather data total quality management as a too to improve the quality education in schools. For each item the respondents will be asked to reflect on a five-point scale, their opinion on total quality management in the schools as follows:

1. = Strongly Agree

2 = Disagree

3. = Uncertain

4. = Agree

5. = Strongly Agree

Section C (Questions 9.1 – 9.10). These questions were constructed to collect data on equating Total Quality Management with Work Improvement Teams and Performance Management Systems. The aim was to find out the perceptions of educators on three processes. In this ten items instrument, respondents mainly teachers were asked to indicate their response on their views on the workability as well as the relationships among the three processes, in a three point scale as follows:

1. = Agree

2 = Uncertain

3 = Disagree

Section D (Questions 10.1 –10.5). The objective of these questions was to collect data on the goals and objectives of the school management to improve the quality of education. A space of (11 –12) was provided for the respondents to comment and motivate their answers.

3.2.2.3 Pre-testing the questionnaire

A pilot study is a small preliminary investigation designed to acquaint the researcher with the flaws and problems that need attention before the major study. It offers the researcher an opportunity to pre-test the instrument. The major purpose of the pilot study is to detect the problems that must be solved before the major study (Legotlo, 1996).

A pretesting of the questionnaire was conducted with 10 teachers not involved in the study. On the basis of the comments made, the questionnaire was improved to be more user friendly.

3.2.3 Final Questionnaire

The final questionnaire was administered to fourteen (14) headmasters;(10) deputy headmasters; fifteen (15) heads of departments;(28) senior teachers; and 133 teachers in the Lobatse, the Kanye area and the South –East District of Botswana.

3.2.4 Covering Letter

The covering letter is a tool employed to introduce the questionnaires to the respondents. The purpose of the covering letter is to indicate the aim of the survey, to convey to the respondents its importance, to assure them confidentiality and encourage their participation (Cohen & Manion, 1980:110). It gives the respondents the direction to complete the questionnaire and guarantees anonymity Borg &Gall 1989:436). A simple covering letter (Appendix B) that explained the purpose and topic of study accompanied the questionnaire to the respondents was attached to the questionnaire.

3.3 Administrative Procedures

Permission for access to schools was secured from headmasters from each secondary school. From the information provided especially on the geographical location of the selected schools, the researcher then delivered the questionnaire.

The researcher requested the principals to help with the distribution of the questionnaires to the selected respondents. In each school, the questionnaires was to be completed by headmasters, deputy headmasters, heads of departments, senior teachers and teachers. The arrangement for the collection of the completed questionnaires was made with the principals of the selected secondary schools.

3.4 Follow –ups.

Non-response is a major disadvantage of the questionnaire (legotlo,1996). Follow-ups are important in maximising response level. Follow-ups were made personally with principals of selected schools. The researcher repeatedly went to the selected schools to check whether the respondents of the various secondary schools had completed the questionnaires. These follow-ups were costly and demanded a lot of perseverance and patience.

3.5 Population and Sampling.

The survey population was drawn from three educational districts of Lobatse, Kanye and the Southeast district. From a list of all secondary schools in the Lobatse area (N=5) the South-east District (N=7), and the Kanye Area (7). The total number of secondary schools all added together is nineteen (19) was compiled through the assistance of dissect officials.

In each of the nineteen secondary schools, headmasters, deputy-headmasters, heads of departments as well as teachers from each of the schools. Thus, the questionnaire got response from each of the nineteen secondary schools in the Lobatse area, Kanye area and the South-East District of Botswana.

TABLE 3.1 Distribution of the sample population

RSPONDENTS	SAMPLE POPULATION	%
Headmasters	**19**	**9.5**
Deputy Headmasters	**19**	**9.5**
Heads of Departments	**60**	**30**
Teachers	**102**	**51**
TOTALS	**200**	**100**

3.5.1 Response

Questionnaires was distributed to 19 secondary schools in the Lobatse area, the Kanye area and the South –East area of Botswana to be completed by 10 respondents in each school

Respondents per school

Location	Headmasters	Deputy-Heads	H.O.D's	Senior Teachers	Teachers	TOTAL	%
LOBATSE Schools							
Lobatse Sec.	0	1	2	3	5	11	
Itireleng	1	0	2	2	4	9	
Ipelegeng	1	1	2	4	4	12	
Letsopa	0	2	1	2	4	7	
Pitikwe	1	0	1	6	8	16	
TOTAL	3	2	8	17	25	55	
KANYESchools	XXXXXXXXX	XXXXXXX	XXXX	XXXXX	XXXX	XXXX	XXXX
Seepapitso	1	1	0	3	6	11	
Mookami	1	0	0	2	4	7	
Ngwaketse	1	1	1	2	3	8	
Tlhomo	0	1	0	2	6	9	
Ntebogang	1	0	2	3	3	9	
Bathoen	1	1	0	2	4	9	
Mathiba	1	1	2	2	4	10	
TOTAL	6	5	5	16	29	61	
SOUTH- EAST Schools	VVVVVVVVV	VVVVVVV	VVVV	VVVVV	VVVV	VVVV	VVVV
Kagiso	1	0	1	2	12	16	
Baitlotli	1	0	0	2	8	11	
Ramotswa Sec.	1	0	1	2	8	12	
Taung	0	1	1	2	12	16	
Mogobane	1	0	0	2	8	11	
Otse	1	1	0	1	6	9	
Kelemogile	1	0	1	2	5	9	
TOTAL	6	2	4	13	59	84	

Table 3.2 below will show the response rate.

	RESPONSE	%
Headmasters	14	7
Deputy – Headmaster	10	5
Heads of departments	15	8
Senior Teachers	28	13
Teachers	133	66.5
TOTAL	200	100

3.5.2 STATISTICAL TECHNIQUES

3.5.2.1 Descriptive data

A computer aided statistical analysis was employed. The SSSPS- programme was used to compute the results of the study. The first step in the analysis was to compute descriptive data for each respondent in the study. Appropriate statistical procedures determining frequency distribution, percentages, mean and standard deviation.

3.5.1.2 Constraints

Whenever there is a research project being carried out a lot of problems are also encountered along the way. These are usually forces that can invalidate the research and interfere with what is supposed to come objectively from the research. The following were experienced during the carrying out of this research study;

1. Financial problems

Money is a necessity in any project no matter how big or small it may be. Usually the amount of money that is available does not meet the expected expenditure that has to be covered in travelling i.e like in fuelling, purchasing stationery, printing the questionnaires and hiring people to do other tasks that are essential for the study such as editing and statistical consultants.

2. Time

Time is precious and it is not always available to carry out all the activities. The time one starts the research study and the time one is supposed to complete is just not enough for most students to cope with. Time always flies.

3 Follow - ups

This is the most disheartening of all the necessary activities to be carried out by students. The response from the respondents needs the most patient person in the world, of which without that then there won't be any success whatsoever. Perseverance and extreme patience is the only remedy to this malady.

3.5 Summary

In summary the questionnaire was used as a main tool for collection of data for this study. Assistance to analyse data was received from University of North West statistic department, a statistical tool SPSS 9 for performing frequency, percentages and graphical representation, mean and standard deviation was used carefully to determine the results of the study. Descriptive statistics was employed to verify issues and challenges on the perceptions of TQM by secondary school teachers in the Kanye area, the Lobatse area and the Southeast district of Botswana.

The following chapter reflects analysis and interpretation of data collected, using statistical tool SPSS.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

The main purpose of this chapter is to report on the results of empirical investigation conducted to investigate the perception of educators on Total Quality Management in the South-East District, Lobatse Area and the Kanye Area. The data is summarised quantitatively and qualitatively based on the information already obtained.

4.2 Review of the Respondents

This analysis was based on the responses of three hundred and twenty (320) respondents in all secondary schools in the Kanye Area, Lobatse Area and the South - East area of Botswana. Out of the above stated expected total number of respondents, only 200 questionnaires were returned, making a total percentage response of 63% in all.

4.3 Biographical and Demographical Data of Respondents

The main aim of this sub-section is to gain a picture of biographical and demographical picture and profile of the respondents. This information helps in understanding what the respondents really are. This information was elicited from the participants to have the insight into the location of the schools, the age of educators, their qualification, their gender, the school enrolment, educational qualification, their positions of responsibility in their respective schools and their length of stay in the profession.

4.4 Summary of Demographic and Other Information

Educators as respondents were asked to report their ages by selecting or picking one of the six age groups where they fall. According to table 4.1,115(58%)of the respondents were between the ages of 31 –35.Respondents between the ages of 36 –40,make (25) 13% of the respondents. Surprisingly 25 (13%) were below the ages of 30.The implication of this percentage is of the fact that some of those below 30 are temporary teachers because generally in Botswana we have a low number of teachers hence the reason why we still have

quite a considerable number of expatriate teachers in the profession. More to that the numbers are brought down again because of HIV/AIDS pandemic.

Table 4.1 Biographical Data of the Respondents

Variable	Categories	Frequency	%
Age of educator	30 and below	25	12.5
	31-35	115	57.5
	36-40	25	12.5
	41-45	18	9
	46-50	98	4.5
	51 and above	8	4
	Total	200	100
Gender	Male	110	55
	Female	90	45
	Total	200	100
School Location	Urban	70	35
	Rural	130	65
	Total	**200**	**100**
School Enrolment	Under 250	8	4
	251-350	7	3.5
	351-550	15	7.5
	551-850	54	27
	851-1000	75	37.5
	0ver 1000	41	20.5
	Total	**200**	**100**
Position in the school	Headmaster	14	7
	Deputy–Head	10	5
	HOD	15	7.5
	Senior Teacher	28	14
	Teacher	133	66.5
How long have you been in the position?	Less than 1year	22	11
	1 –3	81	40.5
	4- 5	44	22
	Over 5	53	26.5
	Total	**200**	**100**
Academic Qualifications	Diploma (Ed.)	104	52
	B.A.Humanities	22	11
	B.A.+P.G.D.E.	53	26.5
	B. Ed	11	5.5
	M. Ed	1	0
	B.Sc.	7	3.5
	M.A.	2	1
	Total	**200**	**100**

4.4.1 Age of Respondents

4.3.1 Educators were requested to state their ages by selecting their age groups. According to table 4.1,115(58%) of the respondents are between31 –35.Respondents between the ages of 36-40, make 25(13%) of the respondents. A good number of respondents are below 30 and most of them are temporary teachers that is why we have low numbers of teachers who are Batswana by descent.

4.4.2 Gender of the Respondents

The data presented in table 4.1 show that 110 (55%) of the respondents were males. This is an implication that males still dominate in the teaching profession. Furthermore, most of the key posts in the teaching profession are still dominated by males, showing that women empowerment is either still lacking or it is being implemented slowly or it is receiving very little attention from the powers that be. It may however indicate that may be females do not like the teaching profession. Females 90 make (45%) of the respondents.

4.4.2 School Location of the Respondent

Respondents were asked to indicate where their schools are located, i. e either in urban centres or in rural areas. Table 4.1 shows that 130(65%)were found to be working in rural areas. This is mainly because a good number of schools where the questionnaires were distributed are in rural areas 15 whereas only five schools (25%) of the schools are found in urban areas. Rural schools make up 15(75%) of the total percentage of all the schools where the questionnaire were distributed.70 (35%) of the respondents were from urban schools.

4.4.4 School Enrolment

Table 4.1 shows school enrolment where respondents were requested to indicate student enrolment in their respective schools. Table 4.1 indicate that of the total respondents 75(38%)are attached to schools with an enrolment of 851 – 1000.All the above mentioned institutions are Junior secondary schools offering Junior Certificate courses in education. Junior schools outnumber senior schools in Botswana as a whole with a disproportionate

numbers of more than 200 to only 27 senior schools the whole country. Only 41(21%) are mainly from Senior secondary schools.

4.4.5 Your Position in the School

On the whole table 4.1 indicates that 67(47.7%)represents the school management. This comprises of the headmaster, the Deputy-Headmaster, Heads of Departments and Senior teachers. Table 4.1 goes on to indicate that 133(66.5%) were teachers. At present figures show that that there are many teachers at the level of teacher because per year there are few teachers elevated to senior teacher position despite the many posts advertised each year by the ministry of education. There are a good numbers of teachers in acting positions/coordinators. The other issue is that stagnation is exacerbated by the fact that parallel progression has long been stopped by the ministry of education.

4.4.6 How long have you been in that position?

The respondents were asked to state their experience in the positions they are occupying or holding at the time. Table 4.1 indicates that 81(40.5%)have 1 – 3 years in their in their respective position. This is a clear indication that conditions can be favourably implemented in most schools as most of the schools have professionals who are still young and active. What they need most is to be exposed to workshops and in-service training to further their knowledge on Total quality management. 53(26.5%) are over 5 years experienced in teaching which enforces the fact that a combination of the two groups with the involvement and dedication of the management, Total Quality Management can be a reality in education.

4.4.7 Highest Academic Qualification

Respondents were asked to indicate their level of academic qualifications. Table 4.1 indicates that 104(52%) of the respondents have Diploma in Education which is obtained from Molepolole College of Education (Molepolole) and Tonota College of Education (Tonota) while others got their Diplomas from the University Of Botswana especially those teaching Mathematics and Science related subjects.22 (11%)are holders of Bachelor of Arts in Humanities, 53(26.5%) have Bachelor of Arts and an additional Post Graduate Diploma in

Education (P.G.D.E.), 11(5.5%) have Bachelor of Education,1has Masters in Education(M. Ed),73.5% have Bachelor of Science Degrees(BSc.), whilst only 2(1%) have Masters in Arts. From the notion we get in table 4.1 not all professional teachers with either a diploma or a degree clarify whether he/she should be posted to either a junior school or a senior school. There are teachers who are degree holders who are in junior schools and those with Diplomas in senior schools and vice-versa and this is done randomly.

4.5 DESCRIPTIVE ANALYSIS

Section B of the questionnaire is meant to determine empirically teacher's perception on Total Quality Management. The respondents were asked to reveal to what extent they agree or disagree with literature on issues important in carrying out the process of Total Quality Management. The questionnaire intended to reveal whether educators have the same perception aligned with what the literature say about Total Quality Management. The five skills used were as follows;

- TQM as a tool to improve effectiveness, productivity and performance
- The role of the school management to improve quality in education
- Total Quality Management guiding principles
- Implementation of Total Quality Management in schools
- Relationships between TQM, Performance Management System (PMS) and Work Improvement Teams (Wits).

These skills were given in a four-point scale, which gave the respondents a direction: -

1. **SD – Strongly Disagree**
2. **D – Disagree**
3. **U – Uncertain**
4. **A – Agree**
5. **SA – Strongly Agree**

4.5.1 Total Quality Management is a Methodology that Can Help Educational Professionals to Cope with Today's Changing Environment

Most of the respondents in this item 179(90%), strongly agreed that Total Quality Management is a methodology that can help education professionals to cope with today's changing environment. This implies that Total Quality Management as a philosophy should be implemented in institutions so as to come to terms with the vital needs of education facing professionals today. 'In the current context of dynamic change and the continuing emphasis on quality education, there has never been more critical time educational systems to demonstrate quality outcomes that are visible, portable and create value for money'. (Cf 2.2). This is a clear confirmation that indeed TQM is a very valuable programme that can be implemented so as to better the output of secondary school students/learners. Table 4.4 further indicate that 16(8%) of the respondents were uncertain as to whether TQM can help change professionals to adjust to the contemporary expectations of the education systems, while only 5(2.5%) disagreed with the message of the item. A graphical representation of the distribution of responses to this item is exhibited in Figure 4.1.

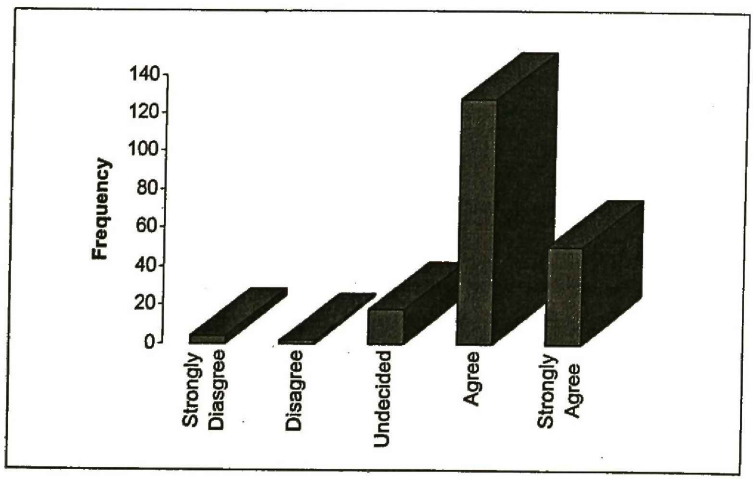


Figure 4.1: Distribution of 'TQM is a methodology that can help Education Profession'

4.5.2 Total Quality Management Can Provide Thee Focus for Educational Improvement

Figure 4.2 and the results in Table 4.4 show that 181(90.5%) are of the view that Total Quality Management can provide a focus for educational improvement. TQM has very clear and outlined rules that have to be followed so that the process becomes a success. All steps and important initiatives are well labelled and needed to be followed closely as has shown in those who have implemented before. 15(8%) of the respondents were uncertain whether TQM could be of great importance once inculcated in the educational system. Only 4(2%) disagree with the item. This is an implication or sign that goes well with the available literature in chapter two 'The focus of 'customer' and 'suppliers' and their relationships are narrowly defined and misunderstood. Improvements in end products such as, 'student learning outcomes', 'research outputs' and 'nature of services' are emphasised over processes. (Cf 2.2).

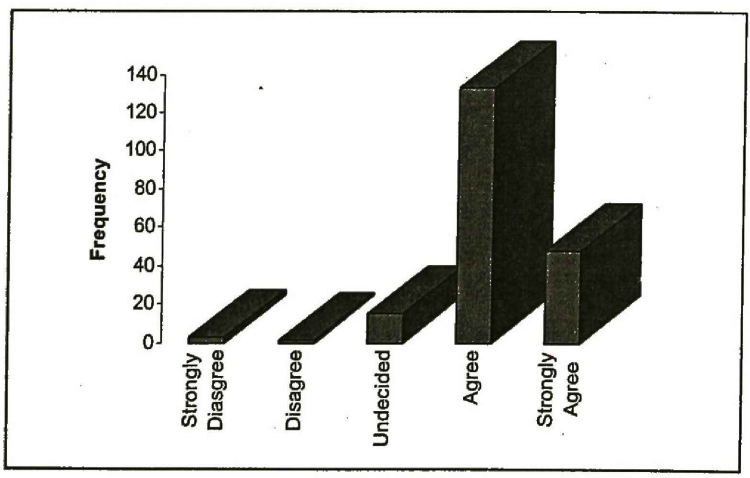


Figure 4.2: Distribution of 'TQM can provide the focus for Educational Improvement'

4.5.3 Total Quality Management is an Organization's Wide Effort to Achieve Quality

Most of the respondents of this item 177(89%) clearly indicate that Total Quality Management is an organizations wide effort to achieve quality. Some of the initiatives that the ministry of education should come up include involving everyone in the organisation, making everyone feel that he/she has something to contribute to the education system and the welfare of the organization as a whole. Autocratic leadership where everything is imposed on professionals can be an impediment to the full establishment of TQM as a process. 20(10%) of the respondents are uncertain about whether wide effort can be a reality, perhaps that can be so, where there is poor administration attributes where there is no communication or where the school management is not committed. Only 3(1.5%) disagree with the idea and of course a contradiction of the realities of TQM as a programme of improvement. Quality management is a set of concepts, strategies, tools, beliefs and practices that is aimed at improving the quality of products and services, reducing waste and saving costs. (Cf 2.3.1). The distribution of responses to this item is graphically shown in Figure 4.3.

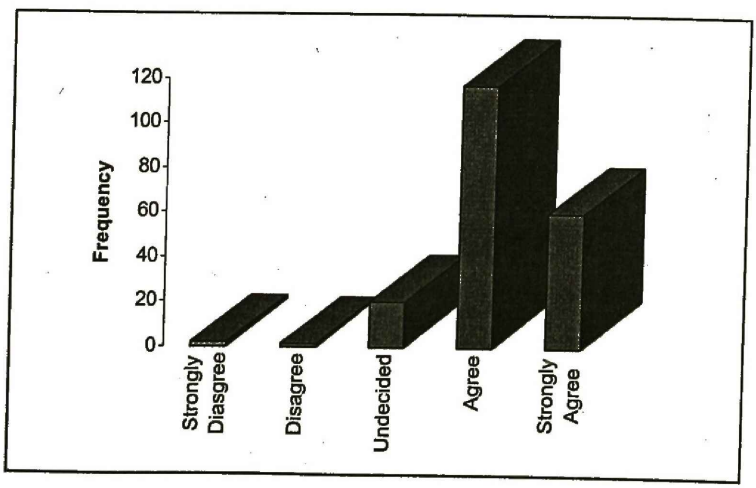


Figure 4.3: Distribution of 'TQM is a an Organization's Wide Effort to Achieve Quality'

4.5.5 Total Quality Management Requires the Dedication of all Organizational Members in Quality Matters

On this variable of dedication 184(92%) of the respondents are of the view that everyone is required to give a strong participation on quality matters (see Figure 4.5 also). This clearly agrees with TQM initiatives that the quality improvement programme must involve all those who work in the institution. Working as a team is one way in which a lot of TQM objectives can be realised. Access to all what is required without fear amongst all professionals is very important for the process to be a success. 12(6%) of the respondents are uncertain about the variable and only 4(2%) disagree with the message of the variable. Based on these results it is clear to everyone that TQM requires dedication of all members in matters of quality. Everybody is responsible for the service they deliver, whether they are institutional managers, teachers or staff in support roles. Harnessing commitment from staff and channelling it into improvement is a major aspect of TQM. (Cf 2.1)

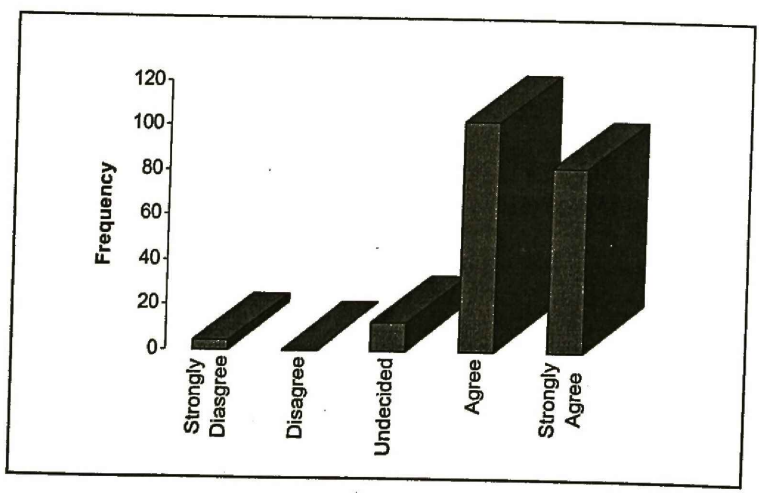


Figure 4.5: Distribution of 'TQM Requires the Dedication of all Organizational Members in Quality Matters'

4.5.6 Total Quality Management Requires a Commitment from Management for Quality Initiatives to Succeed

The majority of the respondents 183(92%) agree to the statement that Total Quality Management requires a commitment from management for quality initiatives to succeed. TQM must start from the top management so that they set a good example and they give direction of where the institutions are going. If everyone feels part of the train of success then everything will pull of at the same pace without any hindrance. This does not differ anywhere with the literature in chapter two. Total Quality Management involves strategic visioning, the commitment of everybody and the involvement in quality improvement. Therefore commitment will lead to success. Responses to this item are graphically displayed in Figure 4.6.

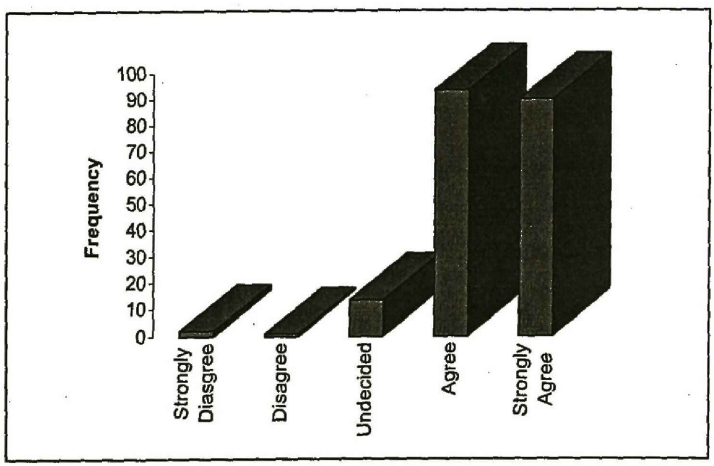


Figure 4.6: Distribution of 'TQM Requires Commitment from Management for Quality Initiatives to Succeed'

Item 8.7 Total Quality Management requires a particular style of leadership, which is characterised as transformational management

Table 4.4 shows that 170(85%) of the respondents agree that Total Quality Management requires a particular type of leadership that is characterised as transformational management. TQM requires a leadership that is transformational conscious and TQM compliant without which there is no hope for success. Quality must start at the very top of the organisation .It is well documented that without upper management involvement, and leadership, a TQM process takes longer and cost more to implement. This means that all C.E. O's must become educated in the principles of TQM, committed to TQM implementation, and provide an example to their organization. This study is fully supported by literature; traditional do-it-to-them evaluation systems by themselves generate fear and lack of initiative. Staff members focus on doing whatever is enough to keep the boss happy. However, if volunteer members of the empowered improvement teams are given opportunities to become experts and/or to use experts, that enablement generates excitement and dedication. (Cf2.4.1.5). A graphical representation of responses to this item is displayed in Figure 4.7.

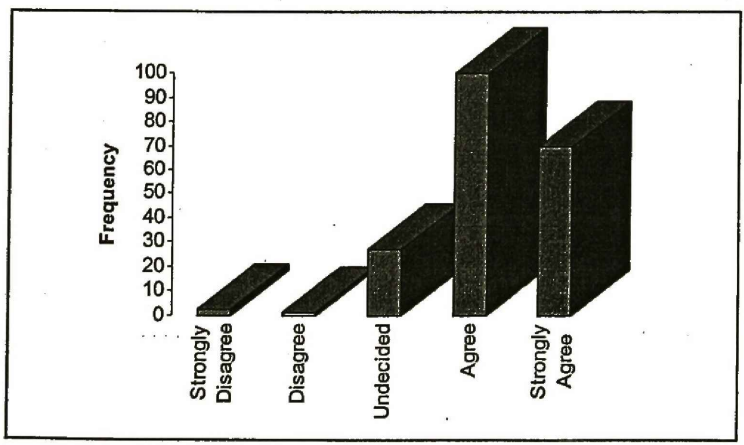


Figure 4.7: Distribution of 'TQM Requires a Particular Style of Leadership which is Characterized as Transformational Management'

Table 4.2 TQM as a tool to improve effectiveness, productivity and performance

	SD		D		U		A		SA		Total	
	F	%	F	%	F	%	F	%	F	%	f	%
8.1 TQM is a methodology that can help education professionals to cope with today's changing environment	4	2	1	0.5	16	8	130	65	49	24.5	200	100%
8.2 TQM can provide the focus for educational improvement	3	1.5	1	0.5	15	7.5	133	66.5	48	24	200	100%
8.3 TQM is an organization's wide effort to achieve quality	2	1	1	0.5	20	10	117	58.5	60	30	200	100%
8.4 TQM is a philosophy about quality which involves everyone in the quest for quality education	2	1	2	1	21	10.5	114	57	61	30.5	200	100%
8.5 TQM requires the dedication of all organizational members in quality matters.	4	2	0	0	12	6	102	51	82	41	200	100%
8.6 TQM requires a commitment from management for quality initiatives to succeed.	2	1	1	0.5	14	7	93	46.5	90	45	200	100%
8.7 TQM requires a particular style of leadership which is characterised as transformational management	2	1	1	0.5	27	13.5	100	50	70	35	200	100%

Key: SD = Strongly Disagree, D = Disagree, U = Uncertain, A = Agree, SA =Strongly Agree.

4.6 THE ROLE OF SCHOOL MANAGEMENT TO IMPROVE THE QUALITY OF EDUCATION

Table 4.3: The Role of School Management to Improve the Quality of Education

	SD		D		U		A		SA			Total
	F	%	f	%	f	%	f	%	f	%	f	%
9.1 The school management is committed to a quality culture	59	29.5	83	41.5	25	12.5	25	12.5	8	4	200	100 %
9.2 The school management backs up goals by providing the means to achieve the goals of the school/organization	57	28.5	64	32	28	14	48	24	3	1.5	200	100 %
9.3 The school management meet regularly with staff to define their requirements in the teaching profession	3	1.5	21	10.5	19	9.5	105	52.5	52	26	200	100 %
9.4 The school management practices the principles of quality	26	13	70	35	39	19.5	54	27	11	5.5	200	100 %
9.5 The school management succeeds in its responsibility to change from quantitative to qualitative approach	35	17.5	86	43	41	20.5	30	15	8	4	200	100 %

9.6 The school management provides teachers with the training that they need to improve the quality of education	52	26	80	40	23	11.5	34	17	11	5.5	200	100 %
9.7 The school management sees to it that the vision and mission statement that has been developed is implemented to its utmost.	56	28	56	28	21	10.5	45	22.5	22	11	200	100 %

4.6.1 The School Management is Committed to a Quality Culture

Table 4.5 reveals that 142(71%) disagree with the idea that the school management is committed to a quality culture (see Figure 4.8). There are several factors that make teachers to react like this. One of the most common one is that element of dictatorship tendencies by certain school management teams in certain institutions. Teachers feel that bosses are rather like to impose their feelings on teachers and there is no chance of ordinary teachers to be consulted. Teachers feel that they are sidelined when it comes to coming up with resolutions on matters that affect them and their profession within the school. Senior management teams tend to come up with resolutions and impose them on their subordinates a factor that contributes to some of the policies of TQM collapsing. It is however very important to note that teachers do not feel committed in their profession because they have not been fully engaged full time from the time they joined the profession. Only 33(16.5%) of the respondents agree with the statement that the school management is committed to a quality culture, while 25(12.5%) are uncertain about the statement. This goes against the idea that, Total Quality Management involves, a focus on process, the use of team and teamwork, a change in the culture of the organisation. These statistics are presented pictorially in Figure 4.8.

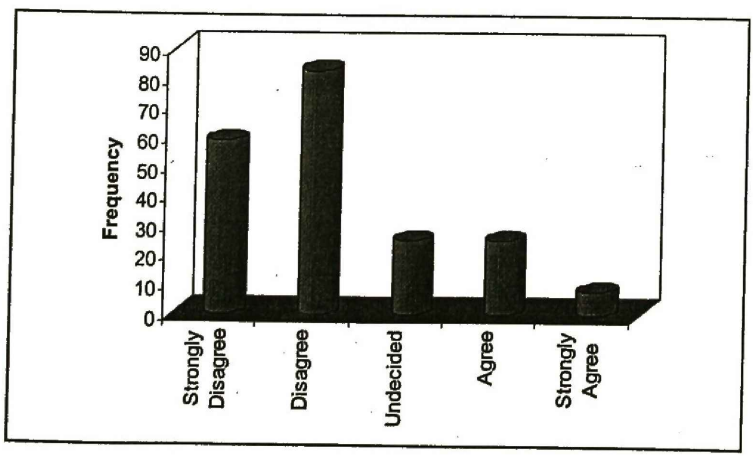


Figure 4.8: Distribution of Responses to 'The School Management is Committed to a Culture

4.6.2 The School Management Backs Up Goals by Providing the Means to Achieve the Goals of the Organisation

According to table 4.5 most of the respondents disagreed 121(61%), that school management backs up goals by providing the means to achieve the goals of the school. Fifty-one (25.5%), however, opposed this view with the remaining 28(14.0%) undecided. The distribution of the responses is exhibited graphically in Figure 4.9. Some of the teachers are very active in their schools and need a lot of support from the school management. Such active teachers turned to be thorny in the eyes of the senior management as they are active and mobile on activities associated with the profession, but due to lack of support from senior management they end up being disgruntled and appear not to be serious with their work. As a result of this teachers feel that senior management are not doing their work effectively. In other cases certain senior management teams specialise on intimidation rather than focussing on issues that are for the betterment of the institution as a whole with quality initiatives at heart. This is in contradiction that, 'A clear commitment from the school board, superintendent and principal that they will fully support Total Quality Management efforts and that they do not expect (to use the language of W. Edwards Deming) 'instant pudding' results. (Cf 2.4.1).

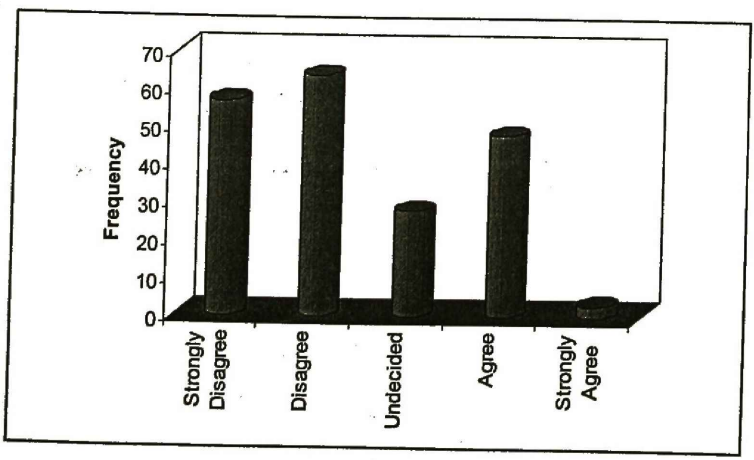


Figure 4.9: Distribution of Responses to 'The School Management Backs Up Goals by Providing the Means to Achieve the Goals of the School

4.6.3 The School Management Meet Regularly with Staff to Define Their Requirements in the Teaching Profession

Most of the consultation is done by senior management teams amongst themselves on many issues concerning the school. Serious matters are only discussed under closed doors by senior management, unless if they fail to reach a resolution that is when they call the entire teaching professionals to allow them to have an input. Most meetings that happen are just briefings on a weekly basis at utmost. The other times when meetings or consultations are done are the regular end of term meetings of which the agenda is usually drawn by the senior management. Teachers usually have very little to say in the form of contributions because what is usually said does not call for their immediate attention. On the contrary 157(78.5%) agreed with the statement that the school management meet regularly with staff to define their roles in the teaching profession. Only 24(12%) disagree with the statement that there is consultation. Nineteen (9.5%) were undecided in this statement (see Figure 4.10).

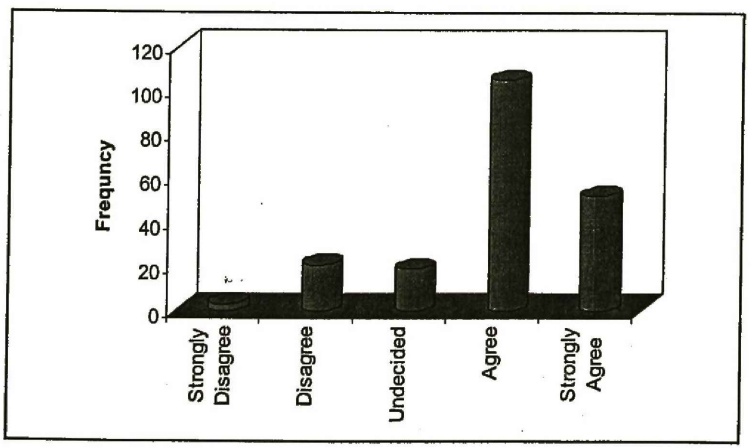


Figure 4.10: Distribution of Responses to 'The School Management Meets Regularly with Staff to Define Their Requirements in the Teaching Profession

4.6.4 The School Practices the Principle of Quality

It is noted that 96(48%) of the respondents disagree with the fact that the school practices the principle of quality. The teaching profession in Botswana is hanging in the balance because of too much disgruntlement form all quarters of the profession. There is general lack of commitment because teaching profession is fast being eroded because teachers are taken for granted. For more than thirty years the teaching profession has been neglected such when some of the people joined teaching not out of commitment by because it is a way of survival, and this has been worsened by the fact that the government is not taking the right initiatives to motivate the teachers. There are few teachers in Botswana because people generally do not recognise the profession. The issue of parallel progression is at the moment a burning issue among professional teachers and this brings down the principle of quality among teachers. In certain instances some headmasters together with senior management find it difficult to control teachers because of disgruntlement.65 (33%) of the respondents agree with the fact that the school practices the principle of quality. Only39 (20%) of the respondents decided that they are uncertain with this statement. Figure 4.11 is graphical representation of the distribution of responses to this item.

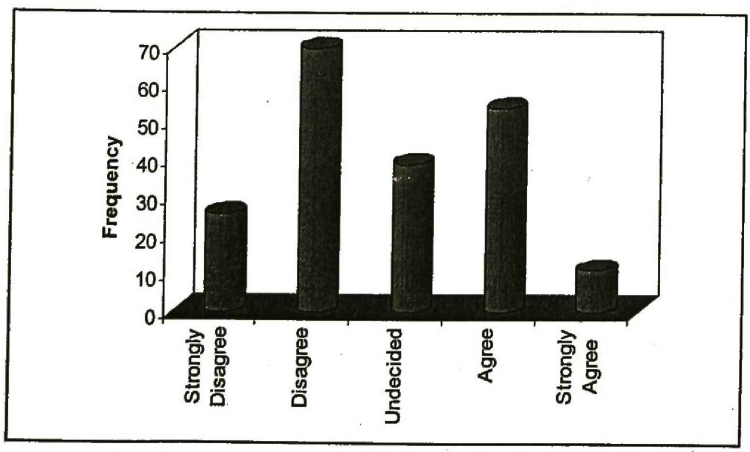


Figure 4.11: Distribution of Responses to 'The School Management Practices the Principle of Quality

4.6.5 The School Management Succeeds in its Responsibility to Change from Quantitative to Qualitative Approach

Most of the respondents 121(61%) strongly disagreed that the school management succeeds in its responsibility to change from quantitative to qualitative approach. The problem is that teachers are made to pay less and less attention to their professional duties mainly because there is a widespread demoralisation among teachers because of empty promises uttered by the powers that be. Therefore teachers take their work for granted. More to that is the fact that the possible explanation may be because certain headmasters do not do close monitoring to teachers in the classroom denying them to know whether work is being done effectively. They turn to believe in quantity whereas they do not check to find out whether things like the syllabus is being followed accordingly or whether students perform to the expected standards and they never even bother whether students' books are marked, they are only interested in seeing or in being told that the syllabus has been completed. Only 38(19%) of the respondents believe that the school management succeeds in its responsibility to change from quantitative to qualitative approach, while 41(21%) are uncertain about the statement. These figures are graphical portrayed in Figure 4.12.

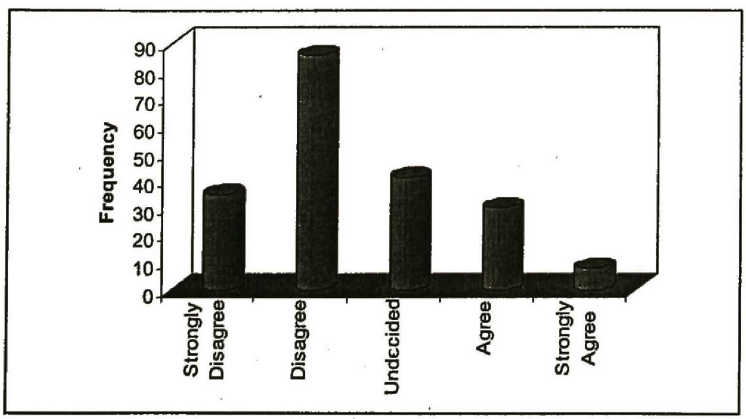


Figure 4.12: Distribution of Responses to 'The School Management Succeeds in its Responsibility to Change from Quantitative to Qualitative Approach

4.6.7 The School Management Sees to it that the Vision and Mission Statement that has been Developed, Is Implemented to its Utmost

Figure 4.14 presents a graphical representation of the responses to the statement that the school management sees to it that the vision and mission statement that has been developed is implemented to its utmost. According to Table 4.5 and Figure 4.14, 112(56%) of the respondents disagree with the statement that the school management sees to it that the vision and mission statement that has been developed, is implemented to its utmost. The possible explanation to the fact is that although some schools claim to have a vision and mission statement it is only there in writing only. Sometimes it is not even displayed for everyone to see or sometimes displayed shabbily in such a way that it does not attract the attention of the people who visit the school. In certain schools the vision and mission school statement is not even known by anyone including the senior management team, a fact that no one is actually committed to his/her duties. In simple terms in such situation there is confusion as there is no driving force. According to table 4.5 67(34%) of the respondents agree with statement and only 21(11%) are uncertain.

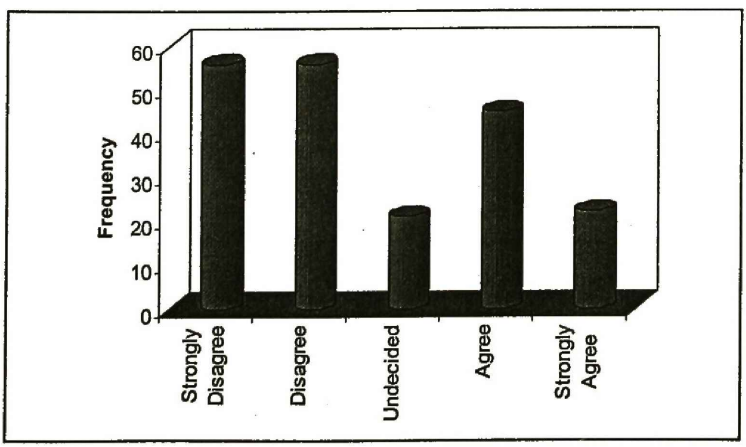


Figure 4.14: Distribution of Responses to 'The School Management Provides Sees to it that the Vision and Mission Statement is Implemented to it Utmost

mere laziness. Twenty-seven (13.5%) of the respondents are uncertain about the claim. 'Individuals, teams and departments exchange information on expectations and feedback on satisfaction to assist learning and effective production of goods and services.(cf 2.5.1.2).

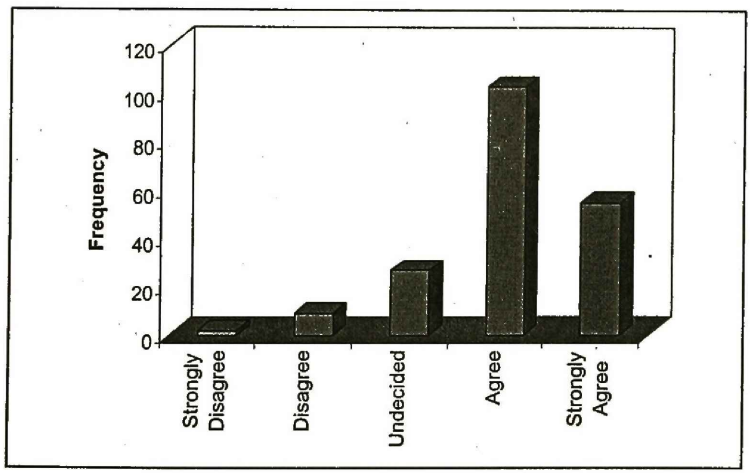


Figure 4.15: Distribution of Responses to 'TQM Strategies are Effectively Communicated to Staff Members

4.7.2 Total Quality Management Requires the Prevention Rather than Detection of Faults at all Points in the System

Table 4.6 and the pictorial representation of responses to this item as shown in Figure 4.16 indicate that 170(85.0%) of the respondents strongly agree/agree that total quality management requires the prevention rather than detection of faults at all points in the system, 28(14.0%%) are uncertain about the statement while only 2(1.0%) of the respondents strongly disagree/disagree with the statement. The whole essence is to aim for excellence and quality education. Total quality management places its emphasis on prevention, but not only on correction of problems. 'In TQM inspection efforts are intended to be directed at prevention by providing information to management on errors and deficiencies that will be

used to identify these problems. These problems can then be examined by teams so that the process itself can be improved.

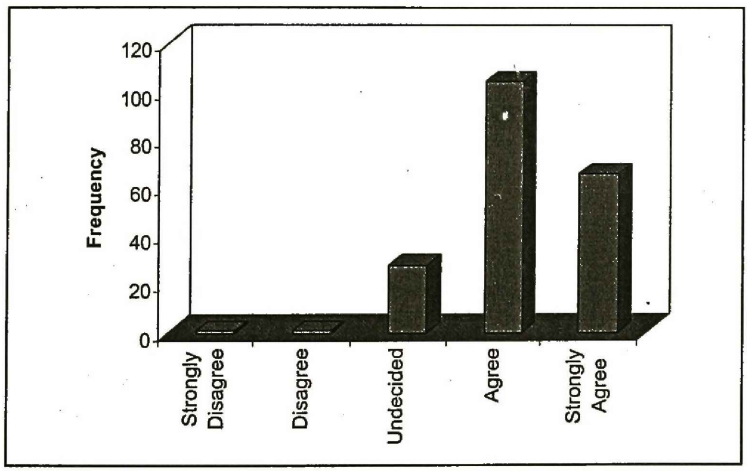


Figure 4.16: Distribution of Responses to 'Total Quality Management Requires the Prevention Rather than Detection of Faults at all Points in the System'

4.7.3 Total Quality Management is led by the School Management in this School

A distributional analysis of the responses to this item is presented pictorially in Figure 4.17. The results indicate that 161(80.5%) of the respondents strongly agree/agree with the statement that TQM is led by the school management team. For the programme to kick start on a fine note leadership should be at the forefront of all Total Quality Management activities, so that there are no deficiencies in the implementation of the programme. Twenty-nine (14.5%) of the respondents are uncertain about the statement and only 10(5.0%) of the respondents strongly disagree/disagree with the statement. Senior management team members are the ones who are supposed to lead by example in terms of commitment and otherwise. 'The first a company must make to start a TQM process is to make a 'snapshot' of their current level of quality. A rationale level on how to implement TQM can be made. This is the important first step that upper management must take but often overlooks. There is

always a gap between how top management believes work is done, and how it really gets done.

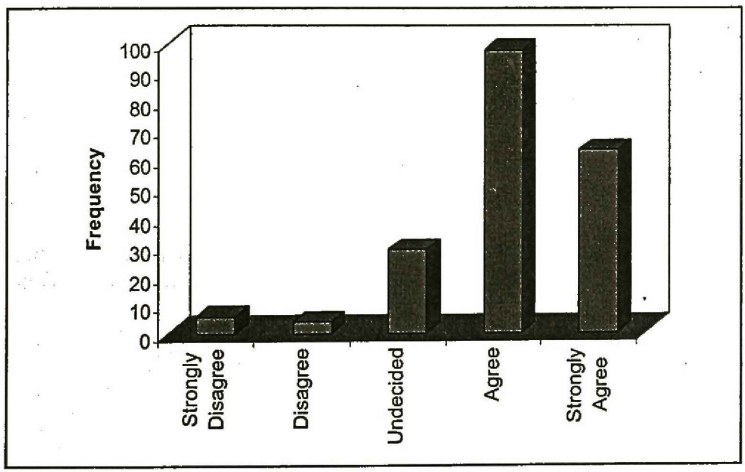


Figure 4.17: Distribution of Responses to 'Total Quality Management is Led by the School Management'

4.7.4 Total Quality Management is Integrated into the School Development Plan

It is noted from the graphical representation of the distribution of responses to this item in Figure 4.17 and the results in Table 4.6 that 164(82.0%) of the respondents strongly-agree/agree that TQM is integrated into the school development plan. One of the ways in which TQM can be included in the school development plan is for it to be reflected in the school vision and mission statement and it should be known by all members of staff and of course time and again to remind students and parents about the aims of the school. Twenty-eight (14.0%) are uncertain about the variable, while 8(4.0%) of the respondents strongly-disagree/disagree with the statement.

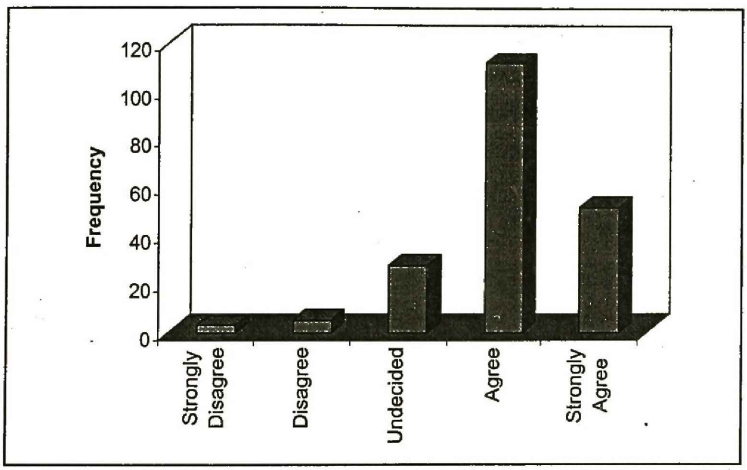


Figure 4.18: Distribution of Responses to 'Total Quality Management is Integrated

into the School Development Plan'

4.7.5 Total Quality Management can be Achieved Through the Total Commitment of All Members of this School/Organization

Figure 4.19 is a graphical representation of the distribution of responses to this item. According to Figure 4.19 and Table 4.6, 185(92.5%) of the respondents strongly-agree/agree that indeed TQM can be achieved through the total commitment of all members of this school/organization. Only 11(5.5%) of the respondents are uncertain. The remaining 4(3.5%) strongly-disagree/disagree with the statement. 'A transformation from 'good enough' or traditional education (where marks or grades of 'A' and 'B' are good enough even if they do not represent good work) should begin with everyone being made aware of the potential and the elements of Total quality management.(cf2.4.1)

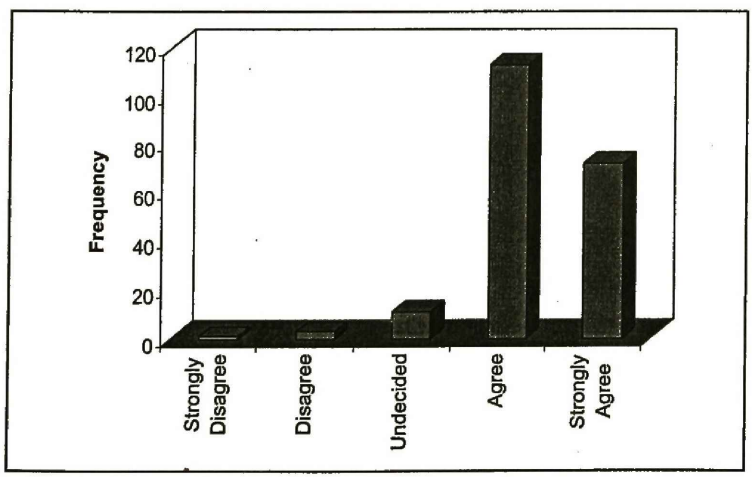


Figure 4.19: Distribution of Responses to 'Total Quality Management can be Achieved through the Total Commitment of all Members'

4.8 IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN SCHOOLS

Table 4.5 Implementation of Total Quality Management in Schools

	SD	D	U	A	SA	Total
11.1 TQM will only work if there is obsessive commitment to quality by the school management	1 (0.5%)	3 (1.5%)	11 (5.5%)	113 (56.5%)	72 (36.0%)	200 (100%)
11.2 It is necessary to identify a team specifically responsible for driving the implementation in schools	6 (3.0%)	9 (4.5%)	27 (13.5%)	103 (51.5%)	55 (27.5%)	200 (100%)
11.3 Implementing TQM requires the acceptance of the principle that teachers will always improve	1 (5.0%)	1 (0.5%)	28 (14.0%)	104 (52.0%)	66 (33.0%)	200 (100%)
11.4 The success of implementing TQM depends on training that will result in attitudinal change of teachers	6 (3.0%)	4 (2.0%)	29 (14.5%)	98 (49.0%)	63 (31.5%)	200 (100%)
11.5 TQM can actually change the way the school is run.	3 (1.5%)	5 (2.5)	28 (14.5%)	112 (56.0%)	52 (26.0%)	200 (100%)

4.8.3 Implementing Total Quality Management Requires the Acceptance of the Principle that Teachers can Always Improve

Table 4.7 and the graph in Figure 4.22 indicate that 186(93.0%) of the respondents strongly-agree/agree that implementing Total Quality Management requires the acceptance of the principle that teachers can always improve. Only 3(1.5%) of the respondents strongly-disagree/disagree with the statement, while 11(5.5%) are uncertain about the statement. The uncertainty among certain professionals emanates from the fact that they do not believe in ideas that are implemented and until that is done they always prefer to occupy an uncertain position until they see reality with their naked eyes. This is supported by literature in that, 'other key considerations have to do with alignment among various organizational systems (Chaudron,1992; Hyde,1992).For example, human resource systems, including job design, selection processes, compensation and rewards, performance appraisal, training and development must align with and support the new TQM culture'.(cf 2.8.2.2.).

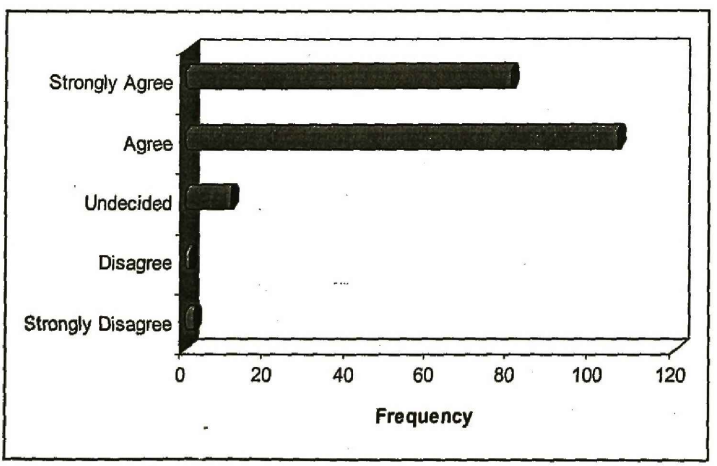


Figure 4.22: Distribution of Responses to 'Implementing Total Quality Management Requires the Acceptance of the Principle that Teachers can Always Improve'

4.8.4 The Success of Implementing Total Quality Management Depends on Training that will Result in Attitudinal Change of Teachers

Figure 4.23 shows the distribution of responses to this item. Table 4.7 and Figure 4.23 show that a majority (183 or 91.5%) of the respondents strongly-agree/agree that the success of implementing Total Quality Management depends on training that will result in attitudinal change of teachers. Engaging almost all teachers in in-service workshops is a good idea that will help to mobilise teachers such that they will feel accepted in the profession. Information dissemination and motivation will be a reality. This implies hat everyone will feel obliged to have an input in the process. 'The likely effects will be; 'a willingness to assume a new role, that of learning facilitator in the teaching/learning process, a willingness to learn about some new instruction techniques and how to use them effectively.(cf 2.8.1.9). Only 3(1.5%) opposed this assertion with the remaining 14(7.0%) unsure about it.

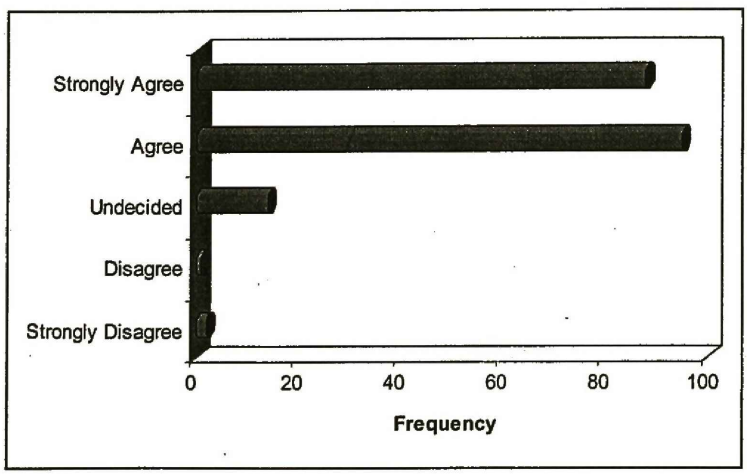


Figure 4.23: Distribution of Responses to 'The Success of Implementing Total Quality Management Depends on Training of teachers'

4.8.5 Total Quality Management can Actually Change the Way the School is Managed

The majority (184 or 92%) of the respondents strongly-agreed/agreed with the item message that Total Quality Management can actually change the way the school is run or managed. A school composed of dedicated staff fully and well informed and inclined to Total Quality Management rules and needs can make the process a great success. It should both be a top-down and bottom-up process so that everyone can feel confident and comfortable with the programme. Ten (5.0%) are uncertain, while the remaining 6(3.0%) strongly-disagree/disagree with the statement. The distribution of responses to this question is presented pictorially in Figure 4.24.

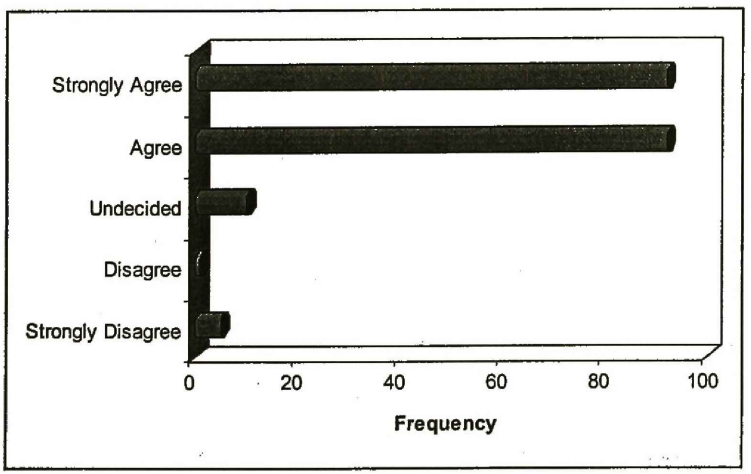


Figure 4.24: Distribution of Responses to 'Total Quality Management can Actually Change the Way the School is Managed'

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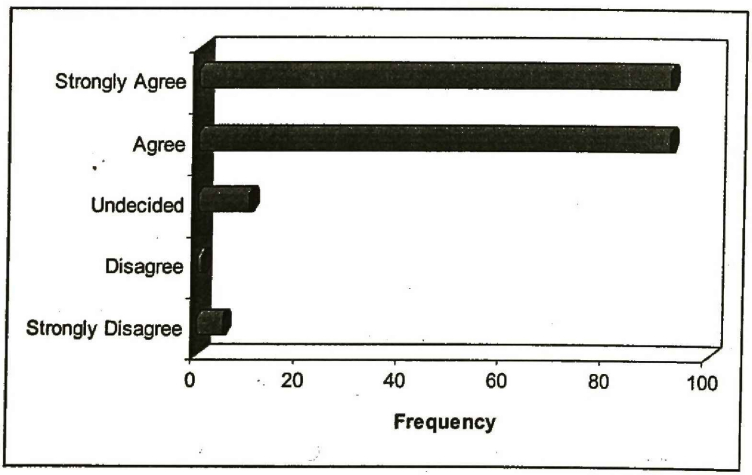


Figure 4.24: Distribution of Responses to 'Total Quality Management can Actually Change the Way the School is Managed'

SECTION C

In this research Total Quality Management is equated to Work Improvement Teams (WITs) and Performance Management System (PMS) in Botswana. Both Wits and PMS encourage productivity, and commitment to quality in the public service including teaching as a profession. Respondents were asked to indicate their level of agreement on the relationship between TQM, PMS and Wits. This was done on a three points scale or variance.

1 = A : Agree

2 = U : Uncertain

3 = D :Disagree

4.9 RELATIONSHIP BETWEEN TQM, PMS AND WITS

Table 4.6: Relationship between TQM, PMS and WITS

	Agree	Uncertain	Disagree	Total
12.1 TQM, WITs and PMS all encourage commitment to quality in work environment by all staff members	178 (89%)	19 (9.5%)	4 (2%)	200 (100%)
12.2 TQM, WITs and PMS are philosophical forces behind the quest for quality education	175 (88%)	22 (11%)	3 (1.5%)	200 (100%)
12.3 TQM, WITs and PMS are realised and practiced by the school management	165 (83%)	33 (16.5%)	2 (1%)	200 (100%)
12.4 The school management is committed in the quality transformation which is backed by TQM, PMS and WITs.	127 (64%)	64 (32%)	9 (4.5%)	200 (100%)
12.5 The school management is well informed about TQM, WITs and PMS	127 (64%)	50 (25%)	14 (7%)	200 (100%)
12.6 The school does Back-up goals of WITs, TQM and PMS with the aims to provide the goals of the school	111 (56%)	77 (38.5%)	12 (6%)	200 (100%)
12.7 The staff is well informed about the importance of making sure that there is a need to work towards productivity, efficiency and quality in education.	103 (52%)	85 (42.5%)	12 (--)	200 (100%)

4.9.1 TQM, WITs and PMS all Encourage Commitment to Quality in Work Environments by all Staff Members

Majority of the respondents (178 or 89%) agree that realistically TQM, WITs and PMS all encourage commitment to quality in work environments by all staff members (see Figure 4.25). All of them encourage commitment, productivity, effectiveness and high rates of performance (cf 2.9.5.5). 'More emphatically, TQM like WITs and PMS is a holistic approach to management that applies to all levels of levels of an organization, every relationship, every process. They are all value driven placing a very fundamental significance on value and purpose as the literature indicate'.(cf 2.3.1).Although coined differently there is no difference between Total Quality Management(TQM),Performance Management System(PMS) and Work Improvement Teams(WITs).They emphasise quality, effectiveness, productivity, excellence in every service rendered. Only 4(2%) disagree with the statement while 19(9.5%) were uncertain of the variable.

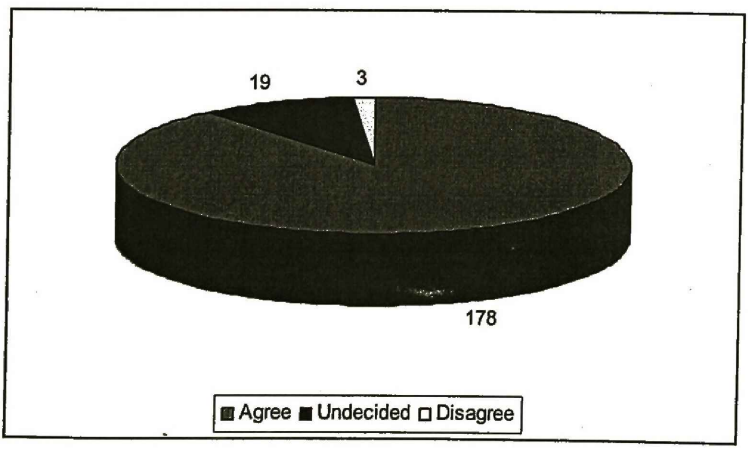


Figure 4.25: Distribution of Responses to 'TQM, WITs, PMS Encourage Commitment to Quality in Work Environments by all Staff Members

4.9.2 TQM, WITs and PMS are Philosophical Forces Behind the Quest for Quality Education

Majority of the respondents 174(87.0%) of the respondents agreed that TQM, Wits and PMS are philosophical forces behind the quest for quality education. Twenty-two (11%) of the respondents were uncertain. Only 4(2.0%) of the respondents disagree (see Figure 4.27). If teachers were not angry with the system at the moment then that would motivate them to offer the best for our children in the education system The implication has been that internationally where these philosophies were employed correctly under conducive conditions there were good positive results in the end. An example is TQM that originates from developed countries like The United States Of America and Japan. These are leading economies in the world without any doubt. 'Work Improvement Teams (WITs) concept is people centred management approach in the public sector, which seeks to foster team spirit, teamwork, commitment to work and mindset that seeks optimum performance.(cf 2.9.7).

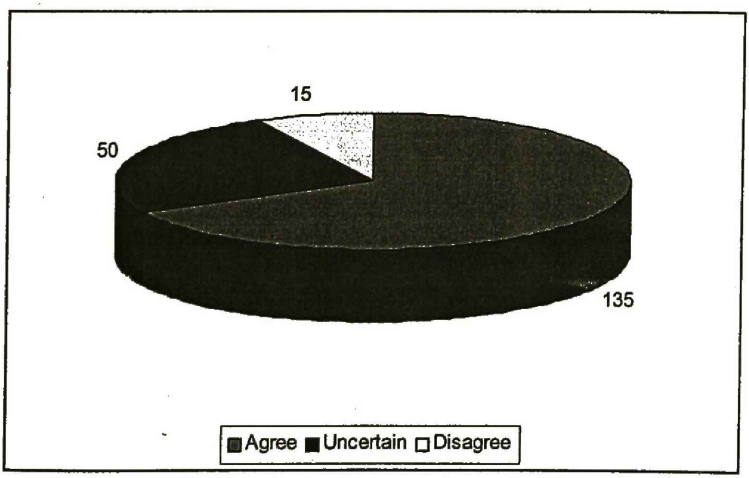


Figure 4.26: Distribution of Responses to 'TQM, WITs and PMS are Philosophical Forces Behind the Quest for Quality Education

4.9.3 Principles of TQM, WITs and PMS are Realised and Practiced by the Schoc Management

According to table 4.8 165(82.5%) of the respondents agree that principles of TQM, WIT and PMS are realised and practiced by the school management. Although majority turn t agree with this on the surface there are few secondary schools that are patrons of thes philosophies. Majority are at a very low level as shown by their examination results eacl year. Due to very few to no workshops for professional teachers a good number of teacher ar not fully knowledgeable on matters of TQM, WITs and PMS programmes. A lot still needs t be done on issues pertaining to these programmes.

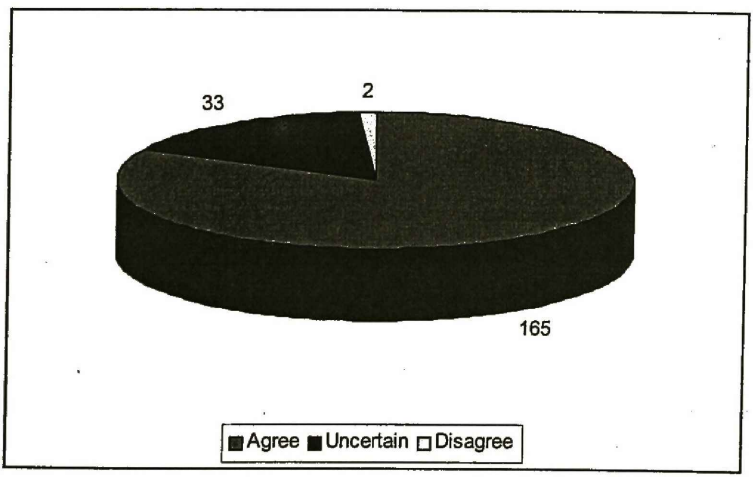


Figure 4.27: Distribution of Responses to 'Principles of TQM, WITs and PMS are Realised and Practiced by the School Management'

4.9.4 The School Management Team is Committed in the Quality Transformation which is Backed by WITs, PMS and TQM

According to table 4.8, 127(63.5%) agreed with the fact that the school management team is committed in the quality transformation which is backed by WITs, TQM and PMS However despite the commitment from the senior management teams on these programmes, there may

be some problems because of widespread disgruntlement among the teaching professionals due to issues such as parallel progression and other unfavourable conditions of work faced by teachers in general in Botswana as a whole. Lack of financial resources may also be a great hindrance in getting ahead with these programmes. 64(32%) of the respondents were uncertain on the variable while only 9(4.5%) disagreed with the statement under discussion. The literature states that; 'Goals and objectives, with relevant measures and standards, are set for the ministries departments divisions and cascade down to the individual employee (cf 2.9.8). Figure 4.28 is a graphical representation of the distribution of responses to this item.

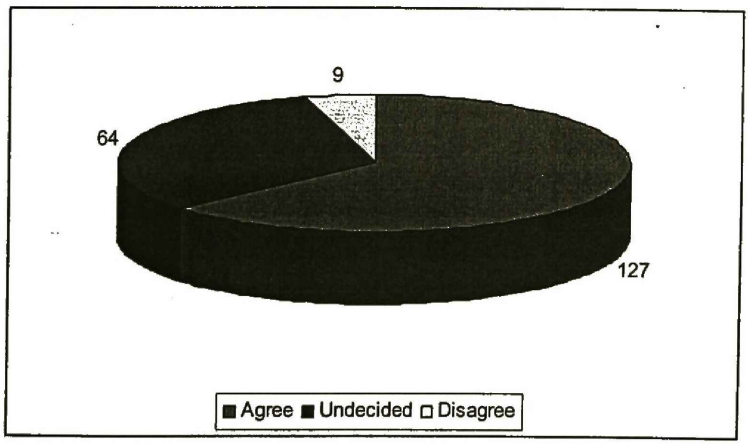


Figure 4.28: Distribution of Responses to 'The School Management is Committed to Quality Transformation Backed by WITS, PMS, and TQM

4.9.5 The school management is well informed about TQM,PMS and WITs

According to table 4.8, 104(52.0%) of respondents agreed that the school management is well informed about TQM,PMS and WITs. Senior management members are the ones who attends most of the workshops that are called time and again, so they are well informed about all what is required in all the three programmes which emphasise quality in education.84(42.0%) of the respondents were uncertain about the variable whilst only 12(6.0%) of the respondents

disagree with the statement. The distribution of responses to this item is presented graphically in Figure 4.29.

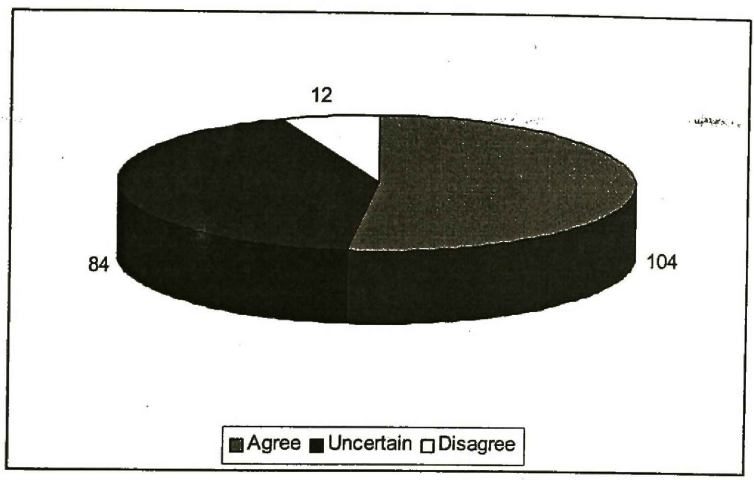


Figure 4.29: Distribution of Responses to

4.9.6 The School Management Does Back-Up Goals of WITs, PMS and TQM

According to Table 4.8 and the graph in Figure 30, 111(55.5%) of the respondents agreed that the school management does back-up goals of WITs, PMS and TQM. Seventy-seven (38.5%) of the respondents are uncertain about that while 12(6%) of the respondents disagreed with the statement. The contradiction is that on the ground things do not appear as they are as revealed by the number of respondents who agree with the variable. This may stem from the fact that there is rather a lot of hopelessness among teachers as professionals in Botswana. Continuous demonstrations are an indication that things are not as they look on the ground. There are actual tools down among teachers and everything has been let loose in the system.

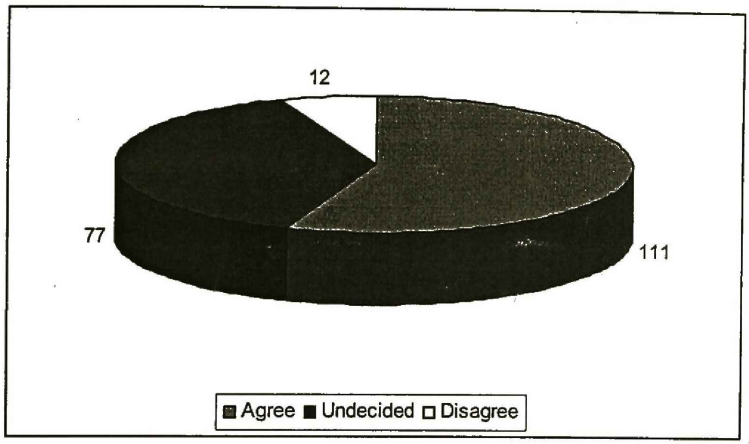


Figure 4.30: Distribution of Responses to 'The School Management Does Back-Up Goals

4.9.7 The Staff is Well-Informed About the Importance of Making Sure that there is a Need to Work Towards Productivity, Efficiency and Quality in Education

Table 4.8 indicates that 104(52.0%) of he respondents agree that staff is well informed about the importance of making sure that there is a need to work towards productivity, efficiency and quality in education, while 84(42.0%) of respondents are uncertain about the variable and 12(6.0%) of the respondents disagree with the statement. Every teacher knows what they are expected to do when they join the profession at the beginning of their service, It is unfortunate that the teaching profession in Botswana is taken for granted by many including the present Government, so teachers are deliberately loosening up the grip in their job as a way of protesting against the unfavourable working conditions they find themselves in at the present days. 'Regular (quarterly) performance reviews provide the organization and individuals with opportunities to reflect on their progress in as far as the goals and objectives are concerned, and can then work towards the realisation of the same.(cf 2.9.8). The distribution of responses to this item is presented graphically in Figure 4.31.

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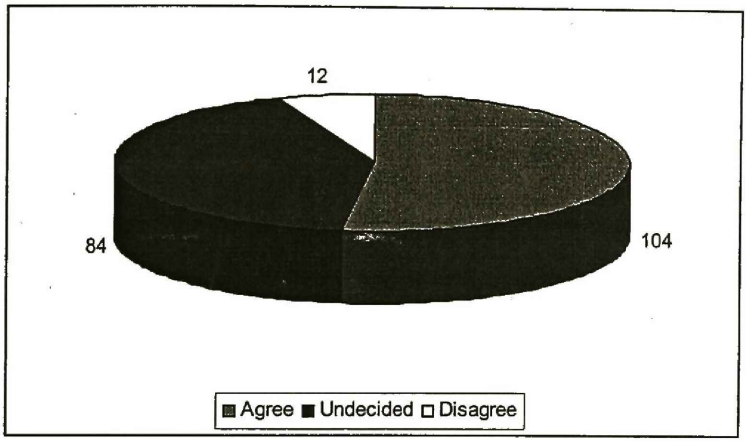


Figure 4.31: Distribution of Responses to 'The Staff is Well-Informed about the Importance of Making Sure that there is a Need to Work Towards Productivity, Efficiency and Quality in Education

SECTION D

In this section teachers were asked requested to indicate their response to the following statements on the goals and objectives of the school management to improve the quality of education. In each question teachers were to choose either **Yes or No,** and support their views by writing them down.

13.1 The goals and objectives of the school management is to create a constancy of purpose for continual improvement of education.

In this statement teacher were in affirmative – **Yes.**

The comments stated by teachers were as follows; others are of the view that management is working very hard to make schools achieve its goals and objectives. Others are of the view that their school management teams are weak either because they unfortunately are not led by an active senior management team(poor or weak leadership which lacks vision).A good

number of teachers feel that they (as teachers) are left out when it comes to dealing with initiatives the leadership of the school wish to come up with for the development of the teaching profession within the school. Teachers also are of the view that there should be a continual improvement of education to match up with contemporary expectation of the modern world e. g equipping schools with enough computers which are linked to the internet so that information is easily available to both teachers and students alike. At the present moment there are many teachers who do not have a simple knowledge to operate computers on their own, they feel it is a great handicap.

13.2 The management should adopt the new philosophy

Majority of teachers responded by saying - **Yes.**

The feelings were that for the new philosophy to be successful there is a need for everyone in the organisation to be made to feel as part of it, be made to get involved in some activities going on in the organization. That will motivate them as staff members and they would feel driven even to work harder or to put more effort, so that there is some form of improvement in achieving quality education.

On the contrary some feel that the new philosophy of management is ideal as far as they are concerned because WITs and PMS have never worked, so Total Quality Management will never be different from them. Teachers also are of he feeling that this philosophy will help the management to run schools effectively as they will be skilled in management techniques. Some were totally bitter about the present pay structure of teachers together with parallel progression need to be attended first before any philosophy ca n be suggested.

13.3 The management should engage in a process of continually improving every aspect of the organizational goals

Majority were on the affirmative – Yes

Their views were that as soon as Total Quality management is adopted there should be constant checks to make sure that the organisational goals are achieved and that everyone should be aboard the train and feeling that he/she is really part of the crew running the show. That will also enhance trust amongst the subordinates. Awareness by management of what is happening, (if there is transparency) would be easy to monitor progress basing on the outcomes i.e. if quality targets are met. Cooperation and openness and lack of victimisation of subordinates can take it far.

13.3 The management should drive out fear by improving communication.

A large number of teachers were on the affirmative –Yes.

The feeling amongst teachers is that driving out fear is vital for a way ahead. Some teachers are not open because they feel that if they say out their true feelings they would be victimised e g. they may be denied progression (promotion),while others feel that they will have bad records in their files hence too much docility, while others are the view that other teachers would view them as bootlickers, so some are scared as a result. Sometimes the response they get from the management is not anything to go by.

Good communication skills are very important since it would lead to transparency and good working relations among staff members irrespective of one's position. Encouragement of a two-way flow of information i.e top-bottom and bottom-up flow of information is very important for the successful running of the school. Dictatorship mentality among senior management team members should be halted and consultation and democracy in education accepted as an alternative ahead. 'Traditional do-it-to-them evaluation systems by themselves generate fear and lack of initiative. Staff members focus on what is enough to keep the boss happy. However, if volunteer members of the empowered improvement teams are given opportunities to become experts and/or to use experts, that enablement generates excitement and dedication. School districts should support members of the quality improvement teams with funding and time for conferences, seminars, visits to other schools, use of consultants,

planning and sharing with others etc. Teams function best when members are given the background and authority to make informed decisions.

13.5 The management should create a management culture that will drive the quality implementation initiatives.

Majority of the teachers were on the affirmative side –Yes.
Teachers are of the view that most senior management teachers do not listen to their juniors, they are unnecessarily bossy and demand a lot from their juniors. Others believe that where there is good management, quality education can easily be achieved and reality has shown that. Other teachers feel that a management culture should be established right from the ministry of education, otherwise nothing like quality education can never be a reality. Proper leadership is the other important factor desired by most teachers. Issues of conditions of payment and parallel progression are also barriers to quality education. They blame the present leadership that it specialises in fault -finding in most instances. Cooperation is an important element.

13.6 In your own words how can Total Quality Management be used as a tool to improve the quality of education your school?

Some teachers are of the view that close monitoring and motivation of teachers are very important aspects so as to improve quality in education. Other are of the view that since each school has a vision and mission statement and plans, these should act as torchbearers for the success of the school in order to reach their goal which is quality education. Others are of the view that proper management of educational departments either nationally, regionally and at school level is crucial if put in practice as that can lead Total Quality Management being a reality. For Total Quality Management to operate well, availability of resources like books, provision of in-service workshops and others can create a great difference. Other teachers feel that all stakeholders should be involved like parents teachers and students, that is when there will be a direction to follow.

13.7 In you own words what inhibits the implementation of Total Quality Management in you r school.

Most of the teachers feel that some of the basic reasons that inhibit the implementation of Total Quality Management in their schools are as follows;

Lack of resources, there are not enough resources to cater for all the educational necessities. Poor working conditions, lack of good and proper accommodation, low salaries and poor working conditions. As a result of this there is no motivation at all. Some teachers joined the profession out of desperation, they became teachers so as to earn a living. The teaching profession is seriously undermined as demonstrated by high neglect by government and ordinary citizens alike. If teaching can be uplifted then it can attract quite a good number of good prospective teachers.

Inconsistency of senior management team also hampers the implementation and continuation of the programme. Lack of training is another factor that causes problems when it comes to the smooth running of total quality management. 'At any level, management resistance to employee empowerment is likely. They may see decision-making in zero sum terms: if employees have more decision-making, managers will have less. In fact, one principle in employee involvement is that each level will be more empowered, and managers lose non of the fundamental authority traits. There will undoubtedly be changes in their roles, however. As was noted above, they will spend less time on control and more on facilitation.(cf 2.8.2.4).

CHAPTER FIVE:

SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

The purpose of this chapter is to give a summary of the study, to recommend suggestion on some of the issues and to come to a realistic conclusion. An area of further research is also highlighted.

5.2 SUMMARY OF THE STUDY

The study focused on the topic; Total Quality Management (TQM); the perception of secondary school teachers in the Lobatse area, the South-east area of Botswana and the Kanye areas of Botswana.

Chapter 1 outlines the statement of the problem and the rationale behind the study. In an attempt to search for the ways to improve quality in education through Total Quality Management attention should be focussed on factors that causes productivity to go down in teaching and guidelines should be provided on how to improve quality in education with the use of Total Quality Management process.

Chapter 2 highlights the nature and scope of Educator's perception on Total Quality Management within the mentioned districts of Botswana. Further definition of the concept and the theoretical framework was also outlined. Focus was also directed to issues and challenges as encountered within the education system pertaining to Total Quality Management as a process towards quality education in Botswana. Amongst the problems that were unearthed, which face the developing countries include the following;

- Poor working conditions of teachers in general like accommodation;
- Low salaries of teachers and inaccuracies in matters of progression/promotion
- Poor communication channels between the ministry and the teachers on important matters relating to teachers needs;

- Serious financial constraints needed by schools in carrying out processes of quality education.
- Lack of commitment from certain teachers due to disgruntlement

Although problems have been realised over a long period of time in the teaching profession there are some schools that are performing well but they are in a majority. As a result generally performance of students right from form three (which offers a junior certificates and those that offer Cambridge certificate there is a general talk that laxity has gone beyond the level that it can be controlled. The type of education that has been introduced i.e. learner centred type of education is not bearing any fruits to the welfare of young people.

There is really a need for the government to really address the grievances of teachers right form primary schools right up to tertiary level. The education of every country is the backbone of every economy in the world.

'Administrators who wish to make major improvements in the quality of their teaching programs should therefore provide incentives for faculty members to participate in the new programs such as salary supplements, travel or equipment funds, or release from service funds. They should also commit to faculty members who carry the principal burden of teaching and assessment in the new programs that they will have the same opportunities for tenure, promotion, and merit as their colleagues enjoy'.(cf 2.6.1.6)

'Schools in common should create a more participative and humane process of management that emphasise performance and results as well as people and relationships. They should evaluate performance, using information wherever possible, even in a field like education that sometimes defies any quantitative indicators. (cf 2.1).

Enablement and empowerment replacing fear is an area of great importance to educators so that they feel comfortable in whatever they are offering in the profession. Training is seen as an enabler to help people to play an effective part in learning how to develop the organization. An important aspect of TQM and learning organizations is that they break down barriers by involving everyone in the development of new

approaches that is a fundamental aspect of learning for both educators and learners or students.

Therefore in a summary form the following are important for Total Quality Management to take off at the highest efficiency of production and performance. They should be put into consideration as the pillars of the process and they are as follows,

- **Work environment of employees:**

There must be a provision of a safe, clean stimulating work environment that includes three basic needs of opportunity, challenge and recognition.

- **Good and appreciated financial payments:**

Payments should go down well with the duties that are done by educators. In most cases educators working hours are not strictly stipulated down, sometimes they go beyond the normal working hours of other service providers.

- **Orientation:**

Educators should be provided with a meaningful orientation on TQM and its quality policies.

- **Education and training:**

Emphasis should be on quality, customer-satisfaction, teamwork, communications and other job related skill.

- **Employee suggestions:**

These can be encouraged by creating a two way communications within the school, not a top–down kind of communications only which amounts to dictatorship tendencies.

- **Communications barriers:**

These must be broken down both inside and outside of the school/Organization. Information of whatever nature form the ministry must find its way down to the assistant teacher so that they may know what they are expected to do and other issues.

- **Employee Involvement:**

This can become a reality by encouraging educator/employee participation in planning, problem solving decision-making.

- **Recognition System:**

This is a program to recognise achievements in quality made by employees. A way of showing employees that their contribution is of great importance is necessary as a motivation force or initiative.

Chapter 3 discusses the development of the questionnaire for educators or teachers, which were pre-tested. A total of 320 questionnaires were distributed to all secondary schools in the Lobatse area, Kanye area and the South-East area of Botswana. From the 320 distributed questionnaires, 200 usable copies of questionnaires were returned.

Chapter 4 deals with the interpretation and analysis of data. The chapter also highlights the discussions and interpretations of the findings from the empirical investigations. The educators were concerned about what first needs to be done before TQM process can become a reality in providing quality education in Botswana secondary schools.

From the responses school management teams need to give teachers training, consultations, they must involve them in decision-making, communication barriers should be fully operational, teamwork dynamics as well as high professionalism and commitment in all spheres of quality education dissemination.

5.3 RESEARCH FINDINGS

In order to address the main aims of the study, the findings discussed in conjunction with the aims of the study in chapter 1 were highlighted. This section will discuss each of the findings for all the mentioned aims.

5.3.1 Findings on aim 1:

To determine from the literature, the nature and scope of Total Quality Management (TQM) in education. The literature revealed that the nature and scope of Total Quality Management in education is of paramount importance as it affects the lives of all stakeholders including individual students/learners, parents, organizations whether educational or not, communities, public confidence, staff morale, productivity, job satisfaction, the economy of each individual countries and the political system as well as the pace of development globally.

There are factors that need to be highlighted which bring a lot of problems in our education system in Botswana. Some stakeholders are not fully involved and committed in the endeavour to come up with quality education under the process of Total Quality Management. Stakeholders should come together as one so as to make TQM a realistic program that will bear fruits for our learners. Consultation and listening to grievances that arise from any of the parties is a very important. The department of education under the ministry of education, must implement promises that they have promised that are aligned with the aims of TQM like; communication barriers, employee involvement, employee suggestions, good working environment, education and training, recognition system as well as accepted regular payments amongst others. Therefore TQM is important in the improvement of the quality of education.

- **Cooperation:**

Cooperation has been seen to be lacking in certain quarters of work delivery. There is no proper and well co-ordinated connection between the ministry of education with schools and between teachers and senior management teams in most of the schools.

Cooperation is central to all aims and objectives being realised and therefore and therefore the following are very necessary;

- **Positive interdependence:**

Team members in schools are obliged to rely on one another to achieve the goals of quality education. If any team members fail to do their part, everyone on the team suffers setbacks.

- **Individual accountability:**

All team members are held accountable both for doing their share in quality education delivery and for understanding everything in the final product (not just the parts for which they were primarily responsible).

- **Face to face promotive interaction:**

Although some of the group work may be done individually, some must be done interactively, with team members providing mutual feedback and guidance, challenging one another and working towards consensus.

- **Appropriate use of teamwork skills:**

Educators or teachers should encouraged and help each other to develop and exercise e ers p, communica on co ic mana skills.

- **Regular self-assessment of team functioning:**

Educators should set goals, periodically assess how well they are working together, and identify changes they will make to function more effectively in future. The above therefore form the strategies that be employed for the successful implementation of Total Quality Management.

'Quality must start at the very top of the organization. It is well documented that without upper management support, involvement, and leadership, a TQM process takes longer and cost more to implement. This means that all C.E.O's must be educated in the principles of TQM, committed to TQM implementation, and provide an example to their organization'. (cf 2.7.1).

'TQM places its emphasis on prevention, not only correction of problems. Sole dependency on downstream inspection ceases. In TQM, inspection efforts are intended to be directed at prevention by providing information to management on errors of efficiencies that will be used to identify problems. Teams can then examine these problems so that the process itself can be improved. This thinking puts a positive rather than a negative emphasis on inspection'. (Cf 2.7.1).

5.3.2 Findings on aim 2

Regarding aim 2, namely; to determine empirically teacher's/educator's perceptions on Total Quality Management (TQM) in secondary schools. Generally across the board teachers are positive about TQM implementation if the program can be followed explicitly as it is stated in black and white.
However TQM can.never be discussed in isolation form factors that have literally been stated by the entire teaching fraternity in Botswana as a whole which include the following;

Senior management team members are not supposed to expect too much from subordinates or put them under unnecessary extreme pressures when it is unnecessary to do so, cooperation and consultation as well as understanding each other as professionals with the required skills and qualifications and therefore recognition of each other is very necessary in this case.

Resources to implement and maintain the program are central to TQM becoming a reality.
Teaching must be upgraded so that it is not undermined as a profession and must be elevated to a status where it will attract as many potential people as possible.

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TO WHOM IT MAY CONCERN

RE: M Ed RESEARCH PROJECT – MONGGAE L.P. (10575669)

The above matter bears reference.

This communiqué serves to confirm that **MONGGAE LESEGO PATRICK** is a M Ed student at this institution and is conducting a Research Project. I, therefore, humbly request your office to assist him with all the information he needs for the project.

The title of the project is; TOTAL QUALITY MANAGEMENT (TQM): PERCEPTION OF SECONDARY SCHOOL TEACHERS/EDUCATORS IN THE LOBATSE, SOUTH-EAST AND KANYE DISTRICTS.

I hope you will assist him in order for him to complete project successfully.

Thanking you in anticipation.

PROF. M.W. LEGOTLO
Head of Educational Planning & Administration

OFFICE OF DEAN
Faculty of Education
University of North-West

APPENDIX A

Questionnaire No.

TOTAL QUALITY MANAGEMENT (TQM): PERCEPTION OF SECONDARY SCHOOL EDUCATORS IN THE LOBATSE, KANYE AREA AND THE SOUTHEAST AREA OF BOTSWANA.

In this study, total quality management (TQM) refers to an organization's wide effort to achieve quality in education. It is a philosophy about quality that involves everyone in the organization in the quest for quality education. In this research, there is a portion where Total Quality Management is equated to Work Improvement Teams (WITs) and Performance Management System (PMS) in Botswana. TQM, PMS, and WITs encourage productivity and commitment to quality in the public service.

SECTION A

BIOGRAPHICAL AND DEMOGRAPHICAL DATA

Kindly answer the following questions by crossing **X** on the appropriate block

1. Your Age category

1.1	**Below 30**	
1.2	**31 - 35**	
1.3	**36 - 40**	
1.4	**41 - 45**	
1.5	**46 - 50**	
1.6	**51 and above**	

2. Gender

2.1	**Male**	
2.2	**Female**	

3. School location

3.1	**Urban**	
3.2	**Rural**	

4. School enrolment

4.1	Under 250	
4.2	251 - 350	
4.3	351 - 550	
4.4	551 - 850	
4.5	851 - 1000	
4.6	Over 1300	

5. Your position in the school

5.1	Headmaster	
5.2	Deputy Headmaster	
5.3	HOD	
5.4	Senior Teacher	
5.6	Teacher	

6. How long have you been in that position?

6.1	Less than a year	
6.2	1 - 3	
6.3	4 - 5	
6.4	Over 5	

7. Highest Academic qualification

7.1	Dip. In Education	
7.2	B.A. Humanities	
7.3	B.A. +P.G.D.E.	
7.4	B Ed.	
7.5	M Ed./Masters	
7.6	B.Sc.	
7.7	M.A.	

SECTION B

The following are guidelines on Total Quality Management.

Please rate the following items on a scale of 1 to 5 reflect your opinion about your school.

1.Please tick in the appropriate box.

2.Answer all the questions. There is no right or wrong answers for these questions, what is required is your own opinion with regard to the statements given.

Key: SA: Strongly Agree

D: Disagree

U: Uncertain

A: Agree

SA: Strongly Agree

8.Total Quality Management is a tool to improve effectiveness, productivity and performance.

	SD	D	U	A	SA
8.1 TQM is a methodology that can help education professionals to cope with today's changing environment.	1	2	3	4	5
8.2 TQM can provide the focus for educational improvement	1	2	3	4	5
8.3 Total quality management is an organization's wide effort to achieve quality.	1	2	3	4	5
8.4 Total Quality management is a philosophy about quality that involves everyone in the quest for quality education.	1	2	3	4	5
8.5 Total quality management requires the dedication of all organizational members in quality matters.	1	2	3	4	5
8.6 Total quality management requires a commitment from management for quality initiatives to succeed.	1	2	3	4	5
8.7 Total quality management requires a particular style of leadership that is characterised as transformational management.	1	2	3	4	5

9. The role of the school management to improve the quality of education

	SD	D	U	A	SA
9.1 The school management is committed to a quality culture.	1	2	3	4	5
9.2 The school management backs up goals by providing the means to achieve the goals of the school/ organization.	1	2	3	4	5
9.3 The school management meet regularly with staff to define their requirements in the teaching profession.	1	2	3	4	5
9.4 The school management practices the principles of quality.	1	2	3	4	5
9.5 The school management succeeds in its responsibility to change from quantitative to qualitative approach.	1	2	3	4	5
9.6 The school management provides teachers with the training that they need to improve quality of education.	1	2	3	4	5
9.7 The school management sees to it that the vision and mission statement that has been developed, is implemented to its utmost.	1	2	3	4	5

10. Total quality management guiding principles

	SD	D	U	A	SA
10.1 Total quality management can be achieved through the total commitment of all members of this school organization.	1	2	3	4	5
10.2 Total quality management strategies are effectively communicated to the staff members in this school.	1	2	3	4	5
10.3 Total quality management requires the prevention rather than detection of faults at all points in the system.	1	2	3	4	5
10.4 Total quality management is led by school management in this school.	1	2	3	4	5
10.5 Total quality management is integrated into the development plan of the school.	1	2	3	4	5

11. Implementation of total quality management in schools

	SD	D	U	A	SA
11.1 Total quality management will only work if there is obsessive commitment to quality by the school management.	1	2	3	4	5
11.2 It is necessary to identify a team specifically responsible for driving the implementation process in schools.	1	2	3	4	5
11.3 Implementing Total Quality Management requires the acceptance of the principle that teachers can always improve.	1	2	3	4	5
11.4 The success of implementing total quality management depends on training that will result in attitudinal change of teachers.	1	2	3	4	5
11.5 Total Quality Management can change the way the school is run	1	2	3	4	5

SECTION C

In this research, Total Quality Management is equated to Work Improvement Teams (WITs) and Performance Management System (PMS) in Botswana. Both WITs and PMS encourage productivity and commitment to quality in the public service including teaching as a profession.

Comments;

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13.2 The management should adopt the new philosophy of management.

YES	NO

Comments;

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13.3 The management should engage in a process of continually improving every aspect of the organizational goals.

YES	NO

Comments;

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13.4 The management should drive out fear by improving communication.

YES	NO

Comments;

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13.5 The management should create a management culture that will drive the quality implementation initiatives.

YES	NO

Comments;

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13.6 In your own words how can total quality management be used as a tool to improve the quality of education in your school?

Comments

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13.7 In your own words what inhibits the implementation of total quality management in your school.

Comments

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Thank you very much for your co-operation. Le Kamoso

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