

**INTERNAL QUALITY ASSURANCE PROGRAMME FOR
PUBLIC SCHOOLS IN NORTH WEST PROVINCE**

BY

MATLHODI CHRISTINA TEU

**SUBMITTED IN FULFILMENT OF THE REQUIREMENT
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN
THE DEPARTMENT OF PLANNING AND
ADMINISTRATION IN THE FACULTY OF EDUCATION
AT THE UNIVERSITY OF NORTH WEST**

SUPERVISOR: Prof. M.W. Legotlo

EXTERNAL SUPERVISORS:

Prof. R.V. Gabela (University of Zululand)

**Prof. J.M. Mosoge (Potchefstroom University for
Christian Higher Education)**

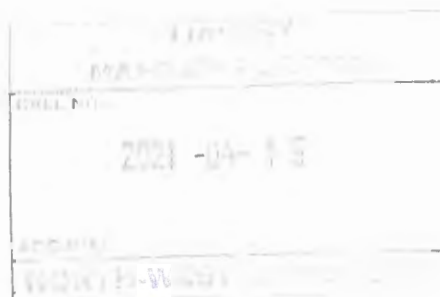
Prof. T.K. Daniel (Ohio State University)

DATE OF SUBMISSION: JANUARY 2002

The financial assistance of the Centre for Science Development (HSRC – South Africa) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the Centre for Science Development.

I declare that the thesis for the degree of doctor of philosophy at the University of North-west hereby submitted, has not previously been submitted by me for a degree at this or any university, that it is my own work in design and execution and that all material contained herein has been duly acknowledged.

..........



ACKNOWLEDGEMENT

This study would not have been possible without the many and varied contributions of the several people.

Specifically I am indebted to Prof. M.W. Legotlo, my promoter, for his motivation and fatherly guidance. For his time, patience encouragement and expertise that made it possible for the completion of my research. Thanks also to his wife Mrs V.M. Legotlo for the encouragement and support to complete this study.

To Mr Mike Temane and Mr Molefe Sedupane, who spent hours helping me test the validity of many ideas. I thank them very much.

A special debt is owed to Maureen Ledibane, an English for Academic Skills lecturer at the University of North West, for reading my work and offering editorial and helpful critical evaluations.



Many thanks to Professors in Faculties of Education and Management in Australia and UK interviewed, and also officials in the Department of Education in South Africa, who were willing to share their views with me on quality assurance.

I especially wish to thank all District and Circuit Managers in the North West Province for granting me permission to access schools. I further would like to thank the principals of schools around the North West Province who helped in the distribution and collection of questionnaires.

A special thanks to my colleagues and friends Thakadu Matshidiso and Dr. Matshidiso Molokoe for their endless encouragement, support and motivation.

Lastly, no one can calculate the gratitude family members deserve when a mother and a wife is studying. I thank my family for their understanding and support especially when the studies started to encroach seriously up on our evenings, weekends and holidays. Thanks to my first born, Bodule (great grandson of Kas Maine in the book entitled: 'The seed is mine' by Charles van Onselen), for his endless efforts on computer skills and spending many hours helping me with typing. Thanks to Mantsho Moipolai who took care of my son Reotshepile and my daughter Kgomotso Intlafatso, during my studies and my absence from home. To my husband Eseu Joseph, who accepted my pursuit of the study and was behind me throughout.

AND TO GOD BE GLORY

ABSTRACT

INTERNAL QUALITY ASSURANCE PROGRAMME FOR PUBLIC SCHOOLS IN NORTH WEST PROVINCE

In South Africa little is documented on strategies for assuring and promoting quality in schools. The quality of education in South Africa is presently under increased scrutiny by both professionals and politicians. Schools have been called to account in ways, which were never heard of, in earlier decades. Departments of Education in different provinces are more concerned about ways of assuring and improving quality in schools. In this regard Quality Assurance as part of quality management, is a process which has great potential for enhancing accountability in public schooling. It also has principles that originated from TQM which suggest that every process within the organisation contributes to the overall quality in that organisation.

The purpose of this study was to determine the practices and principles of quality assurance and the kind of knowledge and skills needed by principals and educators in order to effectively manage, assure and improve quality. The study also examined existing quality models in both industry and education with the ultimate aim of developing quality assurance programme for public schools in North West Province.

There are some important historical points that provide a background to the concept of quality management and demonstrate why definitions of quality vary contextually. The movement of quality has been strongly influenced by the ideas of founding fathers such as Deming, Juran, Crosby, Ishikawa,

Kano and Imai. The evolution of quality concept is closely related to the different eras of the modern quality movement described in terms of four quality eras namely, inspection era, quality control era, quality assurance era and Total Quality Management era. The quality assurance era came with a change away from product quality towards systems of quality and it includes quality control approaches while total quality management refers to a systematic management of organisations' customer-supplier relationships that ensures steep-slope improvements in quality performance. Although they concentrated on quality in manufacturing industry, their principles of quality management and quality improvements are applicable to education. There have been attempts to adapt TQM to educational management in a limited number of schools worldwide.

Schools are expected to manage and improve quality of teaching and learning. In order to accomplish this, Quality Assurance practices offers mechanisms such as policies, attitudes, actions and procedures necessary to ensure that quality of education is been maintained and enhanced. It requires actions internal to the organization as well as actions of external bodies. Although quality assurance framework for South Africa is still in its infancy stage, policies are in place to monitor and evaluate performance in schools. For several years South Africa was without any national system for evaluating the performance of schools. The policy on Whole School Evaluation (WSE) is the Department's initiative to evaluate and monitor quality in schools. The evaluation will be based on indicators covering inputs, processes and outputs, and school self-evaluation, which form the basis for external evaluation and also for improvement. . It is on the basis of

this external evaluation, that an internal quality assurance programme was developed in this study.

The subjects of the study were 500 educators out of which 396 respondents were analysed. The empirical investigation conducted revealed that schools should be ready to innovate any change that lead to the improvement of the teaching and learning process. Furthermore, for educators to be able to assure and manage quality, they should have positive attitude, thorough knowledge and understanding of quality practices and have good communication and interactive skills to be able to deal with changes in schools.

The study also revealed that for managers to assess quality progress they need, policies and procedures, School Development Plan (SDP), sound relation with parents and learners. Good practices for assuring and improving quality in schools include planning, involvement and commitment of all stakeholders.

Quality assurance programme for public schools in North West Province was developed on the basis of the identified practices of quality from the literature and the empirical study. The study recommends that the programme be used by public schools so that they are able to take stock of the quality of activities in their schools and ultimately seek a way of continuously improving these activities.

TABLE OF CONTENTS

NO:	CONTENT	PAGE
1.	ORIENTATION	1
1.1	INTRODUCTION	1
1.2	STATEMENT OF PROBLEMS	2
1.3	AIMS OF STUDY	8
1.4	SIGNIFICANCE OF THE STUDY	8
1.5	METHOD OF RESEARCH	9
1.5.1	Literature study	9
1.5.2	Interviews	10
1.5.3	Empirical investigation	10
1.5.3.1	<i>Questionnaire</i>	10
1.5.3.2.	<i>Population and Sampling</i>	10
1.5.3.3.	<i>Limitations of the study</i>	11
1.6	DATA ANALYSIS	11
1.7	DEFINITION OF TERMS	12
1.8	CHAPTER READING	14
1.9	SUMMARY	14
2.	NATURE AND SCOPE OF THE CONCEPT 'QUALITY'	15
2.1	INTRODUCTION	15
2.2	FURTHER DEFINITION OF QUALITY	15
2.2.1	What is Quality?	16

2.2.1.1	<i>Quality as exceptional</i>	20
2.2.1.2	<i>Quality as perfection or consistency</i>	21
2.2.1.3	Quality as fitness for purpose	21
2.2.1.4	Quality as value for money	22
2.2.1.5	Quality as transformation	23
2.2.2	General conception education quality	23
2.2.3	What is Quality Assurance?	30
2.3	EVOLUTION OF QUALITY MOVEMENT	33
2.3.1	The genesis of quality movement	34
2.3.2	The role of the Japanese in quality movement	35
2.3.3	US experience in the movement of quality	36
2.3.4	The development of the concept of quality	37
2.3.4.1	<i>Inspection era</i>	38
2.3.4.2	<i>Quality Control era</i>	39
2.3.4.3	<i>Quality Assurance era</i>	39
2.3.4.4	<i>Total Quality Management (TQM) era</i>	39
2.4	QUALITY ASSURANCE	40
2.4.1	Functions and design of quality assurance	40
2.4.2	Aims and purposes of quality assurance	41
2.4.3	Principles of quality and quality assurance	42
2.4.3.1	<i>Role of the leader</i>	45
2.4.3.2	<i>Human resource utilization</i>	47
2.4.3.3	<i>Elimination and management of variations</i>	48
2.4.4	Quality management and Quality improvement	48
2.4.4.1	<i>Quality management system</i>	51
2.4.4.2	<i>Quality and standards</i>	53

2.4.4.3	<i>The quality improvement process</i>	55
2.5	AN OVERVIEW OF QUALITY EDUCATION IN SOUTH AFRICA	56
2.5.1	Quality education in South Africa	56
2.5.1.1	<i>The situation prior to 1994</i>	57
2.5.1.2	<i>Policies and legislative framework</i>	59
2.5.2	Quality Assurance in South Africa	63
2.5.3	Important factors in the quality assurance system	65
2.5.3.1	<i>Monitoring and evaluating learner achievement</i>	68
2.5.3.2	<i>School audits and review</i>	68
2.5.3.3	<i>Accreditation</i>	70
2.5.4	Whole School Evaluation and quality assurance	70
2.5.4.1	<i>The National policy on Whole School Evaluation</i>	71
2.5.5	Quality Assurance in SA higher education	80
2.5.5.1	<i>Conceptualisation of quality: South African Perspectives</i>	81
2.6	SUMMARY	82
3	QUALITY THEORISTS AND MODEL OF MANAGEMENT FOR QUALITY ASSURANCE	84
3.1	INTRODUCTION	84
3.2	THE QUALITY THEORISTS	85
3.2.1	William Edwards Deming	85
3.2.1.1	<i>Deming's fourteen management principles</i>	86
3.2.1.2	<i>Deming's seven sins of management</i>	93

3.2.1.3	<i>System of profound knowledge</i>	93
3.2.2	Joseph Juran	96
3.2.2.1	<i>Strategic quality management</i>	96
3.2.2.2	<i>Juran's ten steps to quality improvement</i>	97
3.2.3	Walter Shewhart	98
3.2.4	Phillip Crosby	100
3.2.5	Armand Feigenbaum	105
3.2.6	Kaoru Ishikawa	106
3.2.7	John Jay Bonstingl	108
3.2.7.1	<i>Customer-supplier focus</i>	108
3.2.7.2	<i>Constant dedication to continuous improvements</i>	109
3.2.7.3	<i>A process system approach</i>	110
3.2.7.4	<i>Consistent quality leadership</i>	110
3.3	MODELS OF QUALITY	112
3.3.1	Total Quality Management models	112
3.3.1.1	<i>Murgatroyd and Morgan TQM model for school Leadership</i>	114
3.3.1.2	<i>Total Quality School Model</i>	120
3.3.2	Service success model	125
3.3.2.1	<i>The Total Quality Success model (TQS)</i>	126
3.3.2.2	<i>The role of the leader in service success</i>	128
3.3.3	ISO 9000 standards	129
3.3.4	Quest for educational quality model	132
3.4	HOW OTHER COUNTRIES ASSURES QUALITY OF EDUCATION IN SCHOOLS	135
3.4.1	Assuring quality of education in Nigeria	136
3.4.1.1	<i>Full inspection</i>	138
3.4.1.2	<i>Casual or check- up visit</i>	139

3.4.1.3	<i>Routine checking</i>	139
3.4.2	Assuring quality of education in Queens land- Australia	139
3.4.2.1	<i>School Planning Overview or Partnership Agreement</i>	140
3.4.2.2	<i>The Annual Operational Plan</i>	142
3.4.2.3	<i>Internal monitoring/ External monitoring</i>	143
3.4.2.4	<i>School Annual Report</i>	144
3.4.2	Assuring quality in Britain	144
3.5	SUMMARY	147
4.	TOOLS AND TECHNIQUES FOR QUALITY SCHOOLS	149
4.1	INTRODUCTION	149
4.2	QUALITY SCHOOLS	149
4.2.1	Customers in education	150
4.2.1.1	<i>Assumptions for a customer-focused school</i>	151
4.2.1.2	<i>Characteristics of customer-focused school</i>	153
4.2.2	Dimensions of quality schools	154
4.2.2.1	<i>Goal attainment</i>	155
4.2.2.2	<i>Efficiency</i>	156
4.2.2.3	<i>Equity</i>	157
4.2.2.4	<i>Satisfaction</i>	158
4.2.2.5	<i>Actions to be taken to enhance the pursuit of quality</i>	159
4.2.3	Gaining acceptance of quality management	160
4.2.3.1	<i>Planning to implement quality management</i>	160
4.2.3.2	<i>Requirement for the management of quality</i>	162
4.2.3.3	<i>Team approach for monitoring and evaluation</i>	163
4.2.3.4	<i>Self-evaluation and school self evaluation</i>	164

4.2.3.4.1	School self- evaluation	164
4.2.3.4.2	Why school evaluation?	165
4.2.3.4.3	English model of school self- evaluation	166
4.3	MEASURING PROGRESS IN SCHOOLS	169
4.3.1	Group Process	170
4.3.1.1	<i>Quality council</i>	171
4.3.1.2	<i>Quality teams</i>	171
4.3.1.3	<i>Quality circles</i>	173
4.3.2	Problem solving tools	175
4.3.2.1	<i>Pareto analysis</i>	175
4.3.2.2	<i>Fishbone diagram/ Cause-effect diagram</i>	177
4.3.2.3	<i>Scatter diagram</i>	180
4.3.2.4	<i>Swot analysis</i>	182
4.3.3	Planning and Implementation	184
4.3.3.1	<i>Action Plan</i>	185
4.3.3.2	<i>Hoshin planning</i>	188
4.3.3.3	<i>PDSA Cycle</i>	190
4.3.3.4	De Bono thinking skill	193
4.4	INSTITUTIONS EXPERIENCES	195
4.4.1	South Bank University TQM initiative	195
4.4.2	Application of quality management at Mt Edgecumbe High School Alaska	197
4.5	SUMMARY	199

5	RESEARCH METHODOLOGY	202
5.1	INTRODUCTION	202
5.2	RESEARCH TOOLS	202
5.2.1	Questionnaire as a research tool	202
5.2.1.1	<i>Advantages of questionnaire</i>	203
5.2.1.2	<i>Disadvantages of questionnaires</i>	204
5.2.2	Questionnaire construction	205
5.2.2.1	<i>Development of questionnaire items</i>	206
5.2.2.2	<i>Format and content of a questionnaire</i>	207
5.2.3	Pre-testing the questionnaire	209
5.2.4	Final questionnaire	209
5.2.5	Covering letter	210
5.3	ADMINISTRATION PROCEDURE	210
5.4	FOLLOW- UPS	211
5.5	POPULATION AND SAMPLING	212
5.6	DISTRIBUTION AND RESPONSE RATE	213
5.7	STATISTICAL TECHNIQUES	215
5.7.1	Descriptive data	215
5.7.2	Quantitative data	215
5.8	SUMMARY	215
6	DATA ANALYSIS AND INTERPRETATION	216
6.1	INTRODUCTION	216
6.2	REVIEW OF SUBJECTS	216
6.3	BIOGRAPHICAL DATA OF RSPONDENTS	216
6.3.1	Age category	218
6.3.2	Gender	219
6.3.3	Present position	219

6.3.4	Position experience	219
6.3.5	Highest qualifications	220
6.3.6	Settlement type	220
6.3.7	School category	221
6.4	PERCEPTIONS ON ASSURING AND IMPROVING QUALITY	221
6.4.1	School Readiness To Change and quality improvement	221
6.4.2	Attributes for educational experience	228
6.4.2.1	<i>Knowledge and understanding</i>	229
6.4.2.2	<i>Skills for quality improvement</i>	233
6.4.2.3	<i>Attitude</i>	236
6.4.3	Assessing quality in schools	240
6.4.3.1	<i>Policies and procedures</i>	241
6.4.3.2	<i>School Developmental Plan(SDP)</i>	244
6.4.3.3	<i>Parents</i>	245
6.4.3.4	<i>Learners</i>	246
6.4.3.5	<i>Assessment and evaluation</i>	247
6.5	RESPONDENTS' VIEWS ON BEST PRACTICES OF QUALITY	247
6.6	MEAN SCORES RATING ON SCHOOL READINESS TO CHANGE	251
6.7	COMPARISON OF MEANS	255
6.7.1	Analysis of variance, age category	256
6.7.2	Analysis of variance, gender	257
6.7.3	Analysis of variance, school settlement	258
6.7.4	Analysis of variance, school category	259

6.8	CORRELATION RELATIONSHIP BETWEEN VARIABLES	260
6.9	SUMMARY	262
7.	QUALITY ASSURANCE PROGRAMME FOR PUBLIC SCHOOLS IN NORTH WEST PROVINCE	265
7.1	INTRODUCTION	265
7.2	FRAMES FOR DEVELOPING QUALITY ASSURANCE PROGRAMME	266
7.2.1	The PDSA cycle	267
7.2.2	Strategic planning	269
7.3	QUALITY ASSURANCE PROGRAMME	271
7.3.1	Rationale for Public Schools Quality Assurance Programme (PSQAP)	273
7.3.2	Goals and objectives of Public Schools Quality Assurance Programme	274
7.4	DEVELOPMENT AND IMPLEMENTATION OF THE PROGRAMME	275
7.4.1	Senior level	278
7.4.2	Quality Assurance District Support Team (QADST)	278
7.4.3	School-based Quality Assurance Council (SQAC)	280
7.4.4	School-based Quality Circles (SQC)	282
7.4.4.1	<i>Quality Assurance Departmental Team (QADT) and Quality Assurance Grade Team (QAGT)</i>	284
7.4.5	Major role players of PSQAP at school level	285
7.4.5.1	<i>The district coordinator</i>	285
7.4.5.2	<i>The school principal</i>	286
7.5	THE PUBLIC SCHOOL QUALITY ASSURANCE PROGRAMME	287
7.5.1	Phase 1: Pre-planning	290

7.5.2	Strategic planning phase	293
7.5.3	Implementation phase	296
7.5.4	Monitoring and assessment	300
7.5.5	Comprehensive evaluation phase	302
7.6	SUMMARY	305
8.	SUMMARY, FINDINGS AND RECOMMENDATIONS	306
8.1	INTRODUCTION	306
8.2	SUMMARY	306
8.3	RESEARCH FINDINGS	311
8.4	RECOMMENDATIONS	316
8.5	CONCLUSIONS	320
	BIBLIOGRAPHY	322
	APPENDICES	

LIST OF FIGURES

2.1	The major elements in the regulation process	32
2.2	Quality Assurance Framework	67
3.1	The pipeline model	99
3.2	TQM Model of School Leadership	118
3.3	Total Quality School Model	121
3.4	Quality Service Paradigm Contingency Model	128
3.5	The Quest for Educational Quality Model	134
3.6	School Planning and Accountability	141
4.1	Guiding Principles for School Self-evaluation	168
4.2	School Staff Meeting in our system why they are not useful	177
4.3	Fishbone/cause-effect diagram	179
4.4	Scatter Diagram	181
4.5	SWOT Analysis	184
4.6	An example of action plan	187
4.7	The PDSA cycle	192
4.8	Six thinking hats and six action shoes	194
7.1	The planning Cycle of Quality Assurance Programme	271
7.2	The Development and Implementation Structures	277
7.3	The Public Schools Quality Assurance Programme	288
7.4	Pre-planning phase	291
7.5	Strategic Planning phase	294
7.6	Implementation phase	296
7.7	Monitoring and Assessment phase	301
7.8	Evaluation phase	303

LIST OF TABLES

2.1	Dimensions of quality	19
5.1	Distribution and responses rate of sampled population	214
6.1	Description of the biographical data of respondents	217
6.2	School readiness to change	223
6.3	Knowledge and understanding of quality improvement	232
6.4	Skills for quality improvement	235
6.5	Attitude for quality improvement	238
6.6	Assessing quality in schools	242
6.7	Ranked mean scores on School Readiness To Change	252
6.8	Relationship between age category groups	257
6.9	Relationship between gender groups	258
6.10	Relationship between settlement groups	259
6.11	Relationship between school category groups	260
6.12	Correlation among variables	261
6.13	Analysis of total variance	262
7.1	Users of Public Schools Quality Assurance Programme	276
7.2	Performance Indicators	299

LIST OF ABBREVIATIONS

TQM	-	Total Quality Management
COLTS	-	Culture of Learning and Teaching Services
USA	-	United States of America
UK	-	United Kingdom
OFSTED	-	Office of Standards in Education
RSA	-	Republic of South Africa
NQF	-	National Qualification Framework
ANC	-	African National Congress
QA	-	Quality Assurance
JUSE	-	Japanese Union of Scientists and Engineers
ISO	-	International Standards Organisation
SADTU	-	South African Democratic Teacher Union
DAS	-	Development Appraisal System
SASA	-	South African School Act
SAQA	-	South African Qualifications Authority
CD:QA	-	Chief Directorate, Quality Assurance
DoE	-	Department of Education
WSE	-	Whole School Evaluation
LSEN	-	Learner with Special Education Needs
QPU	-	Quality Promotion Unit
SQM	-	Strategic Quality Management
PDCA	-	Plan – Do – Check Act
PDSA	-	Plan – Do – Study Act
TQS	-	Total Quality Service

EQ	-	Education Queensland
HMIs	-	Her Majesty's Inspector
LEA	-	Local Education Authorities
SID	-	School Improvement Division
HMCI	-	Her Majesty Chief Inspector
DFEE	-	Department of Education and Employment
CORT	-	Cognitive Research Trust
CSWG	-	Customer/Supplier Working Groups
NWPD	-	North West Provincial Department
ND	-	National Department
SMTs	-	Senior Management Teams
SRTC	-	School's Readiness to Change

1. ORIENTATION

1.1 INTRODUCTION

There is a growing concern for primary and secondary schools to improve the effectiveness and quality of education provided. According to the White paper on Education and Training (Department Of Education, 1995) and the Policy framework for quality Assurance (Department of Education, 1998a), the Ministry of Education in South Africa is more concerned about improving quality in schools. The idea of quality in education is not new, what is new is that the industrial quality philosophy is being adapted to the problems encountered in schools. For schools to be quality and service orientated they should relate and care about goals, needs, desires and interests of customers and go an extra mile to make sure that they are met (Whitaker & Moses, 1994:76). By failing to provide excellent quality services, schools face the risk of parents removing their children from one school to the other.

This study focuses on the concerns about the quality of education and control provided by schools. It explores the possibilities of developing a framework for promoting quality assurance in public schools in the North West Province of South Africa. The study was guided by the following questions:-

- How could public schools provide and maintain quality education?
- Is there a quality assurance system in public schools?
- How is the standard of quality being assured?

Within the context of this chapter, a statement of the problem is provided. Thereafter the research methodology is given and the definitions of terms relevant to the study are provided.

1.2 STATEMENT OF THE PROBLEM

Quality is at the top of most school's agenda. There is hardly an article or speech by a prominent educationist nowadays which does not touch on the subject of quality. The quest for quality by any organisation including a school is an admirable one, and the demand of customers for quality assurances of products and services is a most reasonable one (Rinehart, 1993; Freeman, 1994; Indrus, 1996). Anyone in education today who is not concerned about the quality of the services and product delivered by individual schools and by school districts must be imitating an ostrich with its head buried in a sand. In line with this argument, there is a critical need to improve the overall quality of the education in South Africa. Phele (1997:7) argues that if South African schools adopt and implement the principles that underpin Total Quality Management (TQM), wastage in education will be reduced and improvement in educational practice will be promoted. Once quality improves, repetition and dropout rates will decrease.

In the first five years of the democratic South Africa, government has concentrated heavily on new policy formulation and putting the new provincial administrative system into place. This new system is beginning to stabilise and what is becoming key now is the question of quality, which should be supported by distribution of resources, especially for the previously disadvantaged schools. What is critical then is how to create quality public education for majority of people in the country.

A number of academic studies have been conducted to look at the question, both in the government and outside (Vadi, 1998:12). There has been the School

Register of Needs completed by the National Education Department, the Culture of Learning and Teaching Services (COLTS) study conducted by the Gauteng Department of Education Policy Unit. The Catholic Institute of Education has done a study of thirty-eight townships schools, which have achieved exceptionally well under difficult conditions (Vadi, 1998). There is need to equip these schools with required resources. There is also the National Department Report pointing at the critical role of school management in enhancing quality. Studies have shown that the inherited legacy of apartheid is a critical limiting factor for quality. The findings of The School Register of Needs hence indicated infrastructure problem as having adverse effect.

There are many factors that are responsible for quality, but ultimately human agency is one critical factor. Whether education falters or thrives, that depends on human agency. Poor management or ineffective management and leadership are another factors, which has caused damage to quality education in South Africa. The majority of schools management are not committed and accountable. There is a need for schools to have flat management structures; principals cannot expect to succeed as individuals. Educators should work as teams and in collaboration for most of the schools in the country to benefit. All stakeholders must move away from passivity to active agency.

Since educators first applied Frederick Taylor's principles of scientific management at the beginning of the 20th century, scholars and practitioners have made considerable improvement in defining and assessing educational quality (Hittman, 1993; Holt, 1993; Tribus, 1993; Sallis, 1993; Schargel, 1993; Horine et al., 1993; Steyn, 1996, Phele, 1997). Although there has been progress through their efforts, current theory and practice on defining and assessing educational quality has been concentrating on post-secondary

education (Kells, 1988; Hansen, 1993; Strydom, 1993; van Rensburg & Wolvaardt, 1993; Doherty, 1994; Freeman, 1994; Liston, 1999; McKay & Kember, 1999). This implies that quality assurance in higher education received more attention than in secondary education. However, in terms of benefits to learners and the community, secondary education has as much to gain from the rapid development as in higher education.

According to Cheng (1996) and Weller (1997) numerous educational reforms and school structuring movements are currently working towards educational effectiveness and school development in countries such as Canada, USA, UK, Japan, New Zealand, China and Hong Kong. Typical examples of reform movements are (Cheng, 1996:3):

- Search for effective schools;
- The shift to school-based management;
- Emphasis on development planning in schools;
- The assurance of school education quality; and
- The implementation of various school restructuring programmes.

Increasingly, organisations are recognising the strategic importance of quality and quality management. According to Sallis (1993) in the USA, the Citizen Charter, the Parents Charter, Investors in People and many other initiatives were about raising the standards and improving quality. Many organisations have arrived at the conclusion that effective quality management can enhance their competitive abilities to provide strategic advantages in the market place. Education is the key to the nation's future and its mission of regaining prominence in the global marketplace. That is why recently there has been rapid growing emphasis on the quality of education (Cheng 1995; Hughes,

1988; and Steyn, 1996). Cheng (1996) argues that a clear shift can be seen from education quantity to education quality. People are more concerned about the quality of educational services provided in the schools. The key issues in most of current educational reforms are whether quality of school education can meet the high and diverse expectations of school constituencies, and how it can be enhanced and assured.

The emphasis on quality in the contemporary organisational literature can be traced from the popularity of the work of Edward Deming (1983, 1986, and 1993) on total quality management (TQM). Total Quality Management focuses on achieving quality and may be defined as a philosophy and a set of guiding principles that intend meeting and exceeding the need of customers (Steyn, 1996:120). It is a participative management style that focuses on satisfying customer expectations by continually improving the way business is conducted (Weaver, 1991). According to Hittman (1993:78) quality experts such as Deming, Juran, Crosby and Ishikawa suggested a set of managerial principles for improving quality. These includes (Hittman, 1993:78):

- Support from leaders for the continuous improvement of quality;
- Revised strategies for the utilisation and evaluation of human resources that stress training and focus on the process rather people; and
- Elimination of unnecessary variation.



TQM has become an important focus in the management of both business and educational organisations in the United States (Holt, 1993b; Leddick, 1993; Rivers, 1993; Schargel, 1993; Tribus, 1993). Although some educational researchers (administrators) remain sceptical about the application of TQM to schools, more believe in its application to schools (Hoy & Miskel, 1996; West-

Burnham, 1994; Rappaport, 1993; Moore, 1993; Schargel, 1993; Tribus, 1990).

A growing number of schools in the USA are implementing the process, principles and tools of TQM (Horine et al., 1993:31), and revealing tremendous improvements in various areas. West-Burnham (1994) states that the best-known example of a total quality school is Mt Edgecumbe High School in the USA. There are a number of significant quantifiable indicators, which have improved since the introduction of total quality such as attendance, disciplinary incidents, graduation rates, employment and completion of higher education. More importantly, educationists such as Bonstingl, Glasser, Murgatroyd and Morgan have designed quality models for education by adapting the TQM theory.

Most education systems have always exercised some control over the quality of their output. Quality assurance is currently practised in a number of ways in different educational institutions and countries. For instance in Mereday Middle School (Northampton), the concept of quality assurance was based on the principle of prevention through definition, which could be assessed in order to ensure the consistency of experience for every learner (Trott, 1997:194). According to Marsh (1997), the present cornerstone of the British education has been the Citizen Charter, which aims to ensure that all citizens receive high - quality services, responsive to their needs, provided efficiently at a reasonable cost. The Office of Standards in Education (OFSTED) in the UK was established to introduce major changes to the way schools are inspected.

Van Rensburg and Wolvaardt (1993:89) argue that educational institutions striving towards excellence cannot manage without quality management system. Quality management system attempts to assure quality through the introduction of appropriate processes for the management and monitoring of

operations. Cuttance (1994:103) argues that the quality management systems attempt to integrate the process of work with the necessary mechanisms for assuring quality at each stage of the process. In South Africa the First White Paper on Education and Training (RSA, 1995) explicitly states the necessity of improvement of quality of education. Likewise, in the National Qualification Framework (NQF) reference is made to the requirements for a quality management system for education and training providers. Babb (1998) contends that in South Africa, providers are still reluctant to implement this system or to take responsibility for the delivery of quality service for learners. Thus, the need to improve the quality of education and the effectiveness of schools is critical.

There is a critical need to improve the overall quality of South African education which is faced by serious problems like shortage of trained science and technology educators, unsatisfactory school management and poor results (Steyn, 1999). Schools, particularly public schools should make a paradigm shift in their management principles. There is a need to build quality into every stage of the teaching and learning process and for a system to ensure quality.

In South Africa, little is documented on the strategies for assuring and promoting quality in public schools. Customer's views on the practices of promoting quality are not clearly documented. Without clear strategies for quality assurance and improvement, the nation's education is at risk. Hence, the programmes for promoting quality need not be overemphasised.

1.3 AIMS OF STUDY

The aims of this study are stated as follows:

- To determine from the literature the nature and scope of Quality Assurance in education;
- To examine Quality Assurance models in developed and developing countries;
- To determine empirically the customer's perceptions on how to improve and assure the quality of education provided;
- To gather more information on the perceptions of major stakeholders involved in the development of quality assurance in education; and
- To design a quality assurance programme for public schools.

The following hypothesis were investigated:

- Is there a significant difference between the perceptions of the different groups (age categories, gender, rural and urban settlement and school category) with regard to the practices of quality assurance and quality improvement?

1.4 SIGNIFICANCE OF THE STUDY

The quality of education in South Africa is presently under increased scrutiny by both academics and politicians. The White Paper on Education and Training (1995) also noted that many schools serving the majority of learners experienced decline in school performance. In the same breath ANC (1994a) believes repetition and dropout rates in schools would decrease once quality of

education improves. In this sense, there is a critical need to improve the overall quality of education provided by individual schools.

But improving the quality involves managing and assuring the process. Thus, the study focuses on quality management systems and how schools could manage and monitor the provision of quality education. Quality management is regarded as a powerful vehicle to deal with poor quality in schools because it provides a structured, systematic education which lead to an improvement in various areas such as student performance, motivation and self-esteem.

Another need for the study was the researcher's endeavour to design a quality assurance programme that would give schools guidance on quality issues. The establishment of a Directorate for Quality Assurance in South Africa is an indication of the importance and necessity for all stakeholders to have understanding and knowledge in quality assurance issues. Thus, this study will be of great importance to schools in particular, providing knowledge about the process of managing and assuring quality. Moreover, it will also assist schools in putting internal mechanisms in place for quality assurance and improvement. The study will also look at how quality assurance brought improvement in private and public sectors including in higher education and how schools can apply the system used to improve the quality of education in the North West Province.

1.5 METHOD OF RESEARCH

1.5.1 Literature study

In the literature review, a thorough study of primary and secondary sources was

conducted with the view of gathering information on quality assurance models for schools. A dialog-search was conducted with the following key words: Quality, total quality management, quality management, quality assurance, quality control, quality service and quality education.

1.5.2 Interviews

In order to gain a picture of the support given by the South African Department of Education in providing and maintaining quality education in schools, semi-structured interviews were conducted with experienced professionals on quality issues - quality assurance in schools especially in developed countries. The aim of the interviews was to gather information from people involved with and experienced in Quality Assurance.

1.5.3 Empirical Investigation

1.5.3.1 Questionnaire

A questionnaire was developed and pre-tested. The aim of the questionnaire was to gather information from Principals, Circuit and District Managers on their perceptions on how the quality of education can be managed and assured.

1.5.3.2 Population and sampling

Out of the total number of schools (2658) in North West Province, a random sample (n=100) of schools was selected from all twelve districts. With the help of the department of education, a list of schools in all the twelve districts of education was made available.

The subjects of the study (n=500) educators were drawn from 100 schools selected to participate in the study. In each school the instrument was administered to five respondents; the Principal, the Deputy principal, three HOD's and /or senior educators in cases where the number of HOD's are less than the required number. Again in each district, primary, secondary and combined schools were used in the sampled population. The use of the different categories of schools was very important to the researcher, to determine if there is any significant difference in the views of the subjects in the primary schools as compared to those in secondary schools.

1.5.3.3 Limitations of the study

In this study the research was carried out in North West Province of South Africa. When the study was conducted, the researcher was unaware of any programme of quality assurance with the exception of the Department of Education's Quality Assurance Framework and the Policy on Whole School Evaluation. Since the intention of the study was to develop a programme to be used by public schools in South Africa, it is the researchers' belief that the findings and the programme itself would benefit schools to assure and improve their quality processes. Whether or not the programme will be effectively or successfully used, this cannot be ascertained in this study.

1.6 DATA ANALYSIS

A statistical consultant from the University of North West aided in a computer based statistical analysis. The data was presented as follows:-

- Frequencies (f), percentages and means,
- Analysis of Variance (ANOVA) was used. ANOVA is an inferential technique, which could be used to determine whether three or four means are significantly different from each other (Borg and Gall, 1979; 427).
- F-value; and
- Correlation and regression, techniques for exploring the strength of relationship between several independent variables and one dependent variable.

1.7 DEFINITION OF TERMS

- * **Quality:** According to Will Foster quoted by Tucker (1996: 12), quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skilful execution. It represents the wise choice of many alternatives. Verkleij (1999:2) argues that quality is easily recognised, one feels it, smell it and discusses it informally. But as soon as one tries to formalise it, vigorous and emotional debates start. This is because quality has very different meanings, depending on who is defining the quality criteria and for which purpose quality assessment procedures are used. The definition of quality found by BS 4778 states that it is the totality of features and characteristics of a product or a service that bear on its ability to satisfy stated or applied needs (MacRobert, 1994:260). The literature on higher education defines quality as fitness of purpose, fitness for purpose, as exceptional, as perfection (zero defects), as value for money and as transformation (Verkleij, 1997; Harvey; 1996; Noruwana, 1996). All these approaches suggest that quality is relative in the eyes of the beholder and it is

relative in terms of the circumstances in which it is expressed and used. Thus, there is no standard definition for quality, but one might choose a definition that fits into circumstances in which one wants to use it. In this study the term quality of education, educational quality and quality education are used synonymously.

- * **Total Quality Management (TQM)** refers to “a systematic management of an organisation's customer-supplier relationships that ensures sustainable, steep-slope improvements in quality performance” (Murgatroyd & Morgan, 1993: 44). According to Sallis (1993:35) TQM is used to describe two slightly different but related notions - philosophy of continuous improvement and tools and techniques used to implement the theory. TQM is seen as a management philosophy and company practices that aim to harness the human and material resources of an organisation in the most effective way to achieve the objectives of the organisation.

- * **Quality Assurance (QA):** refers to a management system designed to control activities at all stages to prevent quality problems and ensure that only conforming products reach the customer. According to Woodhouse (1998), QA may be defined as the policies, attitudes, actions and procedures necessary to ensure that the quality of education is being maintained and enhanced. Quality Assurance is seen as planned systematic actions necessary to provide confidence that the education meets expectations and is relevant to the needs of South Africans. It is based on the principle of prevention through definition, which can be assessed in order to ensure the consistency of experience for every learner.

In this study Quality Assurance is viewed as a process of assuring quality in schools through the internal assessment mechanisms in the light of stated goals and objectives. Quality Assurance programme is a well-structured plan with clear stated actions, processes and structures in place – including mission, goals, values and strategies - to ensure that the delivery of education in schools is of accepted quality.

1. 8 CHAPTER READINGS

1. Orientation
2. Nature and scope of Quality Management
3. Quality theorists and models of management for Quality Assurance
4. Overview of Quality in Education
5. Research methodology
6. Data analysis and interpretation
7. Quality Assurance model for schools in South Africa
8. Summary, recommendation and conclusion

1.9 SUMMARY

In this introductory chapter, a brief orientation to the study was provided. It outlined the problem to be investigated and explains the methodology to be employed in the study. The major focus of the study is to develop a quality assurance model for public schools.

2. NATURE AND SCOPE OF QUALITY MANAGEMENT

2.1 INTRODUCTION

Much of the literature on the quality process has as its base a manufacturing or industrial context (Hayward, 1998). Like any other business, education needs quality. Education is viewed as ineffective, expensive and desperately in need of reform. According to Ho and Wearn (1996), managing quality is a way to improve the effectiveness of a business as a whole. Public schools in South Africa are faced with serious problems for example, poor Grade 12-examination results and poor basic education. It is critical to point out that the process of managing and assuring quality that assisted the Japanese and Americans companies to compete globally embodies principles that could be applied to improve public schools and the education delivery system in South Africa.

In the next section, brief attention is paid on further definition and conceptualisation of the concept 'quality' and the general conception of education quality. Statements on the historical background of the movement of quality and its impact on education would be followed.

2.2 FURTHER DEFINITION OF QUALITY.

There is continuing interest in the notion of 'quality' and how it applies to educational organizations. It is essential to state that various authors define quality differently, depending on the criteria that guide their understanding.

This implies that quality is a very difficult term to define. Most people if asked for their definition of quality would use terms like ‘goodness’ or ‘luxury’ (Horwitz, 1990:56). However, Horwitz (1990) argues that such terms are subjective and provide no basis for the measurement of quality. Thus, the definition needed for quality should enable organizations to measure whether quality has been or has not been achieved.

2.2.1 What is Quality?

Quality is related to a body of knowledge about products, services and customer and client satisfaction. It is a concept to which various meanings have been attached. It has been associated with ‘standards’ or ‘excellence’, fitness for purpose, fitness of purpose and with the provision of a product or service, which is distinctive or special (Green, 1994). These interpretations imply that there are many competing views on the nature of quality. Hence, Murgatroyd and Morgan (1993:45) use the ‘you know it, when you see it’ phrase to indicate that it is indefinable. There are a number of well-known quality definitions such as, the totality of features and characteristics of a product or service that bears on its ability to meet a stated or implied need – conformity to requirement (Crosby, 1979) and fitness for use. It turns out that quality has very different meanings depending on who is defining its criteria and for which purposes quality assessment procedures are used.

Richardson (1998:213) describes quality as a process that involves everyone, and suggests that a quality profile is not always going to be objective. According to Murgatroyd and Morgan (1993: 45, 46), quality includes three

basic definitions: quality assurance, contract conformance and customer-driven quality.

- Quality assurance refers to the determination of standards, appropriate methods and quality requirements by an expert body, accompanied by a process of evaluation that examines the extent to which the practice meets these requirements. For example, the public examination systems, which are practiced in various countries, represent a way in which quality is assured;
- The quality conformance definition states that some quality standards have been specified during contract negotiation. Homework assignments given to learners, specifically outlining what is expected and when the work should be done represent a good example of this kind of quality (Murgatroyd and Morgan 1993: 48); and
- Customer- driven quality refers to the activity in which those who receive the product or service make explicit their expectations of the product or service they need. Customer-driven quality is therefore a process of matching products and services with the needs of those who use them. The customer-driven quality emphasize customers as core definition of quality by most writers in the field, it is the customer who defines what quality is (Costin, 1996; Harvey & Brown, 1996).

According to Ho and Wearn (1996) the Japanese companies found the old suggestion of quality – the degree of conformity to a standard – too narrow

and, instead focused on customer satisfaction. Hence, quality can be defined as a continuous effort by all members of an organization to meet customer needs and expectations. The definition of quality includes two aspects (Bradley, 1993; Greenwood and Gaunt, 1994; Steyn, 1996):

- Measuring up to specification, and
- Meeting and exceeding customer requirements.

What is essential is that the product or service is fit for purpose and fulfils the expected function. Hence Sallis (1993) argues that quality is not the end in itself but a means by which the end product is judged to be up to standard. Quality will not be achieved by accident or by management dictating. Instead, it requires cultural change in management behaviour and in the attitude of everyone associated with the enterprise. This implies that the process must be effectively managed. Hence, early quality theorists like Crosby advocated quality as a way to reduce organizational costs such as scrap rework and inspection. Crosby (1979) sees quality management as a systematic way of guaranteeing that organised activities happen in the way they are planned.

Definitions of quality range from narrowly defined “primary operation characteristics” of a manufactured product to customer-defined quality. Ishikawa, one of the best-known Japanese pioneers of the quality movement made a distinction between a narrow and broad definition of quality. To him, “narrowly interpreted, quality means quality of product. Broadly interpreted, quality means quality of work, quality of service, quality of information, quality of process, quality of division, quality of people, including workers,

Figure 2.1 Dimensions of Quality

PERFORMANCE	A product's/service's primary operating characteristic (e.g., a car's acceleration performance, the comfort of using long-wear contact lenses).
FEATURES	Add-ons or supplements (e.g. the student study guide for a course, power locks on a car).
RELIABILITY	A profitability of not malfunctioning or breaking down for a specified period of time (e.g., a 5-year, 60,000-mile warranty).
CONFORMANCE	The degree to which a product's design and operating characteristics meet established standards (e.g., a product test that shows that the product is within 0.001 inches of the standard).
DURABILITY	A measure of a product's life (e.g., 10 years).
SERVICEABILITY	The speed and ease of repair (e.g., a panel that can be replaced by an untrained user).
AESTHETICS	A product's look, feels, taste, smell (e.g., a rose has a delicate feel, a desired colour, and a distinctive scent).
PERCEIVED QUALITY	Quality as viewed by a customer, client, or student (e.g., a parent uses a disposable diaper because it's sanitary, convenient, and reasonably priced).

Source: Harvey and Brown (1996:347).

engineers, managers and executives, quality of system, quality of company and quality of objectives" (Ishikawa, 1988:45). Harvard professor David Garvin has identified eight dimensions of quality, which help define the perspective of the quality concept (See figure 2.1).

Harvey and Green in Verkleij (1999: 7) made a systematic overview of quality definitions found in the literature on higher education. They distinguished the following five broad categories of definitions -:

- Quality as exceptional;
- Quality as perfection or consistency (zero errors);
- Quality as fitness of purpose (mission orientation, consumer orientation);
- Quality as value of money; and
- Quality as transformation.

2.2.1.1 *Quality as exceptional*

The exceptional view sees quality as something special. The Oxford dictionary defines the word 'exceptional' as unusual, usually good. It is related to distinction or something of high class. This view is often heard in the context of peer or expert reviews, since quality is recognized when one sees it (Verkleij, 1999). Harvey (1996) referring, to Higher Education believes that quality is something distinctive. In educational terms it is linked to the notion of excellence and of high quality unattainable by most.

The exceptional approach to quality according to Harvey (1996), stresses the maintenance of academic standards, through the summative assessment of knowledge. It presumes an implicit, normative 'gold standard' both for learning and research, and service standards that are dependable on the inputs such as well-qualified staff, well-stocked libraries, well-equipped laboratories and students with good entry qualifications (Harvey, 1996: 211).

In the case of research, norms and standards are often derived from a traditional view that certain research is by definition 'better' which means that it has higher quality than another types of research (Verkleij, 1999).

2.2.1.2 Quality as perfection or consistency

Quality as perfection sees quality as a consistent or flawless outcome. This implies that its principal focus within institutions is on flawless and accessible administrative support systems. According to Harvey (1996:206) the view of quality as perfection 'democratises' the notion of quality. If consistency could be achieved, then all could attain quality. Quality as perfection focuses on the process and sets specifications that it aims to meet. Quality in this case is summed up by interrelated ideas of zero defects and also by getting things right from the first time (Nightingale and O'Neil, 1994; Harvey, 1996). The perfection approach emphasises consistency in external quality monitoring of academic, competence and service standards.

2.2.1.3 Quality as fitness for purpose



Quality as fitness for purpose relates quality to the purpose of a product or service. According to Verkleij (1999) this kind of quality is functional and is judged in terms of the extent to which the product or the service fits its purpose. The purpose may be customer-defined to meet requirements or be institutional-defined to reflect the institutional mission. The customer-defined view refers to quality in terms of fulfilling a customer's requirements, needs and desires. Noruwana (1996) argues that the view of quality as fitness for purpose is interpreted to mean either meeting customer

specification or an institution meeting its own stated objectives. Theoretically the customer specifies requirements. In education, according to Harvey (1996: 206) fitness for purpose is usually based on the ability of an institution to fulfil its mission or a programme of study to fulfil its aim.

Verkleij (1999) argues that fitness of purpose approach to quality basically accepts that universities are different. Thus the approach favours diversity in the system; it separates the issue of acceptance of purposes (fitness of purpose), from the ability of an organisation to reach the stated purpose. The fitness of purpose approach challenges organisations to become the best of their kind without constantly being compared with other institutions with different missions. According to Verkleij (1999) it offers each institution, including well-established ones, the opportunity to define their own purpose and develop their own standards. Self-evaluation forms the basis of improvement processes and external reviews are essential to validate the outcomes of self-evaluation.

2.2.1.4 *Quality as value for money*

Like zero defects, quality as the value for money concept has its basis in industry. The quality as value for money approach sees quality in terms of return on investment (Harvey, 1996). It assesses quality in terms of the extent to which a product or service can meet its stated purpose. For example, if the same outcome could be achieved at a lower cost or a better outcome could be achieved at the same cost, then the customer has a quality product. Harvey (1996) maintains that the value-for-money approach places emphasis on a 'good deal' for the customer. Noruwana (1996) argues that in

relation to the quality value for money doctrine, the clients are satisfied with the products or service they are paying for.

2.2.1.5 Quality as transformation

The transformation view of quality sees quality as a process of change. In higher education this means value is added through the learning experience (Harvey, 1996). Education is an ongoing process of transformation of the participants. It leads to two notions of quality in education: enhancing and empowering the customer. The transformative approach uses standards to assess the enhancement of students both in terms of academic knowledge and a broader set of transformative skills and communication.

In sum, these approaches assume that some kind of purpose must be taken as given. Therefore, it must be accepted that quality is relative in the eyes of the beholder (Garvin, 1984) and it is relative in terms of the circumstances in which it is expressed and used. The following are key elements in approaching quality definition (Liston, 1999: 15) -:

- Identifying and satisfying client needs;
- Developing and tapping the full potential of staff; and
- Improving key processes.

2.2.2 General conception of education quality

The idea of quality in education is not new. According to Rinehart (1993:261) other names have been used to promote the idea of improving

the educational outcomes. Examples would be ‘excellence’ and ‘effective schools’. What is new is the adaptation of the industrial quality philosophy to the problems being encountered in schools and classrooms around South Africa.

Quality in education is somewhat problematic: like beauty it lies in the eye- or rather the mind- of the beholder (Goddard and Leask, 1992:3). A high-quality education system is essential to the health and future of a nation. Furthermore, the definition of quality appears to shift according to the values of different communities in society. Behind the question “what is quality” lies the fundamental issue of the purpose of education. One of the first questions about improving quality in education is quality for whom? An easy answer to the question is that, education serves too many segments of society. According to Rinehart (1993) an industry finds it easy to identify customers. Customers are those who pay for the service or product. Internal customers within an industry are those who benefit from or receive the output. However, education delivers its service not only to individuals, but also to the society.

Continuous improvement involves delighting the consumers in an education system. The idea of continuous improvement of the education system applies to all levels of the system, from the individual classroom to the state administration and from pre-school through the university.

Cheng and Tam (1997) indicate that in the management literature, the term quality has different meanings and has been variously defined by quality gurus in different years. In 1951, Feigenbaum defined quality as

value for money, while Gilmore in 1974 defined it as conformity to specifications. Crosby defined quality in 1979 as defect avoidance and again as conformity requirement. Peters and Waterman (1982) defined quality as excellence and; Juran and Gryna in 1988, defined quality as fitness for use (Cheng and Tam, 1997: 23-24). There seems to be no consensus definitions even though most of these definitions are highly correlated. Similarly, education quality is a rather vague and controversial concept in research and policy discussion. To different people, the definition may be different and so the indicators used to describe education quality may be different (Fuller, 1986; Hughes, 1988).

The literature of educational quality has developed along a distinct path. The definition offered by Gordon and Partington, quoted by Rowley (1997) characterizes the general approach to educational quality. This explains the success with which an institution provides educational environments, which enable students to effectively achieve worthwhile learning goals and appropriate academic standards (Rowley, 1997:8).

What appears to have become a generally accepted account of quality in education is that offered by Ball. Ball (1995) argues that quality in education is fitness of purpose. This view of quality is normally interpreted to mean either customer specification or an institution meeting its own stated objectives. Williams (1994) also supports this definition of viewing quality as fitness of purpose while Woodhouse (1998) argues that if quality is defined as a fitness for purpose, it is very similar to effectiveness, which refers to the relation between goals and outcomes. That is the reason why Noruwana (1996) believes that any

definition of quality in terms of customer needs is problematic because of the varied interest groups, customers and stakeholders that institutions are meant to serve. Schools will therefore do well if they align themselves with a definition of quality that takes into account their stated objectives.

Quality especially in Higher Education, has been defined and assessed according to one of the following four sets of criteria (Bergquist: 1995: 54):

- *Input criteria:* Input criteria have been the most commonly identified measure of quality for years. It refers to the nature and extent of resources available to the institution. It incorporates characteristics of incoming students, faculty credentials, size of library, physical facilities and financial reserves.
- *Output criteria:* Output criteria of quality are built on the assumption that institutions are accountable for what they produce. According to Bergquist (1995) output criteria consist of the nature and extent of institutional products, including graduating students' characteristics, alumni success, research, scholarly publications and public service.
- *Value-added criteria:* Value-added criteria of quality are based on the assumption that the difference achieved by students between the start and end of the educational process is important, not just the start (input) or the end (output). This type of criteria looks at the differences that the institution made in the growth of all members of the institution, including intellectual, moral, social, vocational and physical development.

- *Process-oriented criteria:* The fourth type of criteria focused on the process of achieving quality. Process-oriented criteria take the form of a commitment to “continuous improvement” or an abiding concern for “conformance to standards” (Crosby, 1979:15). Bergquist (1995) suggests that a commitment to a process should not only focus on the process of production but also on decision-making, planning, and problem-solving processes associated with educational matters inside the institution. This approach suggests that it is the process of education that is most important, and not the resources (input) or outcomes (output).

Each of the four approaches to quality is important when assessing the overall effectiveness of a collegiate institution. Therefore, a comprehensive and useful definition would be the one that includes all four sets of criteria since they can all contribute to an effective vision of quality and access (Bergquist, 1995).

Cheng and Tam (1997:23) argue that some may emphasize the quality of inputs to the education system, whereas others emphasize the quality of processes and outcome. Whether referring to input, process, outcome or all of these, the definition of education quality may often be associated with fitness for use, the satisfaction of the needs of strategic constituencies or conformity to strategic constituencies’ requirements and expectations. According to Tribus (1993) quality in education is what makes learning a pleasure or joy. This definition is in line with Deming’s

definition of quality. A product or service possesses quality if it helps somebody to enjoy a good and sustainable market (Holt, 1993).

Borrowing the ideas from the total quality management and system approach, Cheng (1995) defined education quality as the character of elements in the input, process and output of the education system that provides services that completely satisfy both internal and external strategic constituencies by meeting their explicit and implicit expectations. Cheng's definition includes the important characteristics of quality espoused in the management literature.

Schools, like other organizations, have to manage quality since they are in the business of developing learners who should be responsible adults, able to think and act critically in the labour market and civil society. Dzvimbo (1994) argues that learners unlike cars and other goods, have an agency that permeates what teachers, parents and school principals are trying to do in schools. In other words, schools deal with human beings who are able to derive subjective meanings from their daily interactions.

He also believes that the definition of quality have moved away from a heavy reliance on a product-function model based on inputs, outputs and processes such as school materials, facilities and teachers to an emphasis on the processes of teaching and learning and their context. Hence Winch (1996) argues that in education, there has been a shift to the consumer-based approach. In the consumer-based approach, the quality is judged according to whether it meets the needs and wants of the consumer. But the question is who is legitimately viewed as the consumers of

education? First, there are learners and, through them, parents, the state and the taxpayers can also be construed as consumers of education (Bradley, 1993; Greenwood and Gaunt, 1994).

Traditionally, quality in education has been defined in terms of standards of excellence (Nagel and Kvernbeck, 1997). It is associated not only with properties thought to be valuable, but also with pre-eminence in these properties. This sense of quality pertains to student performances and achievements.

The notion of quality cannot be limited to students' results alone, especially if the ambition is to improve quality. According to Grisay and Mahlick (1991) the notion of quality should also take into account the determinants of the results such as the provision of educators, buildings, equipments, curriculum, textbooks and the teaching-learning process. These views imply that the general concept of quality of education is composed of the following three interrelated dimensions:

- The quality of human and material resources available for teaching (inputs);
- The quality of teaching practices (process); and
- The quality of the results (outputs and outcomes).

It appears that the general concept of educational quality is complex and multidimensional. For the purpose of this study, evaluating the quality of the education system as a whole entails analysing the extent to which the products of the education provided meet the standards stipulated in the

system's educational objectives. It also entails the extent to which the knowledge, skills and values acquired are relevant to human and environmental conditions.

2.2.3 What is Quality Assurance?

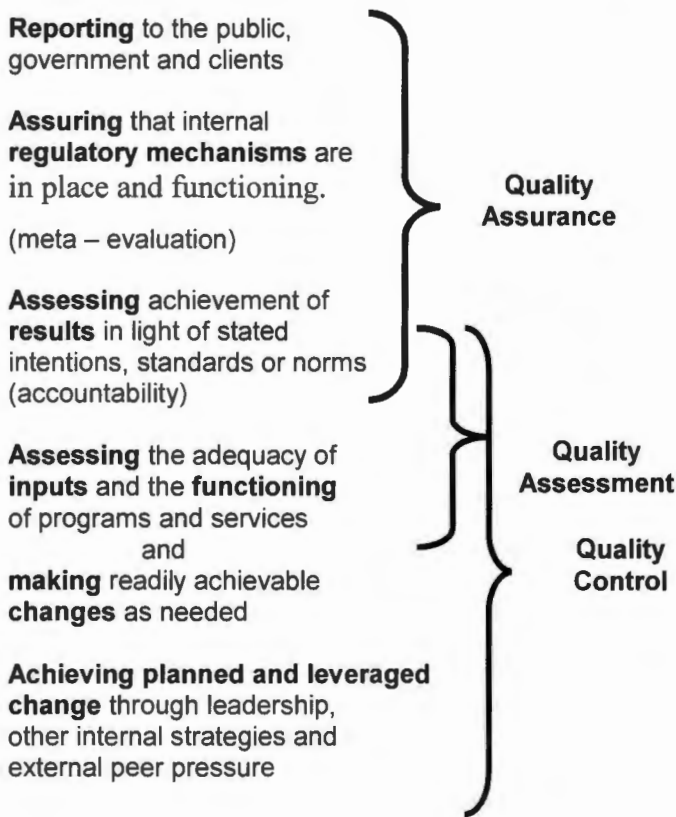
Clarification of the term quality assurance is essential at this point to guide this study. According to Murgatroyd and Morgan (1993), quality assurance is one of the three basic definitions of quality, which also include contract conformity and customer-driven quality. Quality assurance is part of quality management. It includes planned and systematic activities designed to ensure that clients are confident that organizations consistently deliver products and services of a high standard (Liston, 1999). Hence Murgatroyd and Morgan (1993) argue that quality assurance refers to the determination of standards, appropriate methods and quality requirements by an expert body, accompanied by a process of inspection or evaluation that examines the extent to which practice meets these standards. Critical to the quality assurance process is the publication of standards that look at the procedures used by an organisation to standardize its core processes, to ensure that its own output requirements and customers' expectations are consistently met.

Woodhouse (1998) sees quality assurance as policies, attitudes, actions and procedures necessary to ensure that quality of education is being maintained and enhanced. It includes checking that quality control procedures are in place, and are effectively being used. It requires actions

internal to the organisation, but may also involve actions of an external body or bodies. Woodhouse (1998) brings in the idea of internal quality assurance that is very critical for any organisation striving for quality service. The importance of having an internal quality assurance system in place is to check the quality of service the school or organisation is providing before the external body comes to evaluate.

In higher education, quality assurance examines the aims, contents, resourcing, levels and projected outcomes of modules, programmes and courses (Woodhouse, 1998; Noruwana, 1996). Kells (1992) states that the notion of quality is inherent in the concept of regulation, because the regulator, individually or collectively, judges the relative quality of the institution or programme. The major constituent sub-functions of the process of regulating higher education quality are, quality assurance, quality assessment and quality control. These partially overlapping principles that complement one another to constitute the act of regulating quality are reflected on figure 2.2.

Figure 2.1: The major elements in the regulation process



(Source: Kells, 1992:18)

The process could also be applicable to schools. Monitoring and evaluation of the performance of the educational system is crucial for ensuring that all South Africans receive a quality basic education.

According to Quality Assurance Audit phase 2 (RSA, 1998), quality assurance refers to the monitoring and evaluation of the performance of the various levels of the education system in achieving the specific goals at each level and the overall objectives of the system. An effective monitoring and evaluation system needs a system of education that manages the quality of education it offers thoroughly and continuously.

Thus quality management refers to the actions, processes and structures necessary to ensure that delivery of education is of the highest quality. Functionally, quality management is seen as the responsibility of those in operational and management roles throughout the system, whether 'the system' is considered as a school, a district, a region, a province or the nation (Department of Education, 1999). It is imperative that quality management is seen not just a strategy, but as be a new style of working, even a new style of thinking. In the words of George Bush, dedication to quality and excellence is more than good business. It is way of life, giving something back to society, offering your best to others (Jablonski, 1992).

Regulating schools in the sense of monitoring and controlling or changing them to meet the expectations is essential for maintaining and assuring quality. In this study, quality assurance is viewed as a process of assuring quality in schools through internal and external assessment mechanisms in the light of stated goals, internal and external standards.

2.3 EVOLUTION OF THE QUALITY MOVEMENT

As stated earlier, much of the literature on the quality concept has, as its root, a manufacturing and industrial context. In the 1970s and 1980s, quality theorists started giving attention to its application in service sectors such as banking, the hospitality industry and medical care (Crosby, 1979; Peters and Austin, 1985). It is important to indicate at this point that education is also a service industry. Schools exist to bring benefit to young people and to the society.

The movement of quality in education is of more recent origin. According to Sallis (1996) many of the ideas associated with quality are now well developed in education and the notions of quality are increasingly being investigated and implemented in schools. Terms such as quality, efficiency and effectiveness became part of the new slogans in the discourse of educational restructuring. In the United Kingdom the government used the language of quality to create a market-driven approach to education in which parents as consumers were expected to bear greater costs for the education of their children (Whitty, 1989). A growing number of schools in the United States of America are implementing the process, principles and tools of quality management (Horine et al., 1993; Rappaport, 1993; Schargel, 1993).

This section will concentrate on the historical overview of the quality movement.

2.3.1 The genesis of the quality movement

There are some important historical points that provide a background to the concept of quality management and demonstrate why definitions of quality vary contextually. The movement of quality has been strongly influenced by the idea of a few American and Japanese scholars and practitioners.

Among the most widely credited founding fathers are Feigenbaum, Deming, Juran, Crosby, Ishikawa, Kano and Imai. The quality movement

began in the early 1900's when a British farmer, Ronald A. Fisher, devised a series of crop growing experiment to determine cause and effect relationships (Liston, 1999). Walter A. Shewart used statistical process control to study variation in the performance of systems. Edward Deming, a statistician and a student of Shewart, helped in the second world war years to accomplish tasks such as the production of bullets. Although his efforts were not appreciated in the USA, the Japanese enhanced his ideas. After the war, interest in the use of statistical process control decreased. Deming then focused his theory of management on quality principles. It was then that the quality approach took hold in Japan with the Japanese Union of Scientists and Engineers (JUSE) using the services of Juran and Feigenbaum – consultants on quality (Rinehart, 1993; Costin, 1996; Liston, 1999).

2.3.2 The role of the Japanese in the quality movement

The Japanese involvement in the history of the quality movement is particularly interesting. Kaoru Ishikawa championed total quality control before the Second World War, and among others, created the concept of quality circles, a concept of 'let those doing the jobs tell us how we can improve' (Jablonski, 1992: xii).

Genishi Tagushi proposed failure results from what he termed non-quality and suggested that quality and reliability had to be built in at the design stage. Tagushi was one of the first people to advocate prototyping known as the Tagushi method (Liston, 1999). The concept of zero defect was developed by Shigeo Shingo, who believed that the quality process

should be mistake-proof by design and control (Imai, 1985). Imai later extended the concept of zero defect using a continuous improvement process termed *Kaizen* – a never ending search for ever higher levels of quality by identifying the causes of defects.

Morgan and Murgatroyd (1994) concluded that the Japanese-style quality control is not just assigned to the quality control experts, but it is everyone's responsibility. The culture is one of worker empowerment and long-term investment in the training and competence of front-line workers. The success of Japanese manufacturers since the 1960's can be related to the quality management philosophy.

2.3.3 The American experience in the movement of quality

There was little interest in the USA in the quality management during the first two decades after World War II. Because of being the most powerful industrial nation of the world, there was an international demand for its product. The United States received a major 'wake up' call on the need for quality in its products in the mid – 1970's. Phillip Crosby made the Americans of the 1970's and later decades aware of the need for product and service quality (Crosby, 1979; 1984; 1992). He began to expound the advantages of a quality approach to management based on the Japanese success and his 14 years of personal experience as a corporate vice president for quality (Liston, 1999). Crosby pulled together the American and Japanese quality thinking, bringing to it pragmatic realism and expounded the following five key elements necessary for quality management (Crosby. 1979: 53):

- Whatever is produced should conform to requirements rather than specification;
- Quality must be measured by the cost of not conforming to requirements;
- Quality is not a choice based on economic factors; it is essential for survival;
- Management should be satisfied with nothing less than zero defects, for which it has responsibility and which cannot be seen as a worker's problem; and
- Problems originate throughout the organisation and must be attributed to specific areas of origin by management to rectify those problems.

Thus quality assurance became the term for attempting to improve quality by developing selected quality control techniques within the framework (Liston, 1999).

2.3.4 The development of the concept of quality

The evolution of quality concept, including the development of the concept of quality from a narrowly defined set of products attributes to the nearly all-embracing modern definitions of quality. It is closely related to the different eras of the modern quality movement described in terms of the following four distinct 'quality eras' (Garvin, 1988):

- Inspection era;

- Quality control era;
- Quality assurance era; and
- Total Quality Management era.

Kanji and Asher (1993) also supported the quality eras mapped out by Garvin.

2.3.4.1 Inspection era

The introduction of formal inspection in the industrial process was the necessary consequence of mass production in the early nineteenth century. Quality management started with simple inspection-based systems where traditionally a company would employ teams of inspectors to examine, measure or test a product and compare it with a product standard. The basis of the system was that poor quality product found by the inspectors would be indicated to the management. This would then be scrapped, reworked or sold as lower quality (Kanji and Asher, 1993). Disadvantages of inspection were -:

- Inspectors often failed to find the poor quality items and the customers were left with the consequences;
- Inspection-base system seems to be costly: some-one was paid to look for bad work and someone to repair it;
- Inefficient: simply not successful; and
- Wrong headed.

2.3.4.2 *Quality Control era*

The change to a system of quality control was due to the shortcomings realised during the first or the inspection era. Under the quality control system, product testing and documentation control became the ways to ensure greater process control and reduced non-conformity. These included the Shewart cycle and analysis of variability, statistical sampling technique and statistical process control (Kanji and Asher, 1993; Costin, 1996).

2.3.4.3 *Quality Assurance era*

The quality assurance era came with a change away from product quality towards systems of quality. According to Garvin (1988), Quality Assurance includes the Total Quality Control approach initiated by Feigenbaum. That is, quality evolved from a narrow manufacturing based discipline to one with broader implication for management. However, a system of controlling what is done was set and audited to ensure that it is adequate, both for design and use. Kanji and Asher (1993) believe that the fundamental difference is that quality assurance is prevention based while quality control is inspection or faultfinding based.

2.3.4.4 *Total Quality Management (TQM) era*

The fourth stage of development represented a shift in perspective. During the first three eras, emphasis was on product quality and manufacturing, little if any attention, was paid to service industries,

service departments or the soft areas of quality such as delivery. Thus the fourth stage remedied this by applying the concepts to all parts of the business. An organization going through a total quality process would have a clear and unambiguous vision, few interdepartmental barriers, time spent on training, excellent customer relation and the realization that quality was not just a product quality but the quality of the company as a whole (Kanji and Asher, 1993).

2.4 QUALITY ASSURANCE

2.4.1 Functions and design of quality assurance

Quality assurance means the way in which substance is given to monitoring and improving quality. According to De Haan, Hummels and Claessen (1999) as different demands are made on products or service; quality assurance fulfils the functions of transparency, validation, accountability and improvement.



- **Transparency** is concerned with making clear to interested parties what products and services are offered and the way they are produced. In the case of education, this entails the way the primary process of delivery is designed. The result of making the process transparent would include a guide on how supervision is organised.
- **Validation** is concerned with whether what is offered is also what is said to be offered.
- **Accountability** can be seen as giving insight into how governmental and parental money had been spent. For example,

where the government is responsible for financing schools, it will need to establish what is done with its money and whether the money has been used effectively and efficiently to provide education. Likewise, parents also will demand to have the report of how their money was used.

- **Improvement** is a normative aspect. Whether change can be called improvement depends to a large extent on what the assessor regards as good and what objective is being aimed at.

2.4.2 The aims and purposes of quality assurance

The quality of students learning experience is the central purpose of assuring quality. According to Watermeyer (1997), one of the purposes of quality assurance is to demonstrate that the resources are used effectively to provide education of the highest standard. The researcher believes that the aim of having quality assurance system in place is to ensure that students receive quality education. That is the reason why the South African department of education is striving to create a quality environment that enhances teaching and learning in every public school. The purpose of quality assurance relates more to accountability and includes the use of performance indicators, reviews, inspection, accreditation and student assessment (Department of Education, 1998).

Yorke (1997) mentioned the following as the purposes of quality assurance:

- To facilitate continuous quality improvement through the sharing of good practice and innovation;
- To enable the funding bodies and institutions to discharge their statutory responsibilities;
- To provide timely and accessible public information on a consistent basis and, on the quality and standards of the educational provision for which each institution is responsible; and
- To ensure that any unacceptable provision is speedily addressed.

2.4.3 Principles of quality and quality assurance

Sallis (1993) suggested that Total Quality Management (TQM) involves the following two notions:

- The philosophy of continuous improvement; and
- Tools and techniques used to implement the theory.

The use of the word 'total' in TQM, suggests that every process within an organization contributes to the overall quality in the organization. Every person in the organization is an integral part of the process (Paine et al., 1992). This implies that for quality to be achieved, the total commitment and personal involvement of all members of the school organization is essential. According to Greenwood (1994) quality management has the following guiding principles:

- It is led by the management;
- It requires good customer-supplier relationships;

- It requires the recognition of customer-supplier relationships which are both internal and external to the school;
- It requires the prevention rather than detection of faults and failures at all points in the system;
- Quality is everybody's responsibility;
- It requires measurement of the costs of quality, that is prevention, appraisal and failure; and
- It requires a non-stop search for improvement.

Quality assurance is in danger of being an external imposition and thus being unwelcome. The need for assuring quality in schools cannot be underestimated. In terms of benefits to learners and the community, much has to be gained from rapid development of quality assurance methods in school education as in higher education. Freeman (1994) suggested that schools in approaching quality assurance must learn from the higher education experience. Although much of the experience is negative, he argues that the problem lies in seeing quality assurance as something that is imposed to institutions. Schools should take the initiative and develop their own approaches to quality; such internal approaches should lie alongside external performance indicators.

Freeman (1994) proposed the following principles for devising school quality assurance systems:

- *Focusing on learners and learning:* Schools have to decide who should set the quality agenda. Should it be educators, governing bodies, learners or principals? Loder (1990) strongly argued

that quality is essentially a professional matter. To him, learners and other consumers do not easily assess quality. But Freeman (1994) also supporting Sallis (1993) disagrees with this idea. To them the primary focus of any educational institution should be the needs and views of its learners. This does not mean that other stakeholders' views should be ignored. Learners are the reason why the school exists and they carry its reputation. The process of teaching is important but its quality is judged through the outcome of learning. According to Knight (1993) teaching is important only as a function of learning, and it is learning and, not teaching quality that is paramount.

- *Quality must reflect stakeholders' needs:* Stakeholders must be central to the quality process. Quality is not about the government or the education department telling schools what to do, nor about educators deciding what they wish to do. Instead quality can be best assured by collaboration (Ash, 1992). Various stakeholders in the system should work together towards the improvement of quality. The various types of stakeholders who should be involved include; accountable stakeholders (governors), the employed stakeholders (educators), and parents and learners (Ribbins and BurrIDGE, 1992).
- *Quality has to be demonstratable:* Quality assurance should be a public process, especially in a publicly funded institution. Freeman (1994) argues that if stakeholders wish to be assured of the quality of their school, then they must struggle with the problems of identifying what constitutes quality, how it is

demonstrated and how it might be measured. According to Loder (1990) quality assurance mechanisms must be explicit; institutions should be able to demonstrate their commitment to maintaining and raising the quality of their work in line with the recognized objectives. Sallis (1993) is equally firm on the necessity for the demonstration of quality.

- *Quality is about feedback:* quality systems should not be regarded as and once for all measures; rather, they are key part of creating a learning organization. Each measure of the process or output becomes an input that would be used to develop the system. Freeman (1994) believes that such an approach offers the benefits of the system to all stakeholders since each receives the feedback they need to play their part better.

Quality experts such as Deming, Juran, Crosby and Ishikawa suggested a set of managerial principles for the improving quality. These include:

- Support from leaders for the continuous improvement of quality;
- Revised strategies for the utilization and evaluation of human resources that stress training and a focus on the process rather than the people; and
- Elimination of unnecessary variation.

2.4.3.1 Role of the leader

The major factor in the successful quality programme is the senior leaders' commitment to and active pursuit of continuous quality

improvement. However, these have been difficult to achieve by most schools because of an inadequate workforce, lack of planning and policies that fell short of expectations (Freeman, 1994). Hittman (1993) argues that these quality programmes became attractive to offer short-term solutions to these problems at the expense of a long-term commitment to a holistic approach to quality improvement. It is therefore very essential that management repress the urge to apply quick fixes to problems.

According to Crosby (1989) the management initial role in the quality effort is to announce a clear, specific quality policy. There is a suggestion that management should include quality policy in the organisation's mission statement. One of Deming's 14 points for improving quality 'constancy of purpose' supports the idea. Deming also exhorts management to adopt and communicate a new philosophy that clearly asserts that defects are not acceptable. Hittman (1993) contests that leaders' commitment is evident when resources are dedicated to the quality improvement efforts. Leaders should direct quality efforts that equip the organisation with quality values in planning, goal setting, and performance review and employee communication. If any country aims at having a skilled and dedicated workforce, the concept of quality must filter up from schools, where the effort should be directed towards improving the instructional process.

2.4.3.2 Human resource utilization

Quality experts believe that it is essential for organizations to have a staff-management strategy designed to consider employees as valuable resources with a central role in quality improvement. The success of the strategy rest on the organisation's efforts to develop and realize the full potential of its staff and to maintain an environment conducive to full participation, quality leadership, personal and organizational growth. According to Hittman (1993) the foundation of the staff-management strategy are:

- *Increased training.* Intensified training for all is imperative. Deming stated that 'vigorous and ongoing education and training' is necessary if quality is to be maintained. Schargel (1993) maintains that with the training, participants become familiar with the quality philosophy and the actions, tools and techniques that help to attain a better quality product and reduce failure.
- *The elimination of numerical work standards and goals.* Unless the organisation provides improvement methods, numerical standards and goals can be dysfunctional.
- *New approaches to employee evaluation.* Experts in quality issues suggest that the staff evaluation be conducted from McGregor's Theory Y viewpoint. The theory assumes that employees have a fundamental need to work and desire achievement and responsibility. According to Hittman (1993), the approach is particularly appropriate in evaluating the

complex process of education because there are many confounding and intervening factors that might present plausible explanations for adverse outcomes.

2.4.3.3 Elimination and management of variation

Hittman (1993) argues that many sources of variation in education should not be controlled. To him, it is desirable to develop customized educational plans to meet the needs and expectations of individual learners. Reducing variation is the foundation of Deming's philosophy of continuous improvement and elimination unnecessary variation which can produce substantial improvements in learners' chances of success. The belief that needless variation in education is the source of poor quality is the basis for achieving consensus regarding which educational practices are the most effective and therefore implementing the selected practices.

2.4.4 Quality management and quality improvement

Quality issues have become a key concern of management. The phrase 'quality management' is by definition attractive to managers. However, when it comes to analysing precisely the meaning of quality management in the context of schools, many managers are deterred while others pay lip service. Woodhouse (1998) sees quality management as all aspects of the management function that determines and implements the intentions and direction of an organization.

According to Quality Assurance Audit phase 1(RSA, 1998), quality management refers to the actions, processes and structures necessary to ensure that delivery of education is of the highest quality. It is seen as the responsibility of those in management roles throughout the system, that is a school, district, province or in a country (RSA, 1998). It is important that quality is thoroughly managed and be the responsibility of senior management. The attainment of quality requires the commitment of all members of the organization.

These definitions stress the importance of those in leadership or management positions to take the leading role in the process of managing quality. Hence Hampton (1994) believes that school principals, who are sincere in their desire to adopt a quality management approach, should both invite and demand active participation and openness at all levels. Decision makers for schools who would like to lead their organization to successful improvements, should initiate quality management that utilizes the support of the critical mass stakeholders. They should use a mega, macro and micro needs assessment to establish goals and plans to achieve the quality specifications desired.

Quality improvement is another key part of quality management, which recognises that achieving best practice is a continuous journey of improvement. Liston (1999) sees it as a structured approach that involves staff throughout the organisation using performance information to identify and act on opportunity for improving products, services and management processes in order to meet or exceed clients expectations.

There are two sets of components that together make up improvement process (Goddard and Leask, 1992):

- The first set consists of aims, policies and goals. These are the statements of vision and direction where values play the dominant role. True aims provide direction and are central to the process of improvement.
- The second set has the following four components:
 - *Developmental process*, the essential component in any developmental process is whether the school provides an effective learning environment for learners, educators and all other staff.
 - *Developmental structures and resources*. Each organization must establish the management and decision-making processes that facilitate the improvement process. Organizational structures and resources that support the process should be developed. Development structures include arrangements that identify those responsible for the development process within the formal system and the infrastructure of the organization(Goddard & Leask,1992).
 - *Planning and plans*. There are factors, which need to be strengthened in the work of schools, especially the formation of strategy and action planning.
 - *Evaluation*. The processes of monitoring, review and evaluation are crucial if quality improvement is the desired aspect and end product of organizations.

Thus quality management may be described as systematic attention to quality with emphasis on the maintenance and improvement of quality. Such a management system consists of the following four phases:

- Quality assessment, whereby information regarding education process is accumulated;
- Self-evaluation, the accumulated information is analysed, interpreted and the identification of weaknesses and strong points is done;
- Quality improvement, the results of self-evaluation process are used for the improvement of the education process; and
- Continuous monitoring of quality.

2.4.4.1 Quality management system

If organizations such as schools wish to embrace quality, then they must develop a culture and climate that will facilitate the process. The school culture and ethos will guide actions and influence the attitude and opinions of the participants. The quality management system of an organisation is the set of procedures for determining and implementing the intentions of the organization as regards quality. The collective plans, activities and events are established to ensure that a product process or service will satisfy given needs. It also includes the infrastructure supporting the operational process management and improvement methodology (Liston, 1999). The International Standards Organisation (ISO) defines a quality system as the organizational structure, responsibilities, procedures and resources for implementing

quality management. Mills (1989) also includes in the quality system the quality documentation, which is used to correlate various activities that implement the quality policy of an organisation.

The quality management system defines quality environment within a business. Munro-faure et al. (1993) argues that every business is different and thus, each quality management system will be unique. Common features for developing an effective quality management system include (Munro-faure, 1993:4):

- An understanding of your business, your customer and their requirements;
- Management leadership;
- The involvement of all employees in its implementation;
- A focus on preventing errors rather than merely detecting and correcting them; and
- The ability to evolve and develops as a company.

In education, the aim of quality management practices is to produce outcomes that not only meet the needs of learners and parents but also the nationally determined standards that can compete with international standards. Key elements in quality management are strategic planning, resource allocation, coordinating delivery of services and internal monitoring and evaluation (Department of Education, 1998).

Liston (1999) argues that focus in designing a system for managing quality must be on the core business of the organization and on clients

needs. According to him quality management system is the one that demonstrates the following (Liston, 1999:52):

- A mission, goals and objectives that are clear and are communicated to all;
- Systems that are well planned and coordinated, and communicated to all;
- Shared responsibility, which has been communicated to all;
- Quality indicators, which are well defined, documented and communicated to all;
- Monitoring and measurement systems in place for verification, and which are communicated to all; and
- Methods to correct errors, which have been communicated to all.

A successful quality management system is a management system which enables the management or leadership to ensure that customer requirements are understood and met first time, every time, at a minimal cost to the business (Goddart and Leask, 1992). It embraces all areas of the organisation.

2.4.4.2 Quality and standards

At the base of developing an approach to quality management in the public sector is the attempt to develop clear standards for services. Walsh (1995) argues that the public sector will only be effective if it is required to meet explicit, preferably quantified standards. This is equally true in education. In order to design a system for managing quality,

explicit standards should be developed. Standards are becoming an issue in education, but there are uncertainties about how high standards are to be achieved. In order to understand the magnitude or scope of quality, some sort of measure or level or standard is required to enable the potential user to form an opinion on the offering.

Liston (1999) defines standards as formally documented requirements against which performance can be assessed. For example, quality standards for vocational education and training in Western Australia are statements of characteristics or criteria that the Department of Training and the State Training Board have specified. A training organisation must meet to be recognised as a Quality Endorsed Training Organisation.

According to Woodhouse (1998), standards denote a level or grade, such as an explicit level of academic attainment. He believes that a standard is usually seen as fairly concrete, and is often spelled out by means of specification. One function of standards is to serve as a means of measurement of the criteria by which quality may be judged (Loder, 1990). This implies that standards may be applied to provide criteria for evaluation purposes. Liston (1999:27) pointed out that standards might be:

- *norm-referenced*, as in relation to passing standards set previously by a group of examiners;
- *task-referenced*, as in objectives stated for observable tasks; and
- *criterion-referenced*, as when a performance is compared with stages on a scale of increasing competency.

An alternative view of standards is as best practice exemplars, rather than external inflexible yardsticks (Woodhouse, 1998). Standards can thus be expressed in different ways. Liston (1999) suggested that consideration should be given to the following number of factors when setting any level:

- their eventual use;
- the audiences;
- operational and cultural requirements; and
- the range of workplace and occupational situations.

2.4.4.3 The quality improvement process

Managing quality has become a primary concern in many organisations because of intense global competition and customers demanding higher quality products and services. For example, many organisations companies are using quality improvement process, which implies a group of processes that foster an atmosphere of participative, consensus-based decision making to ensure that meetings are productive (Jackson et al., 1995).

According to Newall and Dale (1991) there are six quality improvement process. These are:

- **Awareness:** In most cases, especially in business, it is the realisation of lower profits, market share, or other economic factors that indicate

when problems exist. This could be a problem in the organisational culture or in the product and services.

- **Education and training:** Education of and total commitment from senior management should exist. In this way a common basis of TQM could be deployed throughout the organisation.
- **Consolidation:** The consolidation of quality strategies, initiatives and policies provides a well-planned and stable base from which the improvement process could be developed.
- **Planning, identification and problem solving:** Problems existing within an organisation need to be identified and priority actions must be developed. At this stage, involvement through standing committees, discussion groups and quality improvement teams is central.
- **Implementation of quality improvement plans:** Plans created at the problem solving stage should be introduced. In order to have desired results, thorough explanation of the intended quality improvement plans should be done. It is then that implementation could take place.
- **Assessment:** Assessment is the most important stage of quality improvement process. Without constant continuous monitoring and upgrading of the quality improvement process, the programme can lose its effectiveness.

2.5 AN OVERVIEW OF QUALITY EDUCATION IN SOUTH AFRICA

2.5.1 Quality education in South African Schools

In South Africa the notion of educational quality has become part of the repertoire of academics and policy-makers. Since 1994, the country has embarked on an open and transparent process of policy-making. For example, the ANC (1994a: 99), stresses that if quality improves, repetition and drop out rates will decrease, while the ANC (1994b) identified the following two main components for achieving quality education in South Africa:

- Improving the quality of provision, and
- Introducing an education quality improvement programme.

It is important to give an overview of the situation in education prior to 1994, and also to outline the most important South African policies and legislation regulating the provision of education.

2.5.1.1 The situation prior to 1994

A brief discussion of the scenario before 1985 and what was in place for monitoring and evaluating the quality of education provided is essential. The inspectorate of the past served as policing mechanism and had very little to do with assuring that quality of education was provided.

Educators unions have heavily criticised the area of inspection. It was during 1985-1990 when it became almost impossible for inspectors and subject advisors to go into schools. Chetty et al. (1993) argue that the process of inspection - including the person conducting the inspection, the process and procedures employed, the outcome of the results of

inspection - were based on particular values and ideological assumptions and have been bitterly contested. South African Democratic Teacher Union (SADTU) joined the defiance campaign of the democratic movement. The campaign took different forms according to the racial groups. The white schools were largely not affected. Indians and coloured schools focused their dissatisfaction on the inspectorate, whereas the African schools rejected all symbols and practices of control by the Department of Education and Training (Department of education, 1999; DAS manual, 1998). The literature study has shown that the kinds of objections raised against the inspection process are not unique to South Africa (Lillis, 1992; Carron 1994; Gardiner, 1996). Lillis (1992) identified the following three major common criticisms of inspectorates in developing countries:

- They worked as a coercive police force, forcing compliance to rules, regulations and norms. Inspection processes are authoritarian, rigid, ritualistic and legalistic.
- Supervisors are underprofessionalised. They demonstrated little professional commitment; they lacked the ability to guide teachers on academic issues and may lack the financial incentives to act as competent professionals as a result they concentrated on administrative rather than facilitative tasks.
- They could not fulfill their communication and professional developments between teachers and supervisors.

Post-apartheid education legislation placed quality of education firmly on the agenda for education transformation. The White Paper on education

and Training (1995) noted that in many schools serving the majority of the population, there has been a decline in school performance and that the quality of education must be improved. The National Education Act (1996), section 4 includes among its concerns achieving redress and enhancing quality. Section 20 of the South African School Act (1996) entrusted school governing bodies with the task of improving the quality of education. The following section will give a brief outline of some of the important legislations that initiate the importance of assuring and improving quality of education in South Africa.

2.5.1.2. Policies and legislative framework

The 1996 constitution

Since 1996 the Republic of South Africa has a democratic constitution. The adoption of the new constitution Act 108 of 1996, came also with transformation of the education system guided by various policies and legislative instruments. A unitary system of education was created and managed by the National Department of Education and the nine Provincial Education Departments. The constitution requires that education be transformed and democratised in accordance with the following (RSA, 1996:3):

- Human dignity, the achievement of equality and the advancement of human rights and freedoms; and
- Non-racism and non-sexism.

The constitution recognizes that everyone has a right to basic education (RSA, 1996; SASA, 1996) therefore; the state must do all that is reasonable to ensure that everyone receives basic education and further education. The democratization of education includes the idea that all stakeholders, that is parents, educators, learners and members of the community, must participate in school activities.

The National Education Policy Act no. 27 of 1996

The National Education Policy Act, no. 27 of 1996, is pivotal in facilitating the democratic transformation of the national system of education. It aims at serving the needs and interests of all the people of South Africa and upholds the fundamental rights. The act gives the minister of education the power to determine national education policy. In determining policy the minister should take into account the competence of the provincial legislatures and the relevant provisions of any provisional law relating to education.

In terms of the National Education Policy Act (1996) subsection 3(4), the Minister shall be responsible for “national policy for planning, provision, financing, staffing, co-coordinating, management, governance, programme, monitoring, evaluation and well-being of the education system.

Section 8 of the act elaborates specifically on the responsibility of the Minister of Education with regard to monitoring and evaluation. Subsection 8(1) states that the Minister shall direct the standards of

education provision, delivery and performance throughout the Republic. It should be monitored and evaluated by the Department annually or at other specified intervals with the objective of assessing progress in complying with the provisions of the Constitution and with national education policy. Similarly, the assessment policy provides for conducting systematic evaluation at grades 3,6 and 9. The objective is to assess the effectiveness of the entire system and the extent to which the vision and goals of the system are achieved.

The South African School Act no. 84 of 1996 (SASA)

South Africa had a long history of apartheid and other forms of discrimination in education. There were different and unequal approaches to schooling and the education system was based on ethnicity, race and colour. One of the basic aims of the SASA was to change the inequalities in education. This implies that the South African Schools Act, no. 84 of 1996, replaced the Education Act of the apartheid government. SASA asserts that all learners have the right to access both basic and quality education without any discrimination. It further requires that the quality of education received by all learners must be improved. This implies that there must be a better provision of facilities, better-trained educators, better methods of teaching and learning and improved school conditions (SASA, 1996). The South African School Act has thus paved the way for a single, non-racial school system.

The South African Qualifications Authority Act, 1995

The South African Qualification Authority Act provides for the development and implementation of a National Qualification Framework (NQF) and the establishment of the South African Qualifications Authority (SAQA). The NQF establishes the integrated national framework for learning achievements. The main aim of the NQF is to enhance access and mobility as well as quality in education and training.

The specific objectives of the NQF are:

- To create an integrated national framework with common standards for learning achievements;
- To facilitate access to, and mobility and progression within education, training and career paths;
- To enhance the quality of education and training;
- To accelerate the redress of the past unfair discrimination in education, training and employment opportunities; and
- Contribute to the full personal development of each learner and the social and economic development of the nation as a whole.

What is imperative in all the policies discussed is that they continue to display the elusiveness of quality and quality achievement. There is an indication of the urgency of making schools effective sites of learning. Surely, effective implementation of these policies to the fullest could help the South African education to be of a competitive quality. In line

with the mentioned legal provision, whole school monitoring and evaluation has been introduced as an integral part of quality assurance.

2.5.2 Quality assurance in South Africa

In the first five years of the democratic South Africa, the government has concentrated heavily on formulating and putting the new provincial administrative systems into place. The new system is beginning to stabilise and what is becoming key now is the question of quality. As South Africa moves towards the establishment of a Directorate for Quality Assurance, the meaning of quality in education and terms like effective, efficient and standards, takes on a more philosophical hue. Questions such as “Quality for what? Quality for whom?” need to be considered. The meaning of these questions according to Angus (1992:379) should be constructed out of the interplay amongst ideological forces in the wider society. In this sense the attributes of these terms and their consequent indicators, become a function of political, administrative and public conceptions as well as research and educational factors (Hofstee, 1992:24-28; Lawton, 1994:2-4).

The context of the South African schooling displays the elusiveness of quality and quality achievement, and the urgency to make schools effective sites of learning. As mentioned earlier, the National Education Policy Act (1996) gives the Minister Of Education power to determine the national education policy, norms and standards for the education system. Thus, the Minister of Education has established the Directorate for Quality Assurance. In order to fulfill its legislative and operational

obligations, the Chief Directorate: Quality Assurance (CD: QA) developed a broad framework that addresses national, provincial, regional and school-level needs. The framework necessitates an audit of quality assurance activities including evaluation, routine monitoring and review activities.

As part of the process the CD: QA commissioned Quality Assurance Audit Phase 1 early in 1998. The audit investigated quality assurance and related matters in the nine provincial departments of education. One of the main findings of Quality Assurance Audit Phase 1 was that the Professional Support Services (PSS) - that form a critical layer to quality improvements at schools- are dysfunctional in provincial departments. It was evident that the department of Education should develop clear policy guidelines with detailed roles and functions of the PSS, as part of assuring quality and the roles it should be playing in improving educational quality.

Quality Assurance Audit Phase 2 of 1998 attempted to deepen the understanding gained during Phase 1, and to suggest structures and mechanisms for effective monitoring, evaluation and quality assurance. The fundamental starting point is that effective supervision and inspection is related to improving the quality and efficiency of basic education.

The CD: QA has developed two discussion documents on quality assurance (Mgijima, 2000):

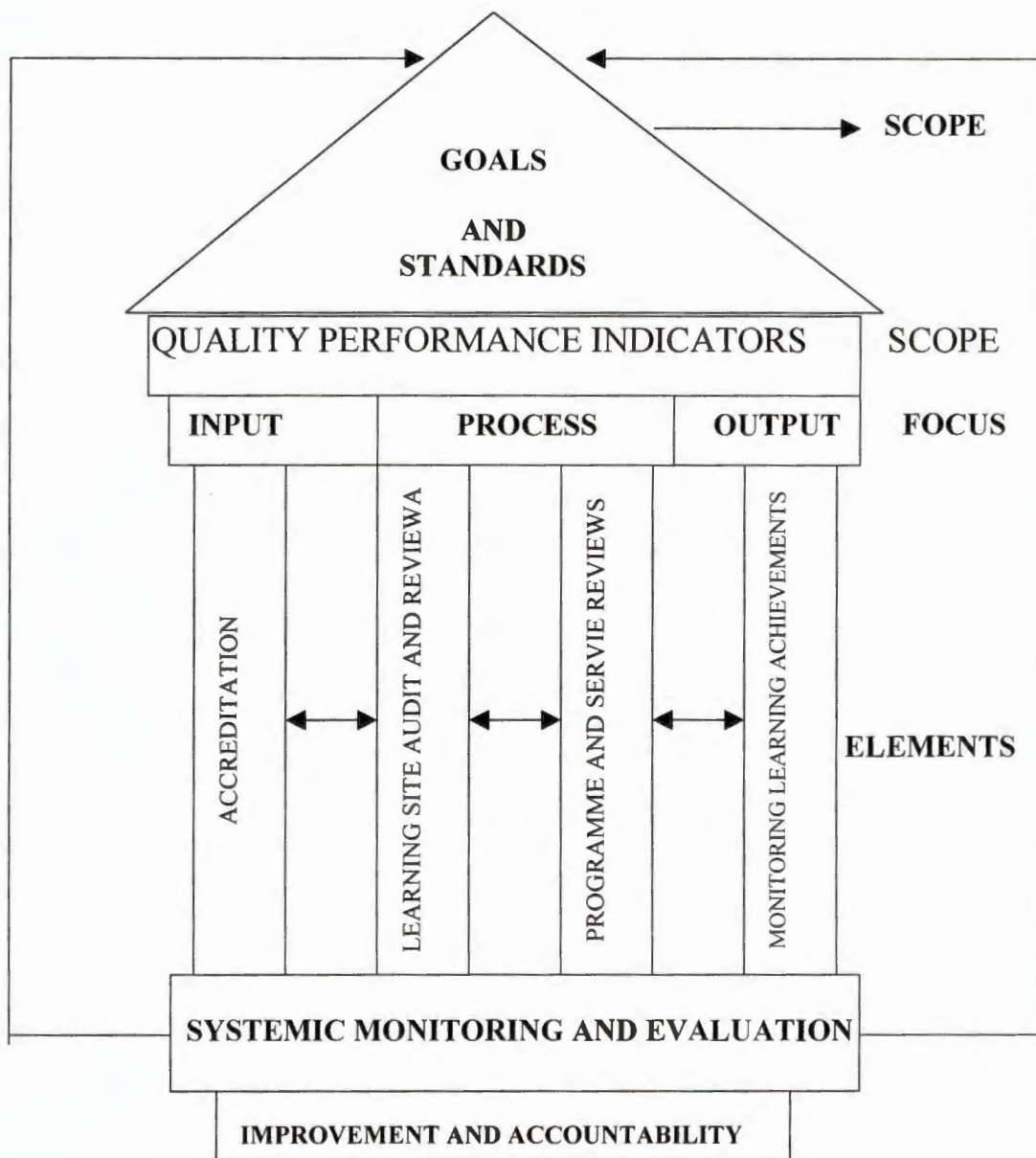
- A Quality Assurance Framework for General, Adult and further education and training in South Africa: Towards a National Policy, and
- A Policy Framework for Quality Assurance in the Education and Training System in South Africa.

The two documents recognize the need for continual quality improvement, to assure that quality permeates all aspect of the South African education provision. They also emphasize the vital role of quality Assurance in developing a more cost-effective and efficient education system.

2.5.3 Important factors in the quality assurance system

The primary responsibility of the department of education in South Africa is to make every public school a quality environment that enhances teaching and learning. That is why the structures and mechanisms for effective monitoring, evaluation and quality assurance for the system should be in place. Figure 2.3 represents the quality assurance framework adapted for South African school. In this regard quality assurance represents the planned and systematic actions necessary to provide adequate confidence that the education provided will meet the needs of learners and parents and also the standards set.

FIGURE 2.2: QUALITY ASSURANCE FRAMEWORK



Adapted from: DEPARTMENT OF EDUCATION, 1998.

In the South African educational context, quality assurance focuses on monitoring and evaluating learner achievement, quality audits and reviews, programme and service reviews, and accreditation of providers, learners and educators as assessors.

Factors important in building and maintaining an effective quality assurance system in all levels are (Department of Education, 1998: 10):

- A clear vision of needs. This means that schools should have a clear understanding of what learners are to learn. In the case of a district, province and nation there should be a clear understanding of the kind of support schools need for their effective delivery of appropriate programme;
- A well-articulated plan for implementing actions to address the identified needs;
- A process for ensuring that all stakeholders understand and are committed to the directions proposed;
- Identification of the resources needed, including an overview of the skills and knowledge required for implementing the plan; and the provision of opportunities to engage in professional development;
- An annual review and evaluation of progress made in addressing the needs identified and determining the next process; and
- Quality assurance functions must have national stakeholders' representation at decision-making level which representation shall ensure public accountability and transparency.

2.5.3.1 Monitoring and evaluating learner achievement

The Policy Framework for Quality Assurance in South Africa states that, as part of quality assurance process, learner achievement will be assessed with the following aims (DoE; 1998:27):

- To measure what is actually being learned by learners;
- To measure by collecting information about learner attainment, the effectiveness of the whole system;
- To pinpoint strengths and weaknesses; and
- To make learning sites accountable.

The emphasis would be on systemic evaluation, which would take place on a periodic basis for each phase that is in key transitional grades. This would take place in grades 3, 6, 9 and 12. All assessment instruments for Systemic Evaluation will be developed nationally in collaboration with all provinces. The evaluation would be carried out every two to three years, once the new curriculum is in place in each grade.

2.5.3.2 School audits and review

School audits and review processes are regarded as cornerstones of quality assurance system, because one is the outgrowth of the other. In the past, especially in most education systems based on the British model, school audits and review occurred in the form of school

inspection (DoE, 1998). This was done for the purpose of checking on the use of public funds, examination of pupils and educators and ensuring compliance with various regulations. School audits in South African context denotes a paradigm shift to provide support for further development of learning sites as well as service to provide an account of their current status.

According to the Quality Assurance policy framework, the audit and review is about determining where the school is, its strengths and weaknesses and where the starting point should be in the continual search for quality (DoE, 1998). This warrants an in-depth review of the learning site that involves observing educators in the classrooms, talking with school administrators and managers, educators, learners and parents; examining school policies and reviewing school records. The review looks not only on those aspects of schooling amenable to the application of quantitative indicators such as examination results, costs, and repetition rate, but also pays attention to the qualitative aspects of education delivery processes. The key activities revolve around professional consideration of evidence of all kinds that relate to:

- The quality of curriculum, teaching and learning process;
- Pupil progress and attainment;
- Management of staff and resources;
- The relationship of staff, pupils and parents; and
- Professional support and development opportunities.

2.5.3.3 *Accreditation*

According to Greenwood and Gaunt (1994:125) the search for quality is a never-ending process, not something that is done once and then forgotten about. Accreditation is a cyclic process that needs to be repeated at regular intervals. It is not a one-off event. It is done to ensure compliance with pre-determined standards as one way of assuring that learning site can deliver a quality programme. The value judgements that are to be made aimed at determining whether the institution has set and met appropriate objectives. This implies that accreditation focuses on two concerns, educational quality and institutional integrity. Educational quality encouraged by looking at conditions that are believed to be necessary and desirable to produce educational quality-input, resource and process, looking at evidence that the institution indeed achieved educational quality (Young, 1983:25).

2.5.4 Whole school evaluation and quality assurance

Whole school evaluation is regarded as a cornerstone of the quality assurance system. For several years South Africa did not have any national system of evaluating the performance of schools. The national policy on Whole School Evaluation was thus designed to ensure that school evaluation is carried out according to the agreed national model.



2.5.4.1 The National Policy on Whole School Evaluation

By the provisions National Education Policy Act no. 27 of 1996, the Minister of Education is mandated to see to it that the standards of education provision, delivery and performance in the system is monitored and evaluated annually or at specified intervals. The objective for the monitoring and evaluation is to assess progress in complying with the provisions of the Constitution and with the national education policy. Therefore, a new model was developed in a policy that is forward looking, comprehensive and school friendly (Fualkner, 2000), known as the Whole School Evaluation policy (WSE). The strength of this policy is that it incorporated from the outset school self-evaluation as an integral feature of the school improvement and accountability process. The onus is on the individual school to continue on its improvement path assisted by an objective, external report from the evaluated team and the support of the district quality assurance support teams.

- Aims and principles of WSE

What then would be the purpose of the policy implementation-taking place? Its aims include (WSE Policy, 2001; Faulkner, 2000):

- To establish a system for monitoring and evaluating the quality of school education on a continuous and permanent basis;

- To provide an information base for policy interventions to improve performance standards in terms of national goals; and
- To develop methods and indicators for long term monitoring and evaluation by the school, district and supervisory teams to increase levels of accountability.

▪ Key principles of evaluation

The key principles that will guide the implementation of the policy are:

- Quality improvement and control of standards;
- All evaluation activities must be characterised by openness and collaboration and evaluation criteria must be made public;
- To determine whether schools fulfil their responsibilities to enable learners to meet or exceed their educational expectations;
- Evaluations must be standardized and consistent; and
- All members of a school take responsibility for the quality of their own performance, including learners.

▪ The evaluation process

The evaluation process includes the following:

- Pre-evaluation visits by the team leader for the specific school;
 - School self-evaluation review documents provided to the team leader;
 - Detailed evidence collation and review of observed school practice during the one week evaluation visit; and
 - Post evaluation reporting, oral and written.
- Areas for evaluation

The areas for evaluation fall within the following nine (9) sections:

- Basic functionality of the school;
- Leadership, management and communication;
- Governance and relationships;
- Quality of teaching and educator development;
- Curriculum provision and resources;
- Learners achievement;
- School safety, security and discipline;
- School infrastructure; and
- Parents and community.

Schools' performance in the areas for evaluation will be rated using a five point scale which has detailed criteria for the judgement made. The range are: 5 = outstanding; 4 = good; 3 = acceptable; 2 = needs improvement and 1 = needs urgent support.

- The use of indicators

According to the policy on WSE (DoE: 2001) evaluation will be based on indicators covering inputs, processes and outputs.

- INPUTS - The input indicators include the main characteristics of each grade of learners, the school's infrastructure, funding and professional and support staff.
 - The main characteristics of each cohort learners on arrival to school is evaluated on the following aspects; socio-economic background, attainment at entry, range of languages and numbers by age and gender per school and class.
 - Physical resources include classrooms, common purpose rooms and areas, external premises and teaching aids, materials and equipment.
 - Professional and support staff includes number by gender, qualifications and experience and educator development and capacity building.
 - Funding by ministry, province, learners and other sources.

- **PROCESS** – process indicators show how well the schools seek to achieve its goals. These include the effectiveness with which schools try to ensure effective governance, leadership and management, safety and security measures, and quality of teaching. The following are questions that reflect on the process as an indicator for evaluation:

- What the school does to ensure that it functions smoothly;
- How leadership and management of the school are directed to achieve the school's goals;
- How the school ensures quality teaching, curriculum planning, and effective assessment of what learners are learning;
- The school's success in encouraging learners to carry out conscientiously and effectively any responsibilities they are given, including attendance and punctuality;
- What the school does to ensure security and safety;
- Language of instruction;
- What support and guidance the school provides to help learners develop intellectually and personally;
- What the school does to appraise staff and to help them develop their skills and effectiveness;
- How the school seeks to encourage parental and community involvement;

- How the school manages its resources;
 - What the school does to ensure the use and development of information and communication, technology for both curriculum and management purposes; and
 - Guidance and counselling.
- **OUTPUTS** – Outputs indicators include achievements in academic standards, standards of behaviour and rates of punctuality and attendance.
 - Learners' standards of attainment at the end of each stage of their education;
 - What progress learners have made while at school;
 - The quality of learners response to teaching and to the school's general provision;
 - Learners' standards of behaviour;
 - The orderliness of the school;
 - The condition of school accommodation and furnishings and the effectiveness with which these are used;
 - The commitment to the school and its learners of parents and the community;
 - The efficiency with which the school uses its resources/funding; and
 - The provision for safety and security.

▪ Evaluation Process

According to policy on WSE (DoE, 2000), the whole-school evaluation cycle includes pre-evaluation surveys/visits, school self-evaluation, detailed on-site evaluation, post-evaluation reporting and post-evaluation support. Each supervisory team will have a team leader who has a responsibility to build a brief profile about the general level of functionality of the evaluation team. The team leader also has overall responsibility for the evaluation responsibility for the evaluation process and the conduct of the supervisors. Supervisory teams will comprise accredited supervisors capable of evaluating the nine areas for evaluation. Members should have the expertise to evaluate at least one subject\learning area and have an awareness of the key elements of good provision for Learner with Special Education Needs (LSEN).

With regard to the team and duration of evaluation, the number of supervisors will normally be within the range of four or six, depending on the size of the school and the resources available. Evaluations will normally be conducted between three and four days of the week, depending on the size of school.

Finally, an evaluation will result in a published, written report and contain recommendations designed to help the school continue to improve. A school will be helped by District Support Services to formulate and implement an improvement plan based on the

recommendations in the report and provide the school with support as it seeks to implement the plan. The policy on WSE (2002:12) outline categorically that the District Support Team should comprise experts in:

- General school management;
- Leadership;
- Governance;
- Curriculum;
- Staff development; and
- Financial planning.

To sum, Faulkner (2000) argues that in this way, South Africa is moving from the old paradigm of inspection, which simply told a school where it was based on the judgement about inputs, to the new paradigm of evaluation in joint collaboration, making judgements about outcomes and assisting the school's own development process. Within the paradigm shift from inspection to quality assurance, whole school evaluation refers to all the services whose main function is to maintain and control standards, evaluate performance, advise and support schools in their continual efforts to improve their effectiveness. The focus is on internal monitoring and external evaluation that is, self-evaluation by the school, the mentoring and support provided by the district-based support teams and the external evaluation by the supervisory units. The intention of the approach is to provide support and development programme for the improvement of performance. It also enables schools to provide an

account of their current performance and to show the extent to which they satisfy the expectations of the government and the public.

The agreed set of criteria will be used and evaluation will be based on performance indicators covering inputs, processes and output. Input indicators include the characteristics of each cohort of learners, infrastructure, funding and professional and support staff. Processes include the effectiveness with which schools ensure effective governance, leadership and management, safety and security measures and quality of teaching. Finally, output shows the school's achievement in terms of the academic standards and learners' standards of behaviour and attainment, rates of punctuality and attendance.

At the end of every evaluation there will be a written published report on the school's performance. Production of a report is obligatory, and it is expected that the district support teams will thereafter work together with the school to improve the areas identified. Within this context, this study provides a programme for Quality Assurance for policy implementation at district and school level.

As mentioned earlier, the issues of quality in education especially on defining and assessing educational quality, concentrates on Post-secondary education. It is important to outline an overview of quality Assurance in the South African higher education.

2.5.5 Quality Assurance in South African Higher Education

The call for the evaluation of the quality of higher education is a worldwide phenomenon. Worldwide, higher education is undergoing major changes in its organisation. In South Africa higher education quality assurance arrangements differ significantly among three types of institutions in the sector. Technikons have been subjected to the accreditation (quality assurance) of programmes by the Certification Council for Technikons (SERTEC) while universities have been assured through professional accreditation and peer-based system of external examination (van der Westhuizen et al., 1999). Technikons are subjected to policies and practices concerning quality laid down by SERTEC, established in 1986. SERTEC developed from a certification body into an accreditation one with a quality monitoring function. Later it shifted the emphasis away from legally imposed certification towards a more voluntary participation in the quality assurance process and acceptance by technikons of quality monitoring.

**NWU
LIBRARY**

Kistan (1999) argues that the concept of quality assurance and control emerged as a primary instrument for evaluating performance and accountability in higher education system. South Africa is the latest candidate for a nationally imported system of quality assurance in the wake of several policy and legal initiatives to transform higher education after the demise of apartheid. For example, the South African Higher Education Act of 1997 and the Education White Paper 3 (higher education) are part of the government's commitment to transform higher

education. This section briefly discusses the origin and nature of quality assurance in South Africa.

2.5.5.1 Conceptualisation of quality: a South African perspective

Although quality has been the touchstone in education all over the world, quality assurance is at an early stage of discussion, legitimisation and implementation in South Africa (Kistan, 1999). There is a general agreement that quality and assurance of quality are important for the maintenance and enhancement of education. While quality is a widely used concept in industry where clearly definable products exist, educational researchers believe that the concept of quality is more difficult to define in higher education.

The approach to what is intended by the word 'quality' in the South African higher education context is based on the report of the Quality Promotion Unit (QPU) established in 1995, when it investigated a quality assurance system for higher education. The QPU argued that there should rather be a notion of quality instead of the definition of quality. The unit recommended that the notion of quality should be characterised by following four considerations (Kistan, 1999; 1997):

- The concept of quality is always influenced by political and economic developments;
- The notion of quality used in audits should be adaptable to suit the circumstances of each and every institution;

- The notion of quality used in audits would typically consist of a combination in various degrees of emphasis of the different concepts; and
- This openness and flexibility in approach to the definition of quality does not, however, imply that there is uncertainty or lack of clarity in the approach.

2.6 SUMMARY

This chapter has focused on the nature and scope of quality management as revealed by Total Quality Management (TQM) movement research. Attention was particularly paid to the definition of concepts, quality, quality education and quality assurance. The literature study conducted revealed that the term 'quality' is difficult to define especially in education. Hence the idea 'you know it when you see it' kind of definition. The following were cited as broad categories of definition of quality by many researchers:

- Quality as exceptional;
- Quality as perfection or zero defect;
- Quality as fitness for purpose;
- Quality as value for money; and
- Quality as transformation.

The literature conducted also revealed that Quality Assurance (QA) is part of quality management. The following summarises findings:

- QA includes planned and systematic activities designed to ensure that the clients are confident that organisation delivers products and services of high standard; and
- QA is seen as policies, attitude, actions and procedures necessary to ensure that quality of education is maintained and enhanced.

It was evident from literature that the quality movement originated in Japanese industries and expanded to other parts of the world and even in education. Finally, initiatives of the Department of Education in South Africa to provide and assure quality of education in schools were also investigated. Policies and legislative framework, which forms the basis for assurance of quality, also indicated the importance of managing quality in education.

3. QUALITY THEORISTS AND MODELS OF MANAGEMENT FOR QUALITY ASSURANCE

3.1 INTRODUCTION

The idea of quality in education is not new. What is new is the adaptation of the industrial quality philosophy to the problems encountered in schools and classrooms (Leddick, 1993; Rinehart, 1993; Steyn, 1996). Other names have been used to promote the idea of improving the educational experience and educational outcomes. According to Tribus (1993), the success of quality management in industry has prompted many people to ask ‘why not in education?’ This question implies that there is an increasing interest in looking into the commercial models, particularly from Japanese industry to see whether there are lessons that could be learnt. Lessons from industry have often been used as a stick with which to beat education (Sallis, 1993).

The movement of quality in education is of more recent origin, and the countries that showed an interest include the USA, Australia, the UK, Canada and very recently South Africa. Leddick (1993) contests that, like business, American education had to change in order to meet new demands and improvements.

Brief attention will be paid to the contributions made by the quality movement theorists on the principles of quality management and quality improvements. A portion of this research will also focus on the model of quality management.

3.2 QUALITY THEORISTS

3.2.1 William Edward Deming

Deming was regarded as the father of the quality movement and has been elevated to god-like status by current proponents of TQM, who worship his management philosophy to the exclusion of any other management doctrines (Liston, 1999). Deming was born in 1900 in Iowa in the United States of America and passed away in 1993. His legacy will be the writings and videos he left behind which helped spark quality improvement efforts around the world.

Deming conducted a thriving worldwide consulting practice for more than forty years. His clients included manufacturing companies, telephone companies, railways, carriers of motor, freight, consumer researchers, census methodologies, hospitals, legal firms, government agencies and research organisations in universities and in industry (Vargas et al. 1996). Deming used statistical analysis to formulate quality-control methods in industrial production. His methods included advocating and enlisting the cooperation of the workers in the achievement of high-quality results during the manufacturing process. These methods exempted methods of relying on inspection at the end of the process to find flaws. His theories were credited with the success of Japan's post World War II economic boom. Jablonski (1992) regarded Deming as a prominent consultant, teacher and author on the subject of quality. After sharing his expertise in statistical quality control to help the U.S. war effort during World War II, the war department sent

Deming to Japan in 1946 to help that nation recover from its wartime losses. Although his disciples continue to multiply after his death, his theory initially was not geared towards education sector.

Researchers in education have studied his theory and applied the theory and adapted it to the schooling situation. Deming's (1986) approach to TQM emphasises the creation of a climate within the organisation, which makes work fun. According to O'Neil and Onion (1994) the assumption is that human beings want to do their jobs well when they work in a quality-driven, customer-oriented environment with full participation and mutual trust and respect among all employees. Deming's major contributions to the quality movement included:

- Fourteen management principles;
- A system of profound knowledge; and
- Seven sins of management.

3.2.1.1 Deming's fourteen management principles

Deming's philosophy of organisations has been derived from the world of business, a world of profits, products and customers. Deming maintains that, for business and industry to be successful and improve, there is a need for a philosophy of management (Harvard, 1998). These principles were formulated to be used in business and industry and are also applicable in education. Many researchers have shown the successful implementation of these fourteen points in the education sector (Bonstingl, 1992; Paine, 1992;

Holt, 1993, Rinehart, 1993; Rivers, 1993; Sallis, 1993). Deming's 14 management principles are as follows:

- Create constancy of purpose for improvement of product and service

Holt (1993) interpreted this principle as establishing the moral purpose of the school. The school should have short and long-term goals based on their vision and commitment to continuous improvement. The constant purpose of the school must be to assist learners in the learning process.

The aim of this principle is for the organisation to become competitive and to stay in business and provide jobs. According to Deming (1986) it is necessary for top management to demonstrate unshakeable commitment and productivity.

- Adopt a new philosophy

According to Steyn (1996) organisations are unable to compete if they continue accepting values of delay and mistakes. They should make a shift to new ways of working. Leaders should adopt and support a quality philosophy designed for continuous improvement (Bonstingl: 1992; Sallis: 1993). Likewise educators must adopt and fully support the new philosophy of Quality Assurance through greater empowerment of educator-learner teams.

- Cease dependency on mass inspection to improve quality

Hayward (1998) argues that since inspection occurs after the work has been done, quality should rather be built on the basis of what is being done. Educators should have the resources to evaluate their work and take appropriate steps to ensure quality. Assessment of learners must be continuous, authentic diagnostic-prescriptive, and relative to life-long knowledge and capabilities. Learning is best shown by students' performance application of learned information and skills to real life challenges.



- End price tag business

Deming believed that the practice of awarding business based on price alone should come to an end. Quality and service must precede the price issue. Price has no meaning without a measure of the quality being purchased (Greenwood and Gaunt, 1994). Schools that would survive and prosper this era of parental choice will be the ones that can produce and maintain quality educational programme. The relationship that a school has with suppliers should be cooperative in tone. It is important to develop long term relationships built on mutual trust respect and loyalty (Rivers: 1993). Everyone's role as a supplier and customer must be recognised and honoured.

- Improve constantly and forever the system of production and service

Everyone in the school should continually strive to improve the quality of teaching and learning and create a culture and climate in which all stakeholders in a school are empowered to continuously evaluate and improve their productivity and service.

- Institute training

Provide an ongoing training programme that addresses the needs of all employees, that is, work based training techniques. The staff development is necessary to ensure that educators understand the importance of continuous quality improvement. In schools, both the educators and learners should know how to learn, plan, and evaluate their work.

- Institute leadership

The aim of leadership should be to help people and machines to do a better job (Rivers, 1993 & Paine et al., 1992). This implies that quality leadership requires a commitment and response to all stakeholders. Leaders must possess profound knowledge and be profound thinkers. They must remove barriers to pride and productivity. Payne et al. (1992) argue that the task of a manager is to lead, in a classroom then, the educator's role is one of leadership.

- Drive out fear

Drive out fear so that everyone works effectively for the organisation. Fear is counter-productive, it creates distrust, suspicion and apathy. It is important to replace fear with love. Rivers (1993) believes that fear should be replaced by love, trust, respect, caring, security, confidence and productivity. Educators and learners need to feel secure, thus leaders must always endeavour to promote mutual respect and trust which would ultimately create sense of security for all.

- Break down barriers

Bonstingl (1992) suggests that cross-departmental and multi-level teams should be created to break down role and status barriers to productivity. Teamwork is essential to ensure that everyone has an opportunity to contribute and compliment weaknesses with strengths. For quality work in a school, teams should be created and be taught teamwork dynamics.

- Eliminate slogans, exhortations and targets for the workforces

System-developed slogans should be replaced by slogans created by teams. All stakeholders in schools should collectively arrive at slogans and exhortations that would improve their work together. It is important to realise that all staff members are working towards the

overall goals of the school. When educational goals are not met, the system should be fixed and not the people.

- Eliminate numerical quotas

Rivers (1993) stresses that management by objective, management by numbers and numerical goals should be eliminated and focus should be on educational encounters. She argues that standardised tests and final grades do not necessarily reflect a learner's progress. Schools should emphasise life-long learning and authentic production.

- Remove barriers to pride of workmanship

According to this principle, Deming was discouraging evaluation systems and merit ratings. Sallis (1993) states that Deming has taken a strong position against appraisal systems, which he believes put staff in competition with each other and act against teamwork. But schools, particularly leaders, must dedicate themselves to removing the systematic causes of educators and learners' failure through close collaborative efforts. Articulate a philosophy, which supports the belief that people prefer to work, and desire to experience the pride that accompanies quality workmanship (Rivers, 1993; Bonstingl, 1992).

- Institute a vigorous programme of education and retraining

A developmental programme that would enable employees to continuously upgrade their knowledge, skills and performance, should be developed. Schools should be committed to long-term investment in educators' personal and professional growth. When site-based staff development opportunities are provided, the staff would be well informed about the latest developments.

- Take action to accomplish the transformation

Create an organisational leadership team to spearhead the quality initiatives. Everybody should support the programme at all levels and across all aspects of the organisation. This means that all staff members in a school should have a contribution towards the success of the quality initiative.

Although Deming's fourteen management principles have been criticised, they assisted have and can help organisations to become quality institutions. His philosophy has been widely and successfully adopted and implemented by many organisations including schools. Deming also recognised that there are some factors that can derail the process, which he described as the seven deadly sins of management to be outlined in the next section.

3.2.1.2 *Deming's seven sins of management*

Although Deming's seven deadly sins of management were meant for the business and industrial setting, they are also applicable in the area of education. These seven barriers to quality management as applied to education include (Sallis, 1993; Walton, 1989):

- Lack of constancy of purpose;
- Short-term thinking;
- Evaluation of performance, merit rating and annual review. What is required is non-threatening, significant, constructive performance review which encourages professional development, innovation and quality;
- Staff mobility;
- Running an organisation on visible figures alone;
- Excessive medical costs; and
- Litigation.

3.2.1.3 *Systems of profound knowledge*

Deming commented as follows on the importance of profound knowledge: "Hard work and best efforts put forth without guidance or profound knowledge may well be at the root of our ruination. There is no substitute for profound knowledge" (Latzko & Saunder, 1995). Deming's concept of profound knowledge is based on four dimensions (Latzko & Saunder, 1995; Rinehart, 1993; Sallis, 1993).

Firstly, appreciation for the system must be evident. According to Latzko & Saunder (1995), Deming sees a system as a series of activities within an organisation that work together to accomplish the aim of the organisation. There are different departments within a school that work independently to achieve the main objectives of the school and the system of education.

Secondly, profound knowledge implies an understanding of the theory of variation. Quality failure in any organisation can be caused by variation from the norm (Sallis 1993). Deming made a distinction between common and special causes of failure. Common causes of poor quality in education according to Sallis (1993) include poor curriculum design, lack of necessary resources and insufficient staff development. In order to remove the causes of failure, the management of the organisation needs to reorganise, improve or specify the systems and procedures (Hayward, 1998). With regard to special causes of failure, they often occur when procedures and rules are not adhered to. The reason for this failure could be attributed to teachers who lack skills, knowledge and a positive attitude in their work. When a special cause of failure has been identified, it could be corrected without a new policy or a need for redesigning the system. Sallis (1993) argues that individuals put faults and problems to failures, whereas the difficulties result from policies and systems. Majority of problems are the results of poor management or inadequate management systems (Sallis, 1993).

The third dimension is the theory of knowledge. According to Rinehart (1993) prediction is the primary function of management. For a continued operation, successful prediction of future outcome is required. There is a

need for a theory of specific future behaviour (Latzko & Saunder, 1995). This implies that successful management predicts the future of their organisation, on the basis of a sound theory.

The fourth dimension is psychology. It is important to understand people's behaviour and what makes them work optimally. Deming maintains that there is an over-emphasis of extrinsic motivation as against intrinsic motivation in encouraging staff to give their best (Latzko & Saunder, 1995).

Hayward, (1998) concluded that adapting the fourteen principles of management and avoiding the problems of the seven deadly sins could not be done without criticism. There are major restraints imposed on schools by the society and also the Department of Education. There is a fear of job security among educators in South Africa, about the introduction of developmental appraisal system, which most schools are reluctant to implement. Nevertheless, if schools are to implement Deming's principles to achieve constancy, schools need to spend more time thinking about the future, this involves policy development and implementation. The school management should change in order to please their constituencies so that they stay in existence. Another important aspect stressed by Deming's principles is that stable schools will be those that search for the needs and expectations of the future clients.

3.2.2 Joseph Juran

According to Green (1994), Juran and Deming have been described as duelling pioneers in the quality movement. Juran was born in 1904 in Minnesota, USA. Like Deming, Juran came under the influence of Shewhart. He was best known with the phrase 'fitness for purpose or use'. To him, a product could meet its specification but not be fit for use (Oakland, 1989). The specification itself may be faulty or not achieve what the customer wants. Juran was recognised as the most intellectually profound of the quality management theorists. He identified the following three steps of quality improvement (West-Burnham, 1992):

- Step 1: structural annual improvement plans;
- Step 2: training for the whole organisation; and
- Step 3: quality directed leadership.

3.2.2.1 *Strategic quality management*

Dr. J.M. Juran, whose impact on quality movement in Japan was second only to Deming's, developed a useful framework for what he referred to as 'a universal thought process- a universal way of thinking about quality, which fits all levels, all product lines' (Costin, 1996). This approach he called Strategic Quality Management (SQM) was developed to assist managers in effective quality planning. The underlying concept of the three-part process is that managing quality consists of quality planning, quality control and quality improvement. According to SQM approach the staff at

different levels in an organisation make their unique contributions to quality improvements.

In the first level, senior management takes a strategic view of the organisation (Sallis, 1993). For example, in educational institutions the senior management formulates vision, mission, sets priorities and policies. In the second level, middle managers such as heads of department would take an operational view of management. They would be responsible for the quality assurance, which involves coordinating information from subject teams and also checking the effectiveness of the programme. The results of monitoring would then be communicated to both subject teams and senior management.

The third level is quality control and improvement. Quality control is the responsibility of educators in the subject teams. These educators design the courses in such a way that the needs of their learners are met (Juran, 1989). Thus, a project-by-project team solving approach to quality improvement affects quality. The next section gives Juran's ten steps to quality improvement.

3.2.2.2 Juran's ten steps to quality improvement

Juran also emphasised the following ten steps for total quality and quality improvement (West-Burnham, 1992; Liston, 1999):

- Create awareness of the need and opportunity for quality improvement;
- Set goals for continuous improvement;
- Build an organisation to achieve goals by establishing a quality council, identify problems, select a project, appointing teams and choosing facilitators;
- Give everyone training;
- Carry out projects to solve problems;
- Report progress;
- Show recognition;
- Communicate results;
- Keep a record of success; and
- Incorporate annual improvement into the company's regular systems and processes and thereby maintain momentum.



There are some parallels in the Juran's ten steps and Deming's fourteen principle of quality management. Both stress staff training. Deming's sixth principle institute *training and retraining*, maintains that besides the initial training given to the staff, there should be further retraining when new processes or equipment are introduced. Juran's fourth step in the process of quality improvement is the provision of training. He also argues that such training should begin with senior management (Walton, 1989; Pike, 1994).

3.2.3 Walter Shewhart

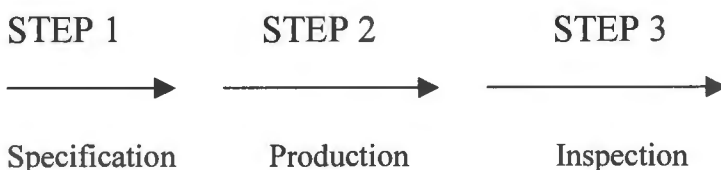
Walter Shewhart had a great impact on Deming and his work. While Shewhart was lecturing in the United States department of agriculture, he came up with a theory about three steps in quality control. The steps in the quality control process are (Bradley, 1993:14):

- *Specification* of what is wanted;
- *Production* of the things to satisfy the specification; and
- *Inspection* of the finished production.

According to Hayward (1998), the quality control process had been seen in the context of a pipeline model as reflected in figure 3.1. The process was linear; once a group finished its part of the task there was no interaction with the other groups. Shewhart proposed a cyclic model as a means of quality control.

The three steps that are interlocking and interdependent form a dynamic scientific process of acquiring knowledge (Bradley, 1993). Shewhart also

Figure 3.1 The pipeline model



Source: Bradley, 1993:14

proposed the PDCA (Plan-Do-Check-Act) cycle. Deming adapted Shewhart's theory and changed it to PDSA (Plan, Do, Study, Act) cycle. The PDCA OR PDSA cycle is congruent with quality practice in which all people in the organisation could make contribution and be part of the improvement of product and service. Thus, decisions about quality practices are not made by those who are involve with the task of inspection.

3.2.4 Phillip Crosby

Phillip Crosby is regarded as the leader in the U.S. quality movement. Crosby's approach to quality management is based on the movement within the organisation towards 'zero defects'. That is, away from a tolerance for substandard performance towards an elimination of waste caused by a reduction in quality (McArdle et al., 1995). He proposed this controversial concept of zero defects, which involved putting in place systems to ensure that things are done correctly the first time and every time.

West-Burnham (1992) regards the concept 'zero defect' as hopelessly unrealistic. Sallis (1993) contends that zero defects are a desirable goal, which might be difficult to guarantee. The concept is important in education because it means that all learners and students would make a success in their education. Structures and systems to ensure that this happens need to be in place at all times.

Another popular phrase first used by Crosby is 'quality is free'. Crosby's viewpoint was that a systematic drive for quality would pay for itself.

Greenwood & Gaunt (1994) argue that it is inexpensive to pay for quality through prevention and appraisal than rectifying failed quality. They described three costs of quality as (Greenwood & Gaunt, 1994:85):

- *Failure costs* occur when there is non-compliance with acceptable standards of quality.
- *Appraisal costs* refer to the costs of checking whether what is done is right. The organisation's internal and external inspections are examples of appraisal costs.
- *Prevention costs* are costs meant to prevent failure from occurring. For an example, to avoid having its educational equipment stolen, a school might put in a security system.

Crosby proposed a programme which senior management could use to bring about a quality improvement in an organisation. The programme is best known as Crosby's fourteen steps of quality improvement. The fourteen steps are (Oakland, 1989; Sallis, 1993; Hayward, 1998):

STEP 1: Management commitment

Management commitment is crucial to the programme's success. This is a point confirmed and stressed by all quality theorists. The senior management must lead quality initiatives. Crosby suggests that this commitment be communicated in a clear and accessible quality statement policy.

STEP 2: Quality improvement team

Form quality improvement teams from all departments. The quality improvement team has the task of setting and directing the programme to be implemented across the organisation. The task of implementing improvements is the responsibility of teams within individual departments.

STEP 3: Quality measurements

Determine where current and potential quality problems lie using various types of measurements. It is important to be able to measure current and potential non-conformity in such a way that it permits objective evaluation and corrective actions. For example, inspection, reports, statistical data and feedback data from customers represent types of measurements to be used.

STEP 4: Costs of quality

It is important that the costs of quality be quantified. The costs of quality involve things going wrong, rework, scrap, having to redo, inspection and testing.

STEP 5: Quality awareness

It is necessary to build quality awareness and personal concern among all staff. This requires regular meetings between management and staff to discuss specific problems and ways of overcoming the problems. According to Sallis (1993), information about the quality programme needs to be communicated.

STEP 6: Corrective actions

Corrective actions to deal with problems of quality should be taken. Crosby suggested that a series of task teams with a carefully constructed agenda be established and the team should deal with major problems first. It is important that the reports of the task teams be given during meetings.

STEP 7: Zero defects planning

Establish a team to set up a zero defects programme and also be responsible for its implementation.

STEP 8: Supervisor trainer

Institute supervisor training or middle management training on its role in the improvement process. It is important that all managers understand their role in the improvement process. This could be carried out through formal training.

STEP 9: Zero defects day

Hold a zero defect day which establishes the idea of zero defects and informs the staff that there has been a change. This is a daylong event highlighting and celebrating the work carried out on quality and to emphasise the management's commitment to quality. Sallis (1993) holds that it has an aspect of staff development.

STEP 10: Goal setting

It is important that once the pledges to work towards zero defects have been made, individuals and teams should set goals. The goals must be specific and measurable.

STEP 11: Error cause removal

The staff should be encouraged to inform the management about any obstacles encountered in reaching the set goals. They should communicate to management the situations that make the pledges difficult to implement.

STEP 12: Recognition

Recognition and appreciation of those who participate in quality improvement is important. What staff needs is recognition of their achievements and contributions, which should be linked with previously set goals.

STEP 13: Quality councils

Establish quality councils to decide how best to tackle problems. It is important to bring quality professionals together to look for strategies of solving the problems of quality. The role of the quality council is to monitor the effectiveness of the programme and to ensure that the improvement process continues smoothly (Oakland, 1989; Sallis, 1993).

STEP 14: Do it over again

Quality is a continuous, never ending improvement. The quality programme never ends, once goals are reached, the programme needs to start over again.

Sallis (1993) concluded that Crosby's management programme is practical and less philosophical than that of Deming. The programme is clear, easy to understand but has been criticised for not being always appropriate to different organisations' cultures (West-Burnham, 1992).

3.2.5 Armand Feigenbaum

Feigenbaum was one of the most credited founding fathers of quality movement. Together with Juran they went further than Deming in developing the managerial and organisational dimensions of quality control (Tuckman, 1995). Some of the key concepts that could be recognised in Feigenbaum's early writings that have influenced the quality movement are (Costin, 1996):

- To define the production process and service delivery as an integrated system that starts with what the customers wants and end with the customer satisfaction.
- The need to redefine the role of inspection function, the consequent reduction in costs of quality by building quality into the production, and the usefulness of statistical quality tools.

According to Feigenbaum, quality costs need to be categorised if they are to be managed (Dale, 1994). Total quality is the sum of three categories mentioned earlier as appraisal, prevention and failure costs. Greenwood & Gaunt (1994) elaborated on examples of quality costs in the context of schools. Examples of waste in schools are the indiscriminate use of equipments and the time wasted on unorganised activities. Sallis (1993) defines failure costs as those things that take the pleasure out of managing and working in education and argues that it is difficult to quantify costs of failure than those incurred during prevention.

3.2.6 Kauro Ishikawa

Ishikawa was one of the best-known Japanese pioneers of quality movement, who made a distinction between a narrow and a broad definition of quality. He believes that a narrow interpretation of quality means quality of product, and the broad interpretation among others, refers to quality of work, service, process, system and objectives. Born in 1925 in Japan, he was in the forefront of quality revolution from its inception in Japan during the late 1940's.

According to Munro-Faure (1992) his work focussed on making statistical techniques for improving quality among the grassroots workers in Japan. Ishikawa suggested that, within the management group, middle managers have a distinct place in the improvement of quality. He introduced quality circle-a concept of “let those doing the job tell us how we can improve’. According to the literature, this refers to the concept whereby people

contributed towards the improvement of quality in a cooperative and participative manner (Jablonski, 1992; Costin, 1996; Hayward, 1998). According to Blair (1989), quality circles may be defined as a voluntary group of workers from the same work area. The group usually meet for an hour a week, during company time, to identify work related problems in their immediate work area, find the most suitable solution and present their solution to top management for consideration and implementation. The idea behind quality circles was to bring workers together for regular meetings. At these meetings, participants were encouraged to discuss ways of improving the workplace and quality of work, and also to identify potential problems for maintaining quality (Williams, 1994). According to Ishikawa, attendance at quality circle should be voluntary and the circle should not be under a superior (Sallis, 1993).

Ishikawa maintained that the philosophy of customer wide quality assurance emphasises the customer and societal issues through the following objectives (Bowles, 1991:206):

- Quality first, profit is not the first consideration;
- Customer orientation, product is not the first consideration, but what the customer needs;
- Next process is your customer; an organisation should break barriers between different departments and sections;
- Using facts and data, statistical methods are needed to identify areas for improvements; and
- Respect for humanity, participatory management.

3.2.7 John Jay Bonstingl

Bonstingl, a quality consultant from United States is a founder and director of the Centre for Schools of Quality. He also served as an evaluator for the Education Pilot Programme of the American Malcolm Baldrige National Quality Award and as a judge for the US Department of Education's Blue Ribbon Schools Programme (Hayward, 1998). Bonstingl presented several workshops in South Africa on the application of the quality concept in education. The following are his contribution to quality as reflected in what he termed four pillars of quality (Bonstingl, 1992; 9).

3.2.7.1. *Customer-supplier focus*

According to Bonstingl (1995) like other fiscally based enterprises, schools are in business to satisfy their customers and to maximise opportunities to serve and delight them. Customers are defined as all the people who use your work, while suppliers are those whose work you use (Bonstingl, 1995:ii). This implies that all role players in a school are both customers and suppliers. They must know their duties and responsibilities. Hayward (1998) also believes that it is important that there be chains and networks of mutual support within and outside the school, to ensure that the school continually improves the standards of education provided.

3.2.7.2. *Constant dedication to continuous improvements*

The concept of continuous improvement has its origins in Japanese quality theory. In Japan the concept is called *kaizen*. The word “*kai*” means change, and “*zen*” meaning good. In Japanese society *kaizen* philosophy is a commitment by its citizens to improve continually the conditions of the home, the workplace and the whole society. The improvement should be ongoing and gradual (Bowring-Carr, 1994; Hayward, 1998;).

Bonstingl (1995) suggests that everyone in the organisation needs to be dedicated to the continuous improvement at all levels. According to him focus in schools should be on encouraging learners to explore hidden talents and to build on previous successes and understandings. The schools should avoid focusing on learners’ failures, inadequacies and limitations (Bonstingl, 1992). Another characteristic of a traditional school is the view that learning is a collection of linear, consecutive segments of one-way communication. In the School of Quality, Bonstingl (1992) compares the learning process to a spiral. The spiral shaped PDSA cycle or a continuous experience pattern of perception, conceptualisation, thought, action and reaction. According to the continuous experience pattern, the learners use their prior knowledge and understanding as a foundation for construction of new learning and the constant refinement of developing intelligences (Bonstingl, 1992:37).

3.2.7.3 A process-system approach

According to Bonstingl (1992) organisations must be viewed as systems. The work that people do within the system needs to be seen as ongoing processes. Within any system there are processes and products. A number of processes form a system. These processes in schools are usually to be carried out by an individual or a group of people (Hayward, 1998). For an example, a learner registering in a school would go through the admission process by the secretarial staff. Once the learner has been admitted, a class teacher and subject specialists would help to educate the learner. Bonstingl (1992:41) confirms that in quality schools, everyone understands that improvement of students' outcomes can only be achieved over the long run. Learning processes need to improve continuously by those in the front lines, and the administrators should create the context for optimal success within the school.

3.2.7.4 Consistent quality leadership

According to Bonstingl (1995) the success of quality transformation is the responsibility of those in top management positions. The quality philosophy is a way of being; it is a life journey of the spirit, body and mind. Bonstingl (1995) believes that the starting point of quality is in the stakeholders' hearts and souls. It is then that quality becomes the essence of the schools, workplaces and communities.

Of great significance is that quality must begin at the top. For example in the school the principal as the head, is at the top position because he/she is accountable for any activity or event-taking place in a school. The teacher also in his/her classroom is at the top of the classroom activities. All the individuals in top positions need to think about what could be done to effect continuous improvement within themselves and those over whom they have influence.

In conclusion, it is important to note that there is some overlapping of ideas in the thinking and the major conclusions of some quality gurus. Training is a prerequisite for success in almost all the works on quality theorists. For an example, Deming's sixth management principle and Juran's fourth step to quality improvement stresses training. Training is needed because the concepts of customer-focused quality, structured problem solving, continuous improvement, open communication, and fact-based decision making are not natural behaviours in organisations (Domb, 1996).

There are evident areas of commonality in Deming, Ishikawa and Juran's quality management principles. All three emphasised the need for interactive participation and input by all parties involved in the various processes, this is a principle important in schools trying to provide quality education. Although the ideas of the quality gurus were developed for an industrial context, there is much that can be learned from their contributions and be adapted to education.

3.3 Models of quality management

There are many models of quality management found in the literature and in practice around the globe. The literature also reveals that there is a range of these models of quality management, ranging from those involving strict adherence to standards for all phases of an operation to a total focus on the quality service to clients, both internally and externally (Liston, 1999).

For the purpose of this section, an overview of some of the models is provided. It is important to stress that most of these models, as stated earlier, concentrated on quality in manufacturing industry, but are of great importance also in the field of education, where quality management debates are at the peak.

3.3.1 Total quality management model

There are a number of quality theorists who contributed to the total quality management (TQM) model. Deming, Juran and Crosby concentrated on quality management in industry while Murgatroyd and Morgan's contribution was specifically for schools. A detailed discussion of Deming, Juran and Crosby's contributions have been made earlier (cf. 3.2.2; 3.2.4), thus only a brief summary is provided before elaborating on Murgatroyd and Morgan's quality management framework.

TQM is based on assuring the quality of product and service to the satisfaction and delight of consumers. Frederick Taylor first proposed

theories of scientific management, which focused beyond the inspection of products at the end of production to testing work methods, and seeing end testing as the guarantor of quality. Radford's work in 1922 established the need for quality assurance inspectors to test every product before it left the factory. Liston (1999) concludes that these equate to requiring an exit examination for students before graduation to test what they learnt from the course and how the service were delivered. He argues that such methods lend themselves to secondary education.

Deming perfected the method by identifying the seven deadly diseases (which were discussed in 3.2.1.2.) and espoused his fourteen points as TQM principles (discussed in 3.2.1.1). Deming also devised the cycle for quality management, the PDSA (Plan, Do, Study and Act) cycle. The cycle is a useful tool for carrying on continuous improvement activities. The four stages in the cycle act as shocks to prevent backward motion. He proposed that moving ahead to improve continuously relies on (Liston, 1999):

- Planning well before starting anything;
- Monitoring and assessment of the success of outcomes; and
- Making necessary changes or adjustments before advancing.

On the other side Juran, who emphasised ten stages for total quality (discussed in 3.2.2.2), proposed a trilogy of processes:

- Quality planning;
- Quality control; and

- Quality improvement.

3.3.1.1 Murgatroyd and Morgan's TQM model in school leadership

Murgatroyd and Morgan (1994:51) see TQM as a systematic management of an organisation's customer-supplier relationships that ensure sustainable steep-slope improvements in quality performance. According to Murgatroyd and Morgan (1994), the essence of TQM is leadership. The kind of leadership required is the one that will ensure that everyone in the organisation is working in a way that ensures consistently high performance and constant improvement. Leadership in TQM is visionary and embraces empowerment, performance and strategy. There is a need to see leadership as a systematic basis for facilitating the work of others, so that they achieve goals that meet the expectations of stakeholders (Murgatroyd and Morgan, 1994).

Murgatroyd and Morgan provided a basic framework of TQM in practice. According to them there are five critical features, required by TQM organisation in order to achieve a sustainable, steep-slope quality improvements. They believe that a school or an organisation registers a success when all the five elements exist. The five components are (Murgatroyd and Morgan, 1994; Hayward, 1998):

- COMPONENT 1: Alignment and commitment to shared vision

The adoption of mission statements outlining the broad purposes of schools and their critical tasks is the first step towards continuous improvement. To achieve alignment and commitment to shared vision, the statement that is produced needs to be something that is used daily by all staff members to justify their actions (Murgatroyd and Morgan, 1994). It is important that everyone in the school has a sense of identity and affinity for the mission statement. The aims and objectives of the school should be formulated and agreed upon between all the staff members.

- **COMPONENT 2:** Extended understanding of customer-drive process and strategy

A significant performance gain would be evident when everybody focuses on process ownership, and aligning processes to both the vision of organisation and the generic strategy of organisation. Through total dedication to process improvement, the organisation would reflect continuous improvement and meet the expectations of both internal and external customers. Murgatroyd and Morgan (1994) identified the following three levels of process influence:

- **Level one** is for those matters that one could effect by action, that do not require the permission of others and actions whose could be justified against the vision statement.

- **Level two** are for those matters that an individual could have an influence by making suggestions and proposals to those having responsibility for the process.
 - **Level three** are for matters over which an individual have minimal influence, that would take a time to have an impact on those processes for which one is most responsible.
- **COMPONENT 3: Teams as focus of organisational change**

Murgatroyd and Morgan (1994) noted that most schools are hierarchically managed. They refer to trend that established it in the early 1990s, whereby many organisations changed their organisational design. Self-managing teams became responsible for key processes in these organisations. Those closest to the process in an organisation were able to improve process performance (Hayward, 1998). Teams are thus not simply established and left loose within an organisation. They should be given a great deal of latitude to perform excellently in terms of customer-driven strategy in pursuing the vision and goals that are central to the organisation.

- **COMPONENT 4: Outrageous or challenging goals**

The setting of challenging goals is particularly essential and everyone in the organisation has to respond to these goals. Organisations should themselves be as good at what they are doing. The challenging goal in an organisation could help bring about steep-slope improvement.

▪ **COMPONENT 5: Tools for systematic daily management**

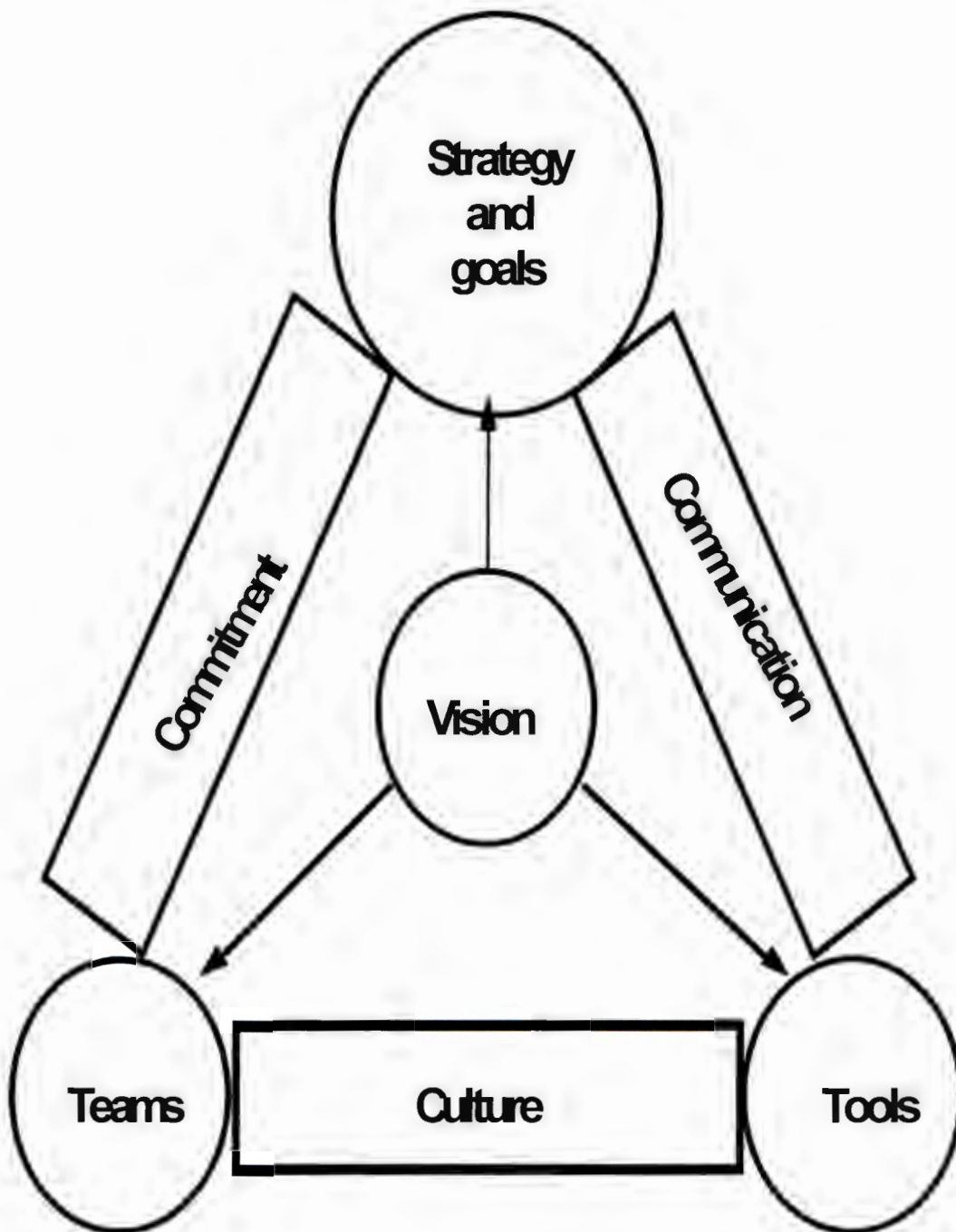
Murgatroyd and Morgan (1994) believe that in a TQM run organisations, there should be a systematic recording of activities taking place, and these records are used for feedback information to staff members. Recording and managing TQM changes are essential activities of the management team and should focus on the following aspects:

- Agreed upon indicators of performance in relation to goals set;
- As milestones are reached on the way to achieving goal, the processes used are written down so that all can use them – codifying the best practice.
- As achievements are made, processes that link to these achievements are examined. The idea is to ensure that the underlying learning that has occurred in making the improvements is not lost.



Figure 3.2 shows the TQM model of school leadership by Murgatroyd and Morgan (1994). In the figure, it should be noted that in the model, Component 2 and 4 has been grouped within one circle, the strategy and goals.

Figure 3.2 TQM model of school leadership



Source: Murgatroyd & Morgan (1994: 67)

According to Murgatroyd & Morgan, successful TQM implementation depends on the five key features – vision, strategy, outrageous goals teams and tools for daily management together with the 3C's of TQM as represented in figure 3.2. The first 'C' in the soft side of TQM is *culture*, referring to the implicit rules, assumptions and values that hold the organisation together. A successful TQM organisation is the one that created a culture where innovations are highly valued. Status is secondary to performance and contribution and leadership is a function of action. Rewards are shared through the work of teams. Development, learning and training are seen as critical paths to sustainability and empowerment to achieve challenging goals together with continued development and success provide a climate for self-motivation (Murgatroyd and Morgan, 1994; Hayward, 1998).

The second C of TQM is commitment, that is, a sense of pride and opportunity for development amongst everyone in the organisation. There should be a sense of shared ownership of the goals of the school. Commitment extends to taking risks so as to achieve goals, as well as working systematically to keep others informed of the opportunity that exist for innovation and development.

The final C is communication. A successful TQM organisation is one in which communication within and between teams is powerful, simple and effective (Murgatroyd and Morgan, 1994), an organisational climate in which there is open, honest and full communication within the teams (Hayward, 1998). Sallis (1993) also stresses the need for communicating the

quality vision, a commitment to quality improvement process and the need to build effective teams.

3.3.1.2 Total quality school model

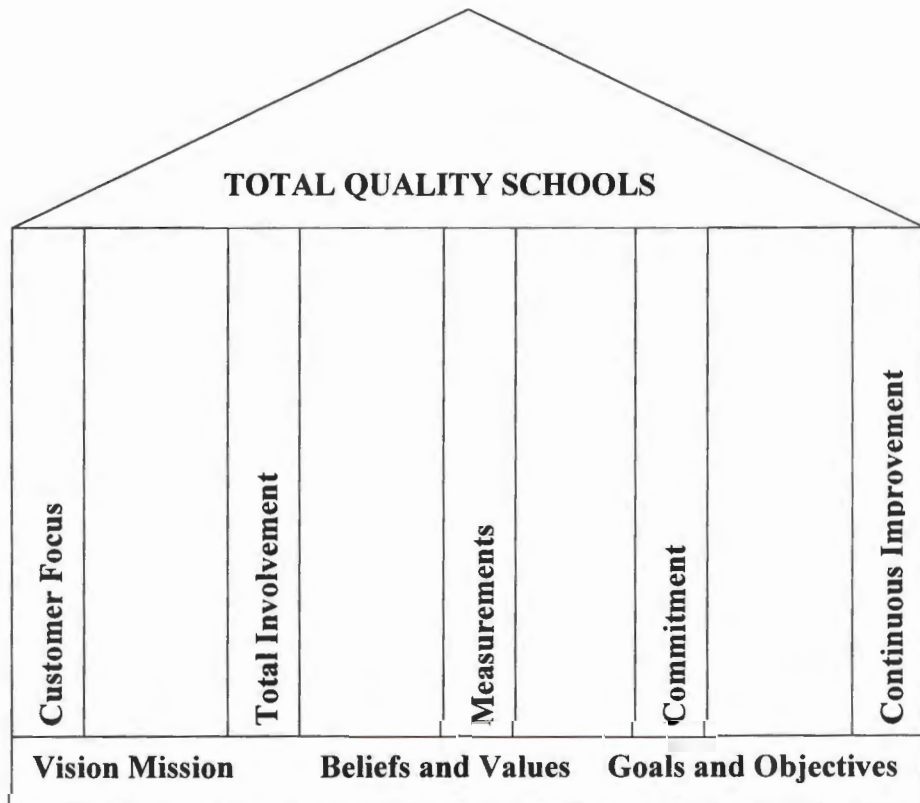
The criteria for total quality school model are classified as the ‘pillars of quality’ for education (Arcaro, 1995). Arcaro (1995:9) believes that these pillars are universal and applicable to every educational institution and should be present in order to attain the Total Quality School status. Focus in managing quality should be limited to one pillar, but instead, it requires a focus on all pillars at the same time (Steyn, 1999). Figure 33 depicts the pillars of quality and its foundation. Each pillar and its foundation should be understood before total quality school model could be developed.

- Customer focus

According to Barry (1991) TQM advocates that all stakeholders become customer focussed, that they continuously find new ways to meet or exceed customers’ expectations. Thus, not only the customer satisfaction is created but also customer loyalty. For schools to develop a customer focus, everyone in the school must realise that every educational output has customers (Arcaro, 1995; Steyn, 1999). Barry (1991) believes that the process for focus on the customer develops a sense of belonging and importance among individuals who try to understand each other’s needs. Asking customers what they want through techniques such as suggestion cards, suggestion box,

shadowing, interviews and surveys provides data for making effective decision rather than basing decisions on experience and intuition (West-burnham, 1992; Weller and McElwee, 1997; Steyn, 1999).

Figure 3.3 Total Quality School Model



Source: Arcaco (1995: 10)

Sallis (1993) argues that it is possible that the needs of the different customers or stakeholders do not coincide. In this case it is necessary to listen to all stakeholders, to treat them fairly and to look for the core issue that might unite them (Steyn, 1999). The main focus in a school should be on the learners' needs because they are the reason for the institution's existence.

- Total involvement

An integral part of quality process is full participation and empowerment and it requires the commitment of everyone in the school to meet the needs of customers collaborately (Barry, 1991). It is assumed that everyone has the ability to make a contribution to quality that is reflected in his or her behavioural and personal contribution to the quality effort. This participation requires management's commitment to focus on change and to provide staff and learners with the support they need to improve their effort. Beavis (1995) reported that TQM failed in his school because the school council, staff, learners and parents were not involved. He believes that the involvement of these stakeholders and not only the senior management team of the school could have made a difference.

- Measurement

In TQM there are a number of quality tools for measuring customer satisfaction, some are qualitative while others quantitative and used to analyse complex situations (Greenwood and Gaunt, 1994). The tools include benchmarking, tally charts, cause-effect diagrams, Pareto charts, histogram, scatter diagrams, run charts, control charts and flow charts (Murgatroyd and Morgan, 1993:158; Rappaport, 1993:20; Latta and Downey, 1994, 20). Latta and Downey (1994) warns users that it is important to be aware that although the quality tools provide more and better information, by merely using them does not ensure a high quality

school. Instead quality tools exist to help solve problems, gather information, analyse data and assist in making decisions about the process and system.

- Commitment of management and other stakeholders

According to Barry (1991:8) and Arcaro (1995: 35) commitment of leadership and management is the key for quality improvement. The process of quality assurance and improvement start at the top and as soon as the management role in Total Quality Management has been made clear to everyone in the system. In this way, quality education can then happen when the staff members are totally committed and thoroughly empowered. According to Steyn (1999:359) commitment of team work plays an important role in the process of quality improvement. A quality team may be composed of anyone in the school who has an interest in quality activities.

- Continuous improvement

The literature study consulted asserted that TQM focuses on the continuous improvement of all processes and views no process as perfect (Arcaro, 1995; Beavis, 1995; Bonstingl, 1996; Weller & McElwee, 1997). Achieving quality is a journey, and not a destination. On the path to quality, is that changing, adding, subtracting and refining must continuously improve processes. The operation emphasises a cyclic process for continuous improvement using the Plan, Do, study and Act



(PDSA) cycle, which is the heart of quality management model (Weller and McElwee, 1997:209). This PDSA cycle consist of four steps:

- *Step 1:* The first step entails a *PLAN* or process to study and the analysis of the situation. “What can be done to improve the situation? What kinds of data are available? How will the data be used?”, these are some of the questions that need to be asked. Schargel (1994) alluded that for the planning step to be successful, it is imperative to invite the inputs customers, suppliers, staff members and top management.
- *Step 2:* In the *DO* step, the plan should be carried out. Schargel (1994) suggested that it be started on the small scale first.
- *Step 3:* *STUDY* and check data on the effects of the improvement. It is essential to determine whether the plan has worked or needs to be improved.
- *Step 4:* then *ACT* on the outcome of the study step. The plan can then be either instituted as it tested or be referred back to step 1 by modifying the change and gathering new data on its effectiveness as adjustments are made (Schmoker and Wilson, 1993:18). There are many areas to be improved in schools. In addition, the way to improve these areas is by implementing the PDSA cycle.

To sum, Miller & Cangemi (1993) describe how United States has struggled to implement TQM. In order to plan for the success of quality that is continuously improving, the following should be noted. Firstly, for the success of a full scale programme, there must be a massive change in the

climate of most organisations. Everyone must accept the responsibility for quality, and must be involved in making decisions about changes to processes and be empowered to implement them (Nightingale and O'Neil, 1994). Communications between all levels of the organisation must be free, open and honest, and that according to Nightingale and O'Neil (1994), is a goal very difficult to achieve in the individualistic, incentive-driven workforce to which we are accustomed. Secondly, the programme cannot be entrusted to a few; it must be instituted and supported by everybody, especially those at the top of the organisation. Thirdly, the organisation needs to be able to demonstrate that the quality programme is having an effect, that there is a measurable improvement.

3.3.2 Service success models

Research on service quality and success can be traced to the Nordic school of services, which became a source of information about a range of contributions in quality service models in Scandinavia. Early research into the management of service operation was also found in USA (Gronroos and Gummesson, 1985; Liston, 1999). The idea in service success model was to sell what the customer wants to buy. It also involved an essential shift in focus from the production process to the market, and to being customer-driven.

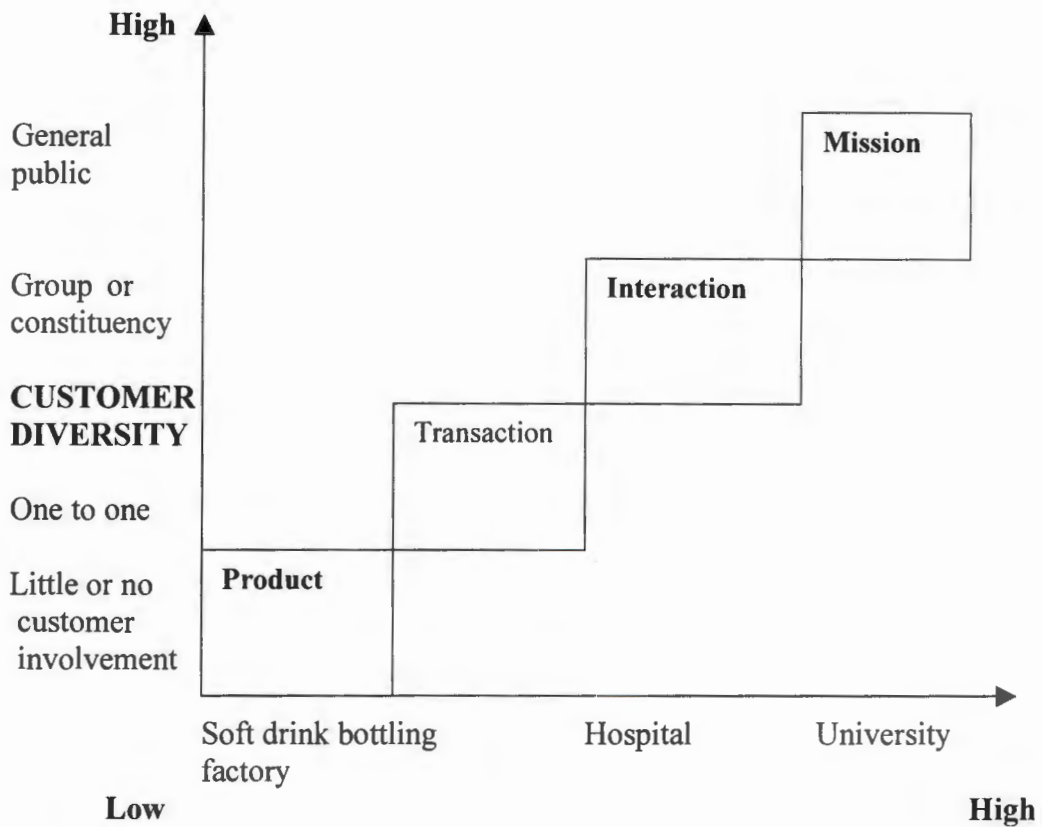
3.3.2.1 The Total Quality Service model (TQS)

According to Liston (1999) the TQS model is a framework that brings together a range of practices and shows how they integrate to deliver a superior customer and client value through service, and ultimately success for the organisation. In the TQS model, the operation of each practice, and how certain elements are emphasised depends on the premise an organisation is pursuing and by the diversity of its offerings.

Figure 3.4 represents the TQS model of the service management concept. It shows a spectrum of organisational diversity, and the nature and degree of customer participation in an organisation's processes. The lower end of the organisational and customer diversity spectrum is the situation where customers buy a product without coming into contact with the producer or supplier. This is not happening in a school situation since all stakeholders are encouraged to participate in the education of learners.

Albrecht (1994) suggests that public service organisations should be at the high end of the spectrum. In this case, the customer and client interface is diverse and complex. Management should be mission-driven and concentrate on successful outcomes. Liston (1999) suggests that, post-secondary education institution should have meaningful concepts of service based on strategies for value creation.

Figure 3.4: Quality service paradigm contingency model

Relationship between the customer and organisation

Source: Adapted from Albrecht (1994)

They should have means of assessing performance and ways of making staff and students believe in them. This means that students or customers may be considered to be involved as co-producers.

3.3.2.2 The role of the leader in service success

According to Liston (1999), if managers want their front-line staff to treat their customers well, they should be involved in developing them for such kind of treatment. Executives should be willing to support and align the organisation's resources behind the front-line staff. In other words, the leader in service success should take a leading role in developing a vision of the type of public value an organisation should create. They should become a craft of meaning with the aim of maximising the value creation by conveying and being a living embodiment of a strong message (Liston, 1999).

In simplest form service is defined as work done by one person for the benefit of another. Service exists within a milieu of human values, and the client retains only the memory of experience. It is the spirit in which service was given that is remembered. Albercht and Zemke (1985) studied examples of outstanding service organisations, and came up with five phases which were referred to as a complete organisational approach to ensuring the quality service as defined by customers. The following five phases were presented as guidelines for successful service (Liston, 1999):

PHASE 1: Find out what clients want. The strategy involves developing continuous picture of what success looks like. That is, finding out what satisfies the internal and external client and what quality of work life motivates the staff to give exemplary levels of service to both external and internal clients. The first phase provides the foundation for the second phase.

PHASE 2: Clarify a service strategy. Managers have to develop strategies that are directed at providing a working environment for all staff. Liston (1999) adds that the service strategy also provide meaning to energise staff as it is about delivering value to clients to retain their patronage.

PHASE 3: Training and development of employee. This third phase is to educate the organisation. It is stemmed on the belief that training, development of employees and communication are essential to creating maintaining a service psyche. It is important to teach staff members how to practice quality service, so as to ensure that all learn to satisfy clients.

PHASE 4: Empower employees with the discretion needed to manage the moments of truth. The aim of the fourth aim is to implement service improvements at the grassroots level.

PHASE 5: All of an organisation's people policies and systems should be aligned to creating exceptional value in the eyes of its clients. Finally, this phase suggests strategies to make service quality an enduring part of the organisation. Incentives and recognition systems for staff becomes part of this mosaic to complete a continuous loop of service success (Liston 1999).

3.3.3 ISO 9000 standards

The Greek term *isos* means 'uniform, homogeneous, equal', and ISO may be seen as a shortened version of *isos* (Liston, 1999). The International Standards Organisation (ISO) 9000 represents the basis for most companies'

quality development by providing a foundation for future quality improvement. The purpose of ISO 9000 registration is to promote development of standards worldwide and also to improve operating efficiency productivity and reduce costs (Nebbers, 1998). Its focus is on documentation. All activities that affect quality, including quality plan, product design, processing materials, manufacturing and distribution must be recorded (Brumm, 1995) that is, clear written procedures of all work processes affecting quality are required. An independent third party monitors compliance with these standards.

The quality system standards ISO 9000 specifies the following three basic levels of systems (Kehoe, 1996:16):

- LEVEL 1 (ISO 9001) applies where the contract specifically requires design effort and the product or service requirement are stated in performance terms.
- LEVEL 2 (ISO 9002) applies where conformance to specified requirements for the product service are stated in terms of an established design or specification.
- LEVEL 3 (ISO 9003) applies where conformance to specified requirements can be adequately established by final inspection and testing of the completed service.

According to Liston (1999) the Australian and New Zealand standards, ISO 9000 series of standards contain a quality improvement element. In 1995, the ISO 9001 standards for education and training were issued. The following

twelve of the twenty standards clauses are particularly relevant to education (Liston, 1999):

- Management responsibility;
- Quality system;
- Contract review;
- Design control;
- Purchasing;
- Purchaser-supplied product;
- Process Control;
- Control of non-conforming product;
- Corrective action;
- Quality records;
- Internal quality audits; and
- Training.

The ISO 9000 series standards applicable to the higher education in Australia and New Zealand aim at (Liston, 1999):

- Improving performance, productivity and coordination;
- Identifying objectives and focus on client expectations;
- Achieving and maintaining product and service quality; and
- Provide baseline for continuous improvement.

The focus of ISO 9001 for education is on the management of organisation-the education institution as a whole. Key points in adopting an ISO 9000 standard approach are (Liston, 1999: 135):

- The standards themselves;
- An interface between people and processes which is well documented to assure quality;
- A mission-the core purpose; and
- Defined processes and systems.

Managing records for ISO 9000 compliance is important that involves quality records and documentation. Quality records provide strong inferential evidence. They contain information about the activity, and thus do not exist until after the activity has been performed (Brumm, 1995). A document is a term that denotes an organisation's written or graphical procedures, policies or instruction. Controlled quality system documents include quality manual, document control and internal quality audits. According to ISO 9000 documentation encompasses both records and documents. A record management programme forms the foundation for successful compliance with ISO 9000 records requirement.

3.3.4 Quest for educational quality model

The Quest for educational quality model serves as the framework for the Birmingham initiative for assuring quality in middle schools. There were nineteen middle schools serving over 10,000 students falling under Birmingham Public schools. According to River (1993) Deming's fourteen points drive the Birmingham quality initiative. Their vision includes the creation of middle schools where educators embrace the principles and processes of quality, and the customer's academic and developmental needs.

The Birmingham Middle School's quality initiative is designed around a five-phase development, implementation and sustainment effort as shown in Figure 3.5.

- Phase I: The first phase is designed to educate middle school principals and assistant principals about the quality initiative. The leaders would participate in a quality leadership forum. These forums will help them to appraise the school and learn to use quality principles in their schools.
- Phase II: The second phase focus on a site-base approach. It aims to improve the quality of the organisational structure, curriculum, instructional program, professional development program and technological integration. At the beginning of this phase academic teams are formed. The academic teams are designed to ensure that every teacher is given an opportunity to participate in an academic team on a daily basis. These teams addresses and discusses issues relevant to their students.

Figure 3.5 The quest for educational quality model

Phase I	Phase II	Phase III	Phase IV	Phase V
Participants: - Principal - Assistant Principals	Participants: - Principals - Assistant Principal (s) - Team leaders - Organisation lead team - Curriculum enhancement team - Instructional improvement team - Professional development team - Ad hoc teams	Participants: - Principals & assistance principals - Team leaders - Team members - Program specialists	Participants: - Counsellors - Students	Participants: All
Quality leadership forum	Creating quality schools	Creating quality classroom	Creating quality students	Sustaining the quality focus
- Quality leadership - QEQ model - Quality schools: A system approach - Visioning the future - Present realities - Strategic priorities - Continuous improvement approaches	- Quality leadership - QEQ model - Strategic plans - Quality schools: A site-based approach - Organisation - Curriculum - Instruction - Professional development	- Quality leadership - QEQ model for teachers - Quality classrooms: An instructional approach - Environment - Processes - Curriculum - Instruction - Support	- Quality leaders - QEQ model for students - Quality students: A lifestyle approach - Attitudes - Academics - Aspirations - accomplishments	- The QEQ model: Plans and processes - Organisational leadership teams - Curriculum enhancement teams - Instructional improvements teams - Professional/personal development teams - Ad hoc teams

Source: Rivers, 1993: 57

They also use their team time to plan, schedule instructional programme and communicate with students and parents. The quality improvement teams, formed by the organisational leadership team are also formed for each school. They address continuous improvement issues relative to its purpose.

- Phase III: In the third phase the model is incorporated into the classroom and focuses on continuous improvement in classroom environment, instructional processes, curriculum offerings and support.
- Phase IV: The fourth phase moves the model into students' domain. The creating quality students phase aim at acquainting students with quality principles and processes. Students should be assisted to apply quality principle and processes to their learning.
- Phase V: Phase 5 facilitates the full implementation and sustainment of the QEQ model. In this phase students become members of student leadership teams.

3.4 HOW OTHER COUNTRIES ASSURES QUALITY OF EDUCATION IN SCHOOLS

This section will pay attention to how developing and developed countries assure the quality of education they provide for their students. Firstly, the method used in Nigeria to assure quality will be discussed, followed by what is done in Australia and Britain.

3.4.1 Assuring quality of education in Nigeria

School inspection in Nigeria started in the missionary schools and became a government concern like in other countries. Musaazi (1982) argues that although the word 'inspection' still exists, it has been replaced by 'supervision'. Supervision is a planned programme for the improvement and consolidation of instruction. He believes that school inspection does not simply refer to that specific occasion when the whole school is examined and evaluated as a place of learning. It also means a constant and continuous process of guidance based on frequent visits, which focus attention on some aspects of the school.

In Nigeria, the inspectorate division in the Federal Department of Education is charged with the responsibility of providing and ensuring quality of education. They carry out regular supervision of state schools. According to Musaazi (1982), the director acts as the chief inspector of education in the federal government. There are chief inspectors in the states' Ministries of Education. The activities of inspectors were intended to improve the educators' training and growth in their job, and in turn learners learn and grow. The activities of inspectors included (Musaazi, 1982:225):

- Individual conferences, in which the inspector is supposed to learn more about his/her job;
- Group meetings with educators;
- Visit to schools (classroom visits and giving demonstration lessons);

- The use of instructional materials;
- The exchange of ideas with educators and learners;
- Guiding professional readings and arranging book exhibitions; and
- Planning for inter-school visits by educators.

These inspectors are expected to perform certain duties entrusted to them and these include (Musaazi, 1982: 226):

- *Advise and guide*: Inspectors serve as adviser and guides to educators with the aim of improving the quality of education. They should arrange courses and workshops that relate to areas in which inspected educators have been found under-performing. These workshops should aim at the improvement of quality of education in schools.
- *Work as a moving teacher or college*: The inspectors work is an extension of the work done by teacher training colleges. They assist trained teachers to improve generally in their profession and advise them on ways of improving their teaching.
- *Provide an inspection report*: The inspectors are expected to provide accurate and positive reports on the schools that they inspected. The reports are very useful because:
 - Principals and staff could refer to them for guidance in their work;
 - To those who would like to know how their schools as compared to others progress; and
 - To those who are responsible for equipping schools.

For the purpose of school inspection, the inspectorate has the right to access schools at all times. In Nigeria inspection fall under the following categories (Musaazi, 1982:227-229):

- Full inspection
- Routine checking;
- Casual or check-up visit;
- Inspection for government grants or take-over of schools; and
- Certification inspection.

In Nigeria, inspection falls under a number of categories. In all types of inspection, inspectors should behave like an advisor, inspirer, authority and helper in every way possible and not as a fault – finder. A brief discussion is outlined.

3.4.1.1 *Full inspection*



This kind of inspection is carried out by a group of inspectors, when they look into all aspects of a school. Normally, a very senior officer heads the full inspection team. Depending on the size of the school, the duration of inspection range from three to five days. It includes, inspecting subjects taught, careful study of how effective learners are learning, it should also find out about the standard of education attained in each class. Apart from the school curriculum, the inspectors examine the whole organisation of the school such as staffing situation in the school, enrolment figures, students' attendance records, staff – routine, school discipline and the cleanliness of

school (Musaazi, 1982). After inspection a follow-up report should also be made available to the school.

3.4.1.2 Casual or check- up visit

This is an informal kind of inspection. Depending on the prevailing situation, it is either ordered by senior officers in the Ministry of Education or initiated by an individual inspector. A confidential report is then sent to the appropriate officials

3.4.1.3 Routine checking

Routine checking involves discussions with the whole staff of the school. A report which emphasises the inspector's own field of specialization, is written. Other areas to be inspected in this kind of inspection might be general administration and organisation of the school. The report written is usually not published but used for evaluation purposes.

3.4.2 Assuring quality of education in Queensland – Australia

For better organisation of the education system, Australia is divided into five states. Each state is responsible for the provision, management and control of education. The overarching goals of Queensland State Education are -:

- To increase the proportion of Queensland's learners who complete twelve years of schooling to 88% by 2010; and

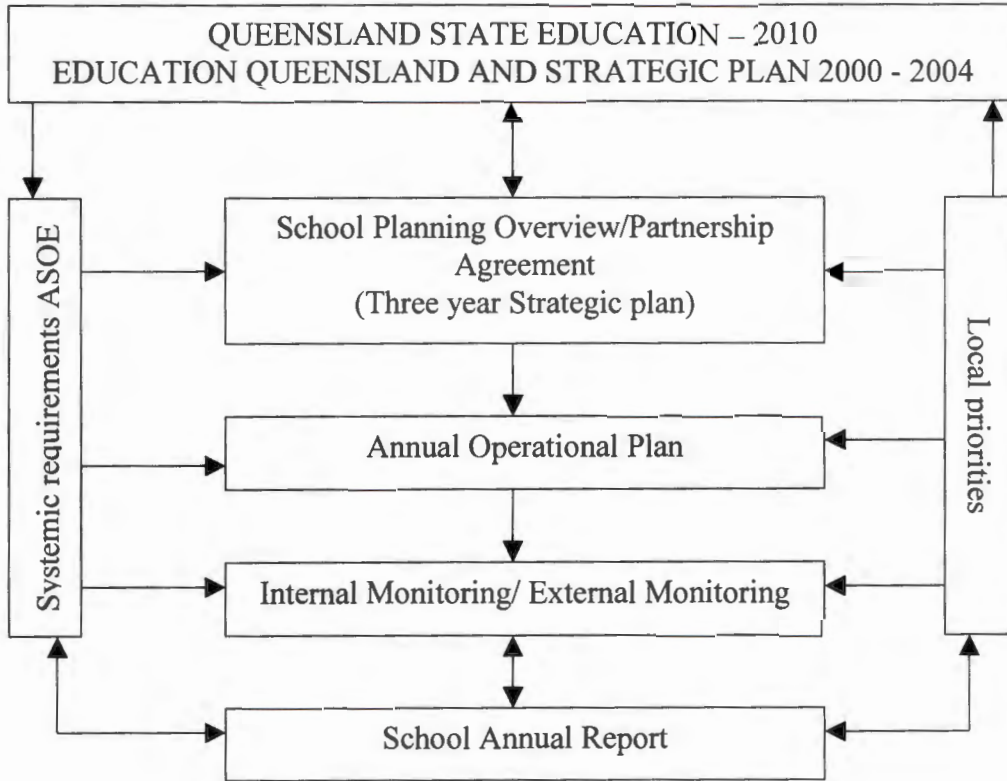
- To improve the quality of the educational experience in state schools for all learners.

Figure 3.5 shows an integrated approach for improvement and accountability in Queensland State School. The School Planning and Accountability Framework ensures that state schools operate as part of a public education system within the context of the local school to devise programs and solutions that meet identified needs. According to Payne (2000) schools are to make a choice of either Enhanced Option I (EOI), which involves the development of school of Partnership Agreement on plans to improve the students outcomes.

3.4.2.1 School Planning Overview or Partnership Agreement

Both the School Planning Overview and Partnership Agreement are strategic planning documents that span a three-year period and inform the development of the Annual Operational Plan. Both provide opportunities to engage staff, parents and community members in long – term planning of a differentiated approach in response to identified needs. The Partnership Agreement should provide a clear and compelling direction of how school community members should work together to achieve improved students outcomes.

Figure 3.6 School Planning and Accountability Framework



Source: Education Queensland, (2000)

The formulation of both the School Planning Overview and Partnership Agreement involve-:

- Undertaking a scan to ensure understanding of school context;
- Identifying key strategic issues for the school identified by the school community;

- Identifying system priorities (outlined in Education Queensland's Strategic Plan and the Annual Statements);
- Developing a statement of purpose;
- Determining direction for curriculum, teaching and learning initiatives; and
- Determining directions for the strategic management plans relating to workforce, technology and facilities.

3.4.2.2 The Annual Operational Plan

The Annual Operational plan is the planning and management tool developed by the principal with the community. It guides the school over twelve months. It must have performance targets, which indicate the intended level of performance to be achieved within a specified time. The performance targets will be negotiated with the district director in areas outlined in the Annual Statement of Expectations and areas identified as school priorities.

The Annual Operational Plan includes:

- All key activities as outlined in the Annual Statement of Expectations;
- School – determined activities derived from the School Planning Overview or Partnership Agreement;
- Intended outcomes and monitoring strategies;
- Performance targets;
- School budgeting including:

- Identifying all resources available for the year by source;
- Allocating resources to school activities; and
- Predicting the end-of-year financial position of the school.

3.4.2.3 *Internal monitoring / External monitoring*

Schools are required to develop and implement internal monitoring processes that track progress towards the achievement of the Annual Operational Plan and the performance target. Internal monitoring enables schools to gather data that allows them to make judgements about performance, examine trends and adjust service delivery. It involves undertaking a cycle of collection, analysis and interpretation of school performance data, and taking strategic action to maintain good practice and modify strategies to improve outcomes.

As part of public education system, all schools are required to provide data specified in the annual Statement of Expectations. The data is used by Education Queensland to develop performance benchmarks that would be used by the department for monitoring, decision – making and accountability purposes. Performance data will assist districts directors to monitor the performance of EO1 schools. For EO2 School, the data would be by district director as a basis for negotiations about performance targets and objectives of the Annual Operational Plan.

3.4.2.4 School Annual Report

This public document enables school communities to review their achievements of the school over a twelve month period. It tells the story of the school over a twelve- month period by reporting on the outcomes of the Annual Operational Plan and the progress towards achieving the performance targets. Audiences for school annual Report include:

- District director;
- School Community (represented by Parents and Citizen Association);
- School management committee; and
- School council (EO2 schools).

A full report is also made available to interested community members. Finally, the school Annual Report informs the development of the next Annual Operational Plan and adjustments to school Planning Overview or Partnership Agreement.

3.4.2 Assuring quality in Britain

According to Murgatroyd and Morgan (1993), the work of Her Majesty's Inspectors of Schools (HMIs) has been a quality assurance activity. As from late 1960 to 1970, inspection developed further and codifying instruments for systematic inspection and comparison. The codification took the inspectorate further into quality assurance process. Her Majesty's Inspectors (HMIs) were selected on their ability to undertake a careful observation of

teaching and schooling. They would also check whether appropriate standards of teaching and education are being met.

In September 1992, the Office for Standards in Education (OFSTED), officially the Office of Her Majesty's Chief Inspector of Schools in England was established. It was established following the passing of the Education (school) Act 1992. It is a non- ministerial government department, and is independent from the Department for education and skills. The purpose of OFSTED is to improve the standards of achievement and quality of education through inspection schools, teacher training, youth service and adult education. It also has joint responsibility with the Adult Commission for the inspection of Local education Authorities (LEA).

According to the interview with Dillon (2000) the OFSTED has a statutory responsibility to keep the secretary of state for Education and Employment informed about -:

- The quality of education provided by schools in England;
- The educational standards achieved by pupils in those schools;
- Whether the financial resources made available to those schools are managed efficiently or not; and
- The spirit, moral, social and cultural development of pupils at those schools.

Under the school Inspections Act 1996, the principal duty of HMCI was to establish and maintain the system for the regular inspection by independent inspectors of all state funded schools in England.

* School Improvement Division (SID)

Within the Department of Education, there are many divisions, which help to maintain the statutory responsibility efficiently. The SID advises Her Majesty Chief Inspector (HMCI) and Department of Education and Skills on schools deemed to be failing and the performance of schools. It liases with appropriate authorities, LEAs and education associations charged with improving schools under special measures. The division identifies schools with serious weaknesses and inspects them to check how they could be assisted to improve their weakness.

From January 2000, a new system of inspection was put in place, namely, differentiated inspection system. The new system's aim was to offer effective schools a short inspection and other schools a full inspection.

Short inspection provides an educational 'health check' of the school. The organisation samples the school's work rather than inspecting and reporting fully on each subject as it is the case with full inspection. Report from a short inspection would focus on school's strengths and areas where improvements are needed. Full inspection provides an evaluation of the entire school. This includes inspection and reporting of the main subjects of the curriculum by inspectors who have specialist knowledge of those subjects. Full inspection leads to a report on every aspect of the school.

Short and full inspections have the following common features -:

- Report on quality of education provided, the educational standards achieved, management efficiency of resources available to school, and the spiritual, moral, social and cultural development of pupils at the school.
- Result in an inspection report for the appropriate authority for the school and a summary of the report for parents, written to a standard format.
- Be conducted by inspection team led by registered inspector.
- Continue to identify schools requiring special measures and to report when a school is underachieving.

3.5 SUMMARY

This chapter has indicated that quality education has its origin in Total Quality Management. Hence, TQM theorists such as Deming, Juran, and Crosby have concentrated on quality in the manufacturing industry, but the literature findings have shown some of the aspects of their theories are applicable to education. There is some commonality amongst the theorists about what constitutes a quality organisation. For example, all regard training as a prerequisite for success in almost all working situation, including a school. The sixth management principles by Deming and Juran fourth step refer to training for quality improvement. The kind of training needed according to the literature involves concepts of:

- Customer-focus quality;
- Structured problem-solving; continuous improvement;
- Open communication; and
- Fact-based decision making.

Again, it has been observed that Deming, Ishikawa and Juran emphasised the need for interactive participation and input by all parties involved in various processes.

In the chapter, models of TQM were also discussed and emphasis was put on Murgatroyd and Morgan's model in school leadership. From the discussion it emerged that the successful TQM implementation depends on:

- Vision;
- Strategy and goals;
- Teams; and
- Tools for daily management.

In conclusion, it is important to note that the theorists outlined, have a positive contribution to make in improving the quality of educational management in schools. However, a note should be taken that the theory cannot be entirely adopted within the educational sector. There is a need to sift through the theory the important aspect that can be suitably adopted and successfully used.

4. TOOLS, TECHNIQUES AND MODELS FOR QUALITY SCHOOLS

4.1 INTRODUCTION

Many of the tools and techniques to be discussed in this section have their origins in the Total Quality Management theory and practice. The chapter will also examine the ways in which schools could work systematically to achieve quality through skilful process management. The important question regarding the tools and techniques is how quality is measured in education. Education does not have a set of accepted tools for this purpose (Latta and Downey, 1994). But researchers do believe that education could benefit from the very tools, since they regard quality tools as a means to extend individual effectiveness. They could help solve problems, gather information, analyse data and assist in making decisions about processes and systems.

4.2 QUALITY SCHOOLS



The question "what does a quality school mean?" is very important in this study. Is quality different from excellence, effective schools and even reform in education? Bradley (1993) believes that there is a difference between quality schools and excellence, because each uses different standards of measurement. Quality schools are those schools that meet the needs of their clients. According to Glasser (1992) the purpose of quality school is to educate learners according to the following definition of education. Education is the process through which we discover that learning adds quality to our lives (Glasser, 1992:186). In recent years, clients are no longer

willing to accept substandard products in any market place, including in education. They have become much more sophisticated in their taste and are more demanding.

Clients of the school system are (Bradley, 1993:3; Greenwood and Gaunt, 1994:27):

- The learners, referring to those to whom education is supplied;
- The parents, referring to those who directly or indirectly pay for their children's education;
- Institution of higher learning and further education for whom learners would be put into their educational process;
- Employers, who need to recruit suitably educators and skilled staff; and
- The nation, requiring better-educated and trained workforce.

The kind of quality needed is the one that will meet the customer requirements. What are customer's needs and who are customers?

4.2.1 Customers in education

Westburnham (1992:29) defines customers as anyone to whom a product or service is provided. In every organisation there are two kinds of customers, namely, external and internal customers; and there are also suppliers, who provide input materials and services.

- *External Customers* are those outside the organisation to whom the product is sold (Greenwood and Gaunt, 1994:27). Parents who directly and indirectly have to pay; institutions of higher learning and further education; employers who need to hire suitably educated and skilled manpower; and the nation requiring well educated and trained workforce are examples of external customers.
- *Internal customers* are those found within the school. Obviously, learners are internal customers of the school, since they are the ones receiving education. In other words education is provided to them. But Hayward (1998) suggests that educators are also internal customers even though they are providers of service to learners. For example, a secretary who types tests and other work given by educators is providing service to the educators. Bradley (1993) also contends that internal customers in schools are the people who make up the vertical school organisational structure. He believes that internal customer for pre-schools are primary schools, for primary schools, secondary schools and for secondary schools, colleges and the world of work (Bradley, 1993:116). It is important that educational planning must be totally integrated, that is from pre-primary to adulthood.

4.2.1.1 Assumptions for a customer-focused school

The current educational management paradigm emphasises hierarchical order, super-ordinate or subordinate function, control, downward communication, and division of labour, delegation, authority, and job descriptions and individual responsibility. According to Bradley (1993), the

total quality management paradigm emphasises the customer priority, the lack of hierarchy, self-monitoring and inspection, collaboration, horizontal communication, co-operation, flow charts and team responsibility. The paradigm involves many facets which when taken collectively, represent the changes needed for a school system to manage quality effectively. The school that wishes to implement total quality management needs to embrace the following assumptions (Bradley, 1993:203):

- Schools need training and new management tools, such as TQM rather than trying to improve schools within the current process and teaching methods to correct the deficiencies in the organisation.
- The new learning demand on schools will require that they develop networks and alliances with parents, other schools, the district office, community agencies and other institutions. The connections are essential to help educators master the strategies needed to make the learning process less passive for the learner.
- A school readiness programme for both parents and learners is essential to the transformation to client-centred schools.
- A broad-based consensus with common operational definitions on what learners should know and what they know would be assessed, should be reached.
- Parents must be equal partners in their children's education.
- Frequent parent conferences and continuous student progress reports are essential in making parents active educational partners.

- The roles of learners and educators will be altered. The learner becomes an active rather than a passive learner and the educator facilitates the student learning as a resource person exhibiting coaching behaviour.
- Schools will concentrate on creating and maintaining quality through continuous improvement. This will be pursued through training and retraining for educators and administrators, restructuring the instructional programme and modifying the delivery system.

4.2.1.2. Characteristics of customer-focused school

Bradley (1993) and Glasser (1992) believe that a customer-focused school system possess certain characteristics that contribute towards the way activities are handled. If the assumptions of such schools are correct, the following characteristics will visible (Bradley, 1993:205; Glasser, 1992:188):

- Continuous total quality management principles;
- Co-operative learning strategies at all grade levels;
- The instructional programme restructured to meet world class standards;
- Ongoing in-service training for all personnel;
- Encouragement and support for innovation, field testing, piloting, and evaluating;
- Networking with parents, other community agencies, schools and institutions;
- Operational definitions in everyday use;

- School-based decision making and management design;
- Common vision among clients, staff, and governance structure;
- Modifications to the instructional delivery system;
- Thinking and problem-solving skills throughout the curriculum;
- Use of teaming both management and instruction;
- Student as active learner, striving toward learning to be a learner;
- Teacher's role is that of a coach or facilitator;
- Long term relationship developed with parents, students and school vendors;
- A client-oriented staff; and
- Use of statistical process control in determining individual learning plans and assessments.

4.2.2 Dimensions of quality in schools

Quality is in the eyes of the beholders. It is ideal and it is as emotional in content as it is logical (Brannon et al., 1983). One-person logic about quality is not necessarily the logic of another. This implies that the statements about quality of schooling are built on the assumptions about quality that are held by the evaluator.

Principals are faced with a challenging role of pursuing quality in their schools. Most of the principals need to move away from traditional management methods referred to as boss-management. According to Glasser (1992) boss-management is ineffective because it relies on coercion and always results in the workers and managers becoming adversaries. Hence,

bossing rarely leads to consistent hard work and almost never to quality work. Managing quality demands a non-coercive method, the lead-management. Brannon et al. (1983), after analysing the dimensions that they believe indicate quality, suggested the actions principals could take to pursue quality in their schools. Their suggestions are based on the following four interrelating, sometimes conflicting, indicators of quality (Brannon et al., 1992: 27):

- Goal attainment;
- Efficiency;
- Equity; and
- Satisfaction.

4.2.2.1 Goal attainment

Goal attainment is predicated upon the existence of conscious, attainable goals. The accomplishment of any predetermined process, output, outcome, or impact comes under the umbrella of effectiveness. Brannon et al. (1983) indicated that attainment could be specific, as in the attainment of objective, or general, as in the attainment of goals. They believe that the existence subconscious goals and the efficiency with which these goals are attainable are questionable.

Discrepancy analysis is one major process used to evaluate and plan for goal attainment (Brannon et al., 1983). In this process the principal describes what is and compares it to what should be. The difference between the two conditions is the discrepancy. If that discrepancy could be eliminated, the

discrepancy becomes a goal. One disadvantage of discrepancy analysis is that it can create problems in the absence of a thorough understanding of what is required. Another problem in discrepancy analysis is how to describe an ideal in terms of the real. According to Brannon et al. (1983) to describe precisely where a school is and where it should be, discrepancy analysis requires those managing to describe accurately and measure precisely. Measurements used for ideals are at best approximate analogies since by definition ideals are not measurable.

Another model suggested by Brannon et al. (1983), is the practical discrepancy analysis. In this process there are goals pertaining to maintaining what the school has, those directed toward attaining further realistic goals and those that have to do with striving for an ideal. If the principal is using this model, he or she is keeping the schools ideal for its emotional or motivational value. It is important to note that in this model there is a tendency to substitute an indirect measurement for a direct one. Substituting an indirect measurement for a direct one often appears to change the goals, which have been set previously. The point is that whatever is chosen as a measurement may end up being defined to the public and by the public as a school goal simply because certain measurements were conveniently available.

4.2.2.2. Efficiency

Efficiency is a concept derived from physics. Efficiency or productivity is a measure of the work output compared to a measure of the work put into the

system (inputs). The idea is to increase the output while decreasing the inputs or holding them constant. The drive for increased efficiency should be described in realistic terms as a goal of the school. Brannon et al. (1983) argue that measurements of programme efficiency in schools are very difficult. They are subject to the same constraints described for goal attainment.

People from the private sector often do not understand the problems of adapting the concept of efficiency to schooling. The primary measures relate to how much goes into business compared to how much comes out. But schools require the expenditure of one unit to obtain multiple kinds of other units, that is, social and cognitive gains.

In sum, two important questions that should always be answered regarding efficiency are how accurate are the measurements chosen, and can they really be used to compare what goes in to what comes out? Principals must therefore understand the limitations of measurement capabilities if they are to sift through claims made about school efficiency and establish realistic goals.

4.2.2.3 Equity

Equity is a complex goal especially in public education. According to Brannon et al. (1983) it implies impartial equality, parity and accumulated value. Like any other indicator of quality, equity is an ideal. Lacking adequate measures of parity, the sides may not trust each other, and may

escalate even in hopes of deflating. The administrator could easily get caught in the middle, regardless of good intentions about ensuring equity. Brannon et al. (1983) warns principal that they should be aware of the complex and emotional issues involved in the pursuit of equity. In matters of equity, the principal juggles and sometimes acts as a referee, knowing that to increase perceived equity for one constituent may very well entail a perceived decrease in equity for another. The option of not dealing with it is not viable, but value laden and complex. Principals should take protective action for the groups at risk, where group values clearly deny other groups opportunities to participate or to use available resources.

4.2.2.4 Satisfaction

Reality indicates that basic needs must be satisfied for other levels of needs to be satisfied. Sufficient funds are needed to provide for basic needs. Brannon et al. (1983) suggest that principals should look for other means of attaining and maintaining quality education, especially without increments in educators' salaries. Nowadays, it is believed that workers who are most satisfied with their work, are more productive. Attention paid to the needs of teachers, students, and the community increases the level of satisfaction experienced, as does attention to performance. For example, praise, recognition, security, involvement, social interaction, esteem, understanding, order, and high realistic expectations are some of the things that could increase the level of satisfaction (Brannon et al., 1983).

4.2.2.5 Actions to be taken to enhance the pursuit of quality

Brannon et al. (1983: 30-31) also suggested the following actions that principals may take to enhance the pursuit of quality in their schools:

- Take the initiative to clarify maintainable and attainable goals, including those related to efficiency, equity and satisfaction. Representatives from the community, circuit office, the department and student body should be involved to enhance understanding, practicality and responsibility while helping the principals to carry out their charge.
- Be sure to include and built on goals already established by the school, the administrative unit and the state. Principals should examine the degree to which the attainment of each goal is possible and probable. They should be able to decide whether the situation calls for general or specific goals and how they will be measured.
- Communicate school goals with and through the school's multiple publics. Principals should make sure that goals are known, understandable, consistent with the organisation and community purposes and reasonably attainable.
- Use multiple methods of communicating and reinforcing goals. Brannon et al. (1938) argue that some people understand visual communications better while some understand verbal communication better. Most understand each form of communication when it reinforces the other. In this sense principals should look for best way of making goals known and how they should be attained. They should

also learn through experience about goal setting, attainment and maintenance.

4.2.3 Gaining acceptance of quality management

According to Bradley (1993) any school making an attempt to implement total quality management, should obtain the board's approval. The board should be supportive. It must be fully informed about what the concept means and how it works. If the support is not found, then the principal should continue to communicate with the board until they decide to initiate and support the process. Three groups that must be supportive are the board, the administrator and the teachers' unions or teachers as a group, in the case where teacher unions are not established. It is important that training occurs before reorganising for total quality management. Bradley (1993) argues that it does no good to reorganise if everyone is going to act the same as they did before. To implement total quality management the school should reorganise resources and roles. Since total quality is based on improvement, the school should first identify all areas, instructional or non-instructional, in which they are going to strive for continuous improvement. Thereafter they should establish the baseline data upon which to collect and compare data to measure continuous improvement. The last step is to put a plan for action, and then the following ways for successful acceptance are essential.

4.2.3.1 Planning to implement quality management

According to Herman (1993), to implement and maintain quality management in schools, a comprehensive planning model must be devised

and used. The following are requirements that must be incorporated when designing a model (Herman, 1993: 2):

- Firstly, key decision-makers about quality management should be educated. Then a go-ahead signal from governing body, school management and critical mass of stakeholders must be obtained. Ownership could only be broadened when key decision-makers have a good understanding of what is involved in quality management.
- A second requirement is to conduct a comprehensive needs assessment. The need assessment should involve the employees, the internal customers and the external community customers (Herman, 1993). This involves collecting data, student achievement scores and soft data such as opinion and/ or attitude survey. A comprehensive needs assessment also directs the investigation to three levels of needs-gaps between what is and what should be or what could be- consisting of (Herman,1993):
 - Mega needs, those that the schools share with society;
 - Macro needs, those involving the entire school district; and
 - Micro needs, those involving individual schools.
- Once a comprehensive needs assessment has been completed, strategic goals should be established for each of the mega, macro and micro levels of needs.
- The fourth strategy called quality specification is developed from the strategic goals for each of the services and products to be delivered by the school.

- In the fifth requirement the planning stakeholders have to develop the quality specifications, and means, ways or programs designed to achieve the quality specification agreed upon by the strategic planning stakeholders.
- The sixth requirement is an ongoing one: once the action plan is initiated, formative evaluative data are collected and analysed for use in making decisions. When the action program is completed, summative data are collected to determine the degree to which the program assisted in reaching the qualitative level of results spelled out in quality specifications.

4.2.3.2 Requirement for the management of quality

Once the tactical plans are completed, those who should manage quality action plans take over the responsibility for the degree of success to be achieved by the quality management structures and processes. The important question is who are those who should manage quality? According to Davies and West-Burnham (1997) in a school where all staff members are managers, much will be achieved. They believe in organising all people within well-led teams. These teams would be devolved responsibility. The reason for the success of teams is that they bring together complimentary skills and experiences that are greater than those of any individual.

Herman (1993) believes that it is very important that those who are to manage the process on an ongoing basis, should make sure that each milestone and subtask is completed in the highest possible quality manner.

For a successful management, managers of quality management process should instil a culture in all employees that creates and maintain an attitude for continually striving for improved quality in all products and services. They should make every employee feel an integral part of decision-making and delivery systems that collectively create a total organisational effort to achieve quality. Davies and West-Burnham (1997) also suggested that it is important to involve all in the development of the school's vision and purpose. They also advise that the mission statement should bring together core values and key aims. Finally, manager should arrange for data collection and feedback to assist each employee and the entire organisation in creating improved procedures that will lead to an increasing quality of both products and services delivered (Herman, 1993: 4).

4.2.3.3 Team approach to monitoring and evaluation

Monitoring and evaluation is the key phrase as far as OFSTED is concerned. The 1996 framework places responsibility for quality of learning squarely on the shoulders of the principal. But would the principal alone conduct monitoring and evaluation in a school? Davies & West-Burnham's (1997) solution to the question is that the team-based model should lead to more focused and more constant monitoring and evaluation, as it becomes a way of life to discuss successes and problems. In this case, self-monitoring teams or self-managed work teams are suggested. A self-managed work team is an autonomous group whose members decide how to handle their task (Harvey and Brown, 1995). The task of the team is an identifiable task, service or product.

According to Herman (1997) formative and evaluation are crucial if the continuing improvement in the quality of products and services is the oversight strategic goal of quality management. Formative evaluative data provide important information at each step of the delivery system, and could be used to determine whether or not value-added targets are being met. Summative evaluative data provide information at the end of a predetermined time period of programme implementation, and they could be used to modify, eliminate, or continue strengthening the programme put in place to meet the goal of continually improving products and services.

4.2.3.4 Self-evaluation and schools self evaluation

Those who manage in organisation at all levels must focus on teaching everyone to evaluate his or her work because quality can only be achieved through self-evaluation. Glasser (1992:179) argues that even though the external evaluation may lead to good work, it would never lead to quality work because it sends the clear message that 'we do not trust that you do quality work'. This self-evaluation is also essential for an organisation. What then is school self-evaluation?

4.2.3.4.1 School self-evaluation

According to Saunders (1999) schools' own capacity and responsibility for reflection and evaluation is at the forefront of the UK policy. This is also true with South Africa, which is now moving from the old paradigm of inspection to the new paradigm of evaluation. During old inspection, a school were

simply told where it was, based on a judgements about inputs. Presently, evaluation has taken a form of joint collaboration, making judgement about outcomes and assisting the schools own development process (Faulkner, 2000). Evaluation is thus a process of determining at a given point to what extent the school is succeeding in its stated aims and objectives (WSE Policy, 2001). It also takes into account the priorities set and the full range of available resources.

Any form of school evaluation could therefore only take place if the school has a set of educational aims and values, the literature emanating from policy bodies make it clear that the context for school self-evaluation is school improvement. Improvement is defined to all intents and purposes as raising standards of learners' performance (Saunders, 1999). The main concern of school self-evaluation should be to improve teaching and learning within the classroom, therefore, its role should be to contribute to this improvement. School self-evaluation is a critical approach to school assessment. It places emphasis firmly and clearly on the corporate contribution to improving learning and teaching.

4.2.3.4.2 Why school self-evaluation?

Evaluation is not an end in itself. The importance of self-evaluation is to secure the highest possible quality of educational provision. The following are regarded as core purposes of self-evaluation (WSE self evaluation, 2001: 7):

- To reflect on the school's own performance with regard to its aims and objectives taking note of curricular priorities;
- To measure the school's performance against local needs and National standards;
- To establish appropriate strategies for the monitoring and evaluation of their work; and
- To prepare for external evaluation.

When a school aims to bring about improvements in performance, it should engage itself in self-evaluation. Hence, Saunders (1999) argues that school self-evaluation is one criterion of an effective school and it enhances the relationship between schools and external agencies. All aspects of the operation of the school should be subject to evaluation undertaken from time to time. These include the management and administrative tasks which relate directly to securing the best possible conditions for learning which call for careful and regular scrutiny. The purposes of evaluation in improving the service would be achieved when its outcomes are used to assess continuing needs.

4.2.3.4.3 English model of school self-evaluation

Saunders (1999) contends that there have been observable changes of focus in the UK government thinking over years, about the role schools have in evaluating educational quality and performance. As mentioned earlier, the literature emanating from policy bodies, makes it clear that the primary function of school self-evaluation is school improvement. The 1997 White

Paper: Excellence in school in Britain, acknowledged that setting targets would not by itself be sufficient to bring about improvement in performance – schools would need to engage in self-evaluation. Thus, a five stage cycle for self-evaluation and annual improvement have been promoted by the Department of Education and Employment (DfEE). The five stage cycle comprise (Saunders, 1999; 417):

- Review of quality of performance, pedagogy and management;
- Diagnostic comparison with other similar schools;
- Setting of specific school-based targets focussed on raising pupil's achievement;
- Development planning to implement targets; and
- Evaluation of action taken and impact on pupils.

Figure 4.1 represent the core principles of the English model of school self-evaluation.

Figure 4.1 Guiding principles for school self-evaluation

SCHOOL SELF-EVALUATION:

- is one criterion of an effective school
- **involves values and ethical questions**
- *is part of the spectrum of quality evaluation of a country's system of education*
- enhances the relationship between schools & agencies

School self-evaluation can:

- **use creative & imaginative approaches** e.g., **photography** as well as investigative techniques, e.g. questionnaires, interviews & numerical data
- **start from a spirit of curiosity** as well as from *an intention to improve or develop the school*
- **give better insights into how things really are** as well as *pointers for action & change*

Self-evaluation should:

- **be 'democratic'**, i.e. promote democratic beliefs & practices through consultation & negotiation
- be 'responsible', i.e. have *learning, success & happiness* of all pupils at its heart
- involve stakeholders, e.g. teachers, pupils, parents
- allow for the participation of a 'critical friend'
- be based on trust, teamwork, 'ownership' – **and fun!** As well as on *clear objectives & procedures*
- aim to understand people's **real-life experiences**. Vested interest, etc., as well as to analyse data
- be shared with participants, from setting out the aims to disseminating the outcomes

Source: Saunders (1999: 148)

Saunders (1999) argue that the English model could be characterised as instrumentalist, action-oriented, rationalistic and managerial. There is both a weak and a strong or radical interpretation of what is missing. According to him, the model aims at:

- Being systematic;
- Having a comprehensible framework;
- Developing a set of transferable procedures;

- Maintaining a clear hierarchy of accountabilities;
- Providing robust evidence (performance data and other performance indicators);
- Working to an explicit national/local agenda; and
- Assisting directly with educational strategy.

Again, on the OFSTED (1998) guidance to schools on self-evaluation, the main focus is on academic achievement. It is important to note that the guidelines state that self-evaluation complements external inspection and it is clearly desirable to use shared criteria for both. Hence the policy on WSE in South Africa points out that school self-evaluation will form the basis upon which the early part of the external evaluation will be conducted.

4.3 MEASURING PROGRESS IN SCHOOLS

Once a school commits itself to constant improvement and achieves a workable organisational focus, the question that usually arises is how is this improvement or quality measured. Latta & Downey (1994) observed that most professions have recognised means of measuring quality, while education does not have a set of accepted tools for this purpose. But they maintain that education profession could benefit from having both precise measuring tools as well as people with necessary skills to use them properly. Tools and techniques could be used to improve work processes. According to Bowring-Carr & West-Burnham (1994), measurement is an important attribute of a school striving towards quality education. Without precise, frequent and comprehensive measurements, the school would not know where it is going or when it has reached the desired goal.

In this section, a group of statistical tools that could be used for statistical process control in an attempt to continuously improve the quality of educational processes of the school will be discussed. Firstly, a brief discussion of the group processes followed by ways of identifying and analysing problems and then the identification of strategies for planning and implementation.

4.3.1 Group processes

Total quality is characterised by management style that is participative and co-operative. The style encourages group thinking on how to use the tools and techniques to improve education. Latta and Downey (1994) argue that two heads are always better than one, they thus encourage group work when using quality tools. Groups or teams can perform better than a collection of individuals because of synergy in which the whole is better than the sum of its parts (Reynolds, 1994). Sallis (1993) also confirmed group processes and regards teams as engines of quality improvement. To have quality schools, teams need to be effective. For example, they should take less time to come up with high quality decisions, consistently improving their performance, meeting targets and deadlines (Bowring-Carr and West-Burnham, 1994). This implies that the staff should be trained to be effective and positive team members. Groups and teams should understand that they have different functions within a quality school. These functions will be discussed in the next section.

4.3.1.1 Quality council

In a school there should be a group of staff members who initiate the quality concept, since quality will never happen by accident. According to Reynolds (1994) activities to assure and assess quality in an organisation need to be thoroughly planned by the quality council. An important member of the quality council is the principal in the school and other senior members. The members of the council should formulate a quality policy and design ways of introducing quality initiative to the whole staff. This would involve staff development training. Reynolds (1994) believes that the quality council should also examine the costs of quality at the initial stage. Within the school context, three areas for analysis of the costs of quality are (Greenwood and Gaunt, 1994: 82-87):

- Quality failure;
- Appraisal of quality; and
- Prevention costs.

4.3.1.2 Quality teams

The word 'teams and teamwork' are used widely to describe groups of people and group activity. According to Kehoe (1996) all organisations on the road to quality development use teams. Teamwork is universally adopted as a vehicle for change and organisational mechanism for involving people in quality improvement. The benefits of team-based approach include

improved solutions to quality problems; improved ownership of solutions; improved communications and improved integration (Kehoe, 1996:72).

Sallis (1993:92) refers to quality teams as project teams. The brief of each team is usually limited and makes it easier to achieve successes with small manageable tasks. Hence Reynolds (1994:49) argues that improvement teams differs from the quality circle in that it has a limited life. Once a particular problem has been solved, the team is disbanded. Quality teams again do not necessarily come from the same class, department or group as in the case of quality circle. The composition of the team, is determined by those people who have a meaningful contribution to make towards improving a process or solving a problem (Hayward, 1998). For an example, if a quality improvement team is to be assembled, an important question is who should be included in the team? Basic guidelines for building effective teams suggest that team members should include (Kehoe, 1996:67):

- Those individuals affected by the problem;
- Those individuals likely to be involved; and
- Those individuals with appropriate skills.



This responsibility or skills dimension to teambuilding is clearly important as all teams have a basic knowledge requirement and should involve those people who understand the objectives and will own the solution. Balanced teams usually succeed while unbalanced ones usually fail. Thus, it is important to note that the balance of a team is achieved through an appropriate collection of individuals having different yet complimentary team roles. Recognising the significance of team roles and balance, and the

importance of providing the correct climate are important prerequisites for enabling quality development through teamwork (Kehoe, 1996).

4.3.1.3 Quality circle

According to Green (1994), Kaoru Ishikawa introduced the concept of quality circles in the theory of TQM in 1962. The idea behind quality circles was to bring workers together for regular meetings. In these meetings workers were encouraged to discuss ways of improving the workplace and the quality of work. They were to identify potential problems and to offer possible solutions to the maintenance of quality (Williams, 1994; Hayward, 1998).

Kehoe (1996) argues that before embarking upon a detailed problem-solving methodology, an organisation has to establish whether an approach to problem identification are classified as top-down deployed improvements or bottom-up self-identified improvements. The bottom-up approach to problem identification utilises the detailed knowledge of the individual team members to pinpoint opportunities for improvements. Such improvements teams, which are referred to as quality circles or quality circle teams, are normally made up from volunteers within a particular function or department (Sallis, 1993; Kehoe, 1996). Their brief is an ongoing one, which aim at identifying and improving quality problems. This implies that the teams operate on an ongoing basis whereby the group progresses from one project to the next. The approach adopted by bottom-up improvement teams include the following stages:

- **Stage 1:** Brainstorming activity by members of the team to identify quality problems within their function of department.
- **Sage 2:** Prioritise the problems identified in stage 1 according to the importance perceived by the team and the probability of solving the problem.
- **Stage 3:** Tackle each of the quality improvement project in priority order ensuring the team is responsible for implementing the improvements recommended.

Hayward (1998) believes that there are many solutions in which the quality circles concept can be used within the school. According to him teachers in a particular grade can establish a quality circle. In British primary schools, quality circles have been used with great success. In these schools circle team provides the ideal group listening system for enhancing children's self-esteem, promoting moral values, building a sense of team and developing social skills (Mosley, 1997).

Quality circles are not committees; they do not have chairpersons and secretaries. They do not produce minutes but they produce solutions. To succeed they must have training, access to data, support from senior management, meet in company time, and receive recognition for success (Doherty, 1994). Hence Atkinson (1990:89) concludes that quality circles are not a panacea but they can have dramatic results in terms of staff involvement, moral values and identification with the aim of the organisation. Without support they will fail.

4.3.2 Problem solving tools

Quality improvement teams require a basic set of analytical techniques that will assist in measurement, understanding, pinpointing and solving problems. The Japanese quality 'guru' Ishikawa proposed the following seven problem solving tools which should be understood by all employees involved in quality improvement (Kehoe 1996: 181):

- flow charts;
- tally charts;
- histograms;
- pareto analysis;
- cause and effect analysis (fish bone diagram);
- scatter diagrams; and
- Control charts.

These tools also help the school to plan for improvement on the basis of sound knowledge of the problem or area to be improved. Some of the problem analysis tools are outlined below.

4.3.2.1 *Pareto analysis*

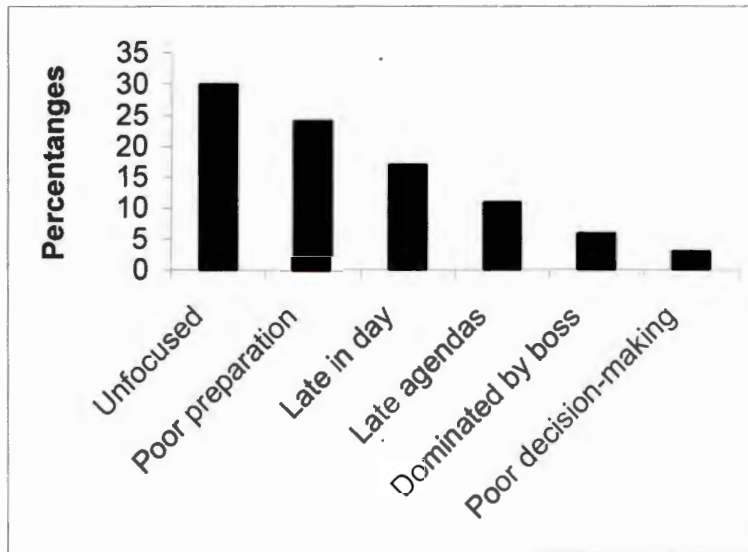
Pareto analysis is an approach to pinpoint problems through the identification and separation of the vital few from the trivial many (Bradley, 1994; Kehoe, 1996). The technique is named after a nineteenth century Italian economist and social scientist Vilfredo Pareto, who examined the

distribution of wealth in Italian society and found that a relatively small number of people owned a proportionately large amount of the wealth.

According to Bradley (1994) the chart derives its name from the Pareto principle which states that 80% of the trouble comes from 20% of the problem. Therefore, its purpose is to focus improvement efforts by ranking problems or their causes. Murgatroyd & Morgan (1993) advise that if this is not remembered, a lot of time could be spent focussing on a range of causes that make little difference to the problem in hand. By using pareto chart – a special kind of histogram - the team looks at a problem and identify primary causes and seek to effect the causes that matter most. The objective is to sort out the ‘wheat from the chaff’, in other words to identify the critical elements which are contributing to the majority of the problem (Kehoe, 1996).

Murgatroyd and Morgan (1993) described a situation in which they attempted to identify in one school system, why staff meetings are not as useful as they should be. The results are represented on figure 4.2. Such a chart could help a school or system to look at what to focus on to make a difference to the problem at hand. From the results, it is evident that getting the meetings more focussed for the staff attending the meeting and would remove some of the frustration with the problem (Murgatroyd and Morgan, 1993).

Figure 4.2: School staff meeting in our system – why they are not useful.



Source: Murgatroyd and Morgan (1993: 180)

In terms of problem solving, the quality improvement team could use this approach to focus their attention on the relatively small number of factors/causes, which contribute most to the problem. Although Murgatroyd and Morgan (1993) have indicated that school teams rarely use Pareto analysis in their attempts to solve problem, the device is very valuable in sorting wood from the trees.

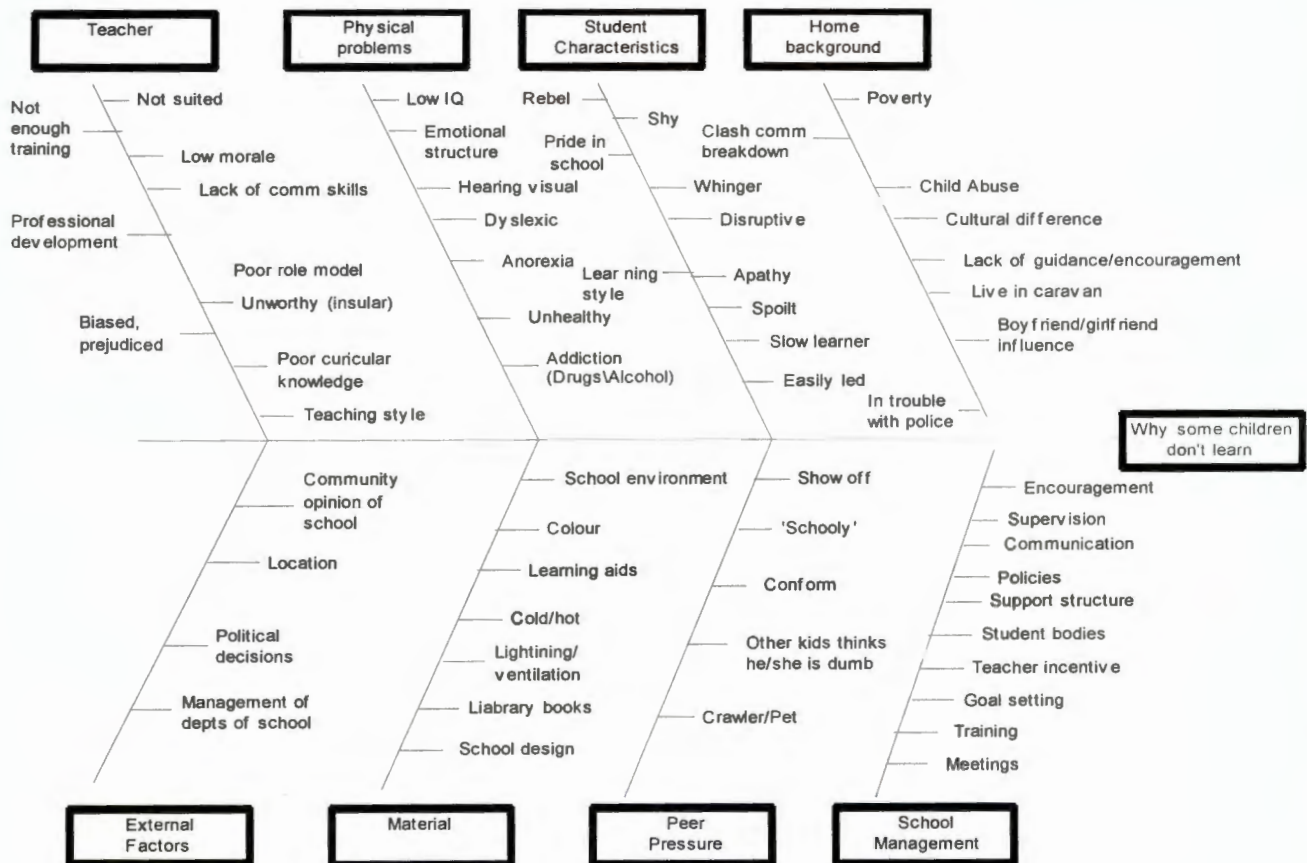
4.3.2.2 *Fishbone diagram/ Cause-effect diagram*

The Cause-effect diagram or Ishikawa is named after Kaoru Ishikawa who invented it (Murgatroyd and Morgan, 1993; Sallis, 1993). It is called

fishbone diagram because it frequently resembles the skeleton of a fish, with the problem statement represented by the head of the fish. Cause and effect analysis is used as a way of structuring the creative process of determining the root cause of a problem. The cause-effect diagram are the most effective within a school when (Murgatroyd and Morgan, 1993:169);

- the school is trying to diagnose a particular problem with more than one cause;
- the school wishes to change processes and needs to understand the processes better before moving to action; and
- The school team seeks to understand the links between its work and that of other teams.

Figure 4.3 Fishbone / Cause-effect diagram



SOURCE: Paine et al. 1992: 114

There are a number of steps to be followed in the completion of a basic cause-effect diagram (Murgatroyd and Morgan, 1993:169):

- Identify the problem examined in a short sentence and treat this as the head of the fish in the fishbone.
- Identify the four basic parameters of the problem's cause that need to be examined by the team. The most frequently used 'causes' in our

use of this tool in schools are policies, procedures, people and equipment.

- Under each heading, look at the probable causes by brainstorming.
- Discuss the basic underlying causes.

Figure 4.3 represent cause-effect diagram, which identifies why certain learners do not learn effectively. In the diagram, a number of causes that result in a problem have been identified, why some children don't learn. Among the causes are teachers, physical problems, student characteristics, and peer pressure and school management. Each cause can have subdivisions; for example a teacher could have insufficient training or show biased prejudicial behaviour towards learner(s).

Of great importance is that the cause-effect diagram are normally generated as part of a team-based brainstorming exercise in which all members of the team are encouraged to contribute ideas on the possible causes of the problem. By drawing the cause and effect diagram a 'rich picture' of the problem is created to which subsequent solutions can be more readily attached (Kehoe, 1996).

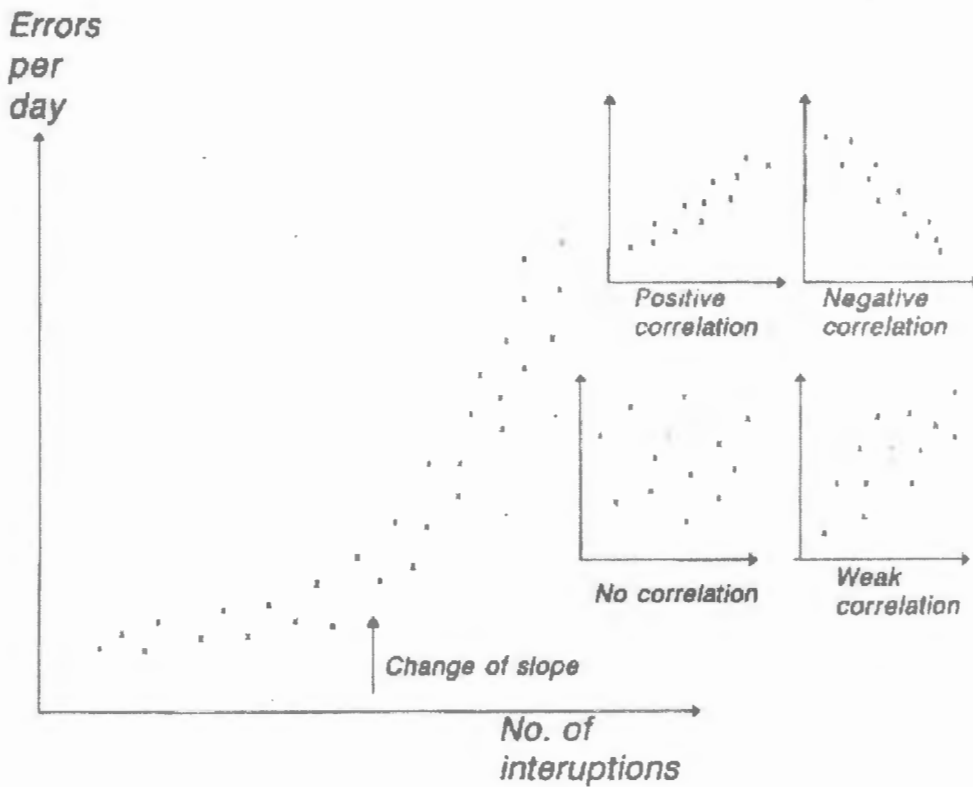
4.3.2.3 Scatter diagram



Scatter diagram is a simple diagram showing the relationship between two variables. It is used to examine what happens to one variable (x) when another variable (y) changes (Murgatroyd and Morgan, 1993). According to Kehoe (1996) it is a technique used to establish a causal link between two factors and often having established some correlation, the solution to the

problem becomes very much easier to identify. Latta & Downey (1994:40) define scatter diagram as a graph that plots one variable against another. The strength of the relationship is ascertained by the degree to which the cluster approximates a straight line.

Figure 4.4 Scatter diagram



Source: Kehoe (1996: 76)

Figure 4.4 represent scatter diagrams in which a number of different instances are shown on the diagram. Such diagrams can illustrate (Kehoe, 1996, Bradley, 1994):

- positive correlation;
- negative correlation;
- curvilinear correlation;
- weak correlation; and
- No correlation.

4.3.2.4 *Swot Analysis*

A quality school needs to have a long-term strategy. A strategy is a broad statement that relates the overall approach and direction towards the achievement of a mission. Blandford (1997) believes that developing and maintaining a strategy involves establishing a framework within which an operational plan can take place. The choice of strategy ultimately depends on decisions about following four generic strategies (Murgatroyd and Morgan, 1993:26-27):

- Access, refers to the extent to which students have free access to the school of their choice. Does the school manage the balance between able-bodied student and students with special learning needs or physical disabilities. These are examples of access decisions that the school should make.
- Resources, refers to financial resources, people resources, learning resources and new technology available to the school.
- Curriculum (services mix) refers to the processes of pedagogy in the school as well as the learning outcomes intended from this pedagogy.

- Management, referring to the ability of the school staff to provide an appropriate service mix to the students who have gained access to the school within the limits of available resources, and acquire high student performance.

The critical question is ‘which of these generic strategies do your school wish to pursue and is the school pursuing a strategy that is right to them? A basic tool that would be helpful in examining school’s current position is SWOT Analysis. SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats (Quality Learning Project; 2001; Murgatroyd and Morgan, 1993; Sallis, 1993). Strategic planning is a long-term planning, which takes into consideration the strengths and weaknesses of the organisation and external factors such as government directives or policies. Figure 4.5 represent an example of SWOT analysis conducted by a British school, when it was about to be merged with another school.

According to Sallis (1993) in Swot analysis there is an internal analysis and environmental analysis. The internal analysis looks at the strengths and weaknesses of how the institution is performing. In the environmental analysis focus is on how a school performs in relation to other schools in its neighbourhood, that is, schools opportunities and threats. The purpose of SWOT analysis is thus a means to maximise strengths, minimise weaknesses, build on opportunities and reduce threats (Sallis, 1993; Hayward, 1998).

Figure 4.5 Swot Analysis

STRENGTHS ▪ A strong enrolment ▪ Enthusiastic management team ▪ Excellent examination results ▪ Strong music, art & drama departments ▪ Strong staff morale ▪ Good staff morale ▪ Supportive Governors	WEAKNESSES ▪ Old buildings in poor decorative condition ▪ High average age of staff ▪ Inadequate budget ▪ Lack of car parking ▪ Inadequate sports facilities
OPPORTUNITIES ▪ Merger with local institution with an excellent site but mediocre reputation ▪ Develop reputation in sport ▪ The excitement of establishing a new institution ▪ The opportunity to enlarge staff expertise in order to increase the range of offerings ▪ The merged institution may attract additional funding	THREATS ▪ Loss of identity, strengths and reputation ▪ Risk of losing experienced teachers who may take early retirement ▪ That the ethos of the other institution may become dominant ▪ Possible loss of some supportive Governors

Source (Sallis 1993:114)

4.3.3 Planning and Implementation

Once a school has identified the problem or challenges, it is then possible to plan and implement change strategies. Development planning is a process that has a number of steps. It is very important that planning be done in a logical and careful way. Again, having a plan is not enough. Follow-through is an important part of the process. Follow-up consists of implementation and monitoring (Quality Learning Project; 2001).

4.3.3.1 *Action Plan*

An action plan helps schools to identify the necessary steps for reaching their goals in the most efficient way possible. According to Quality Learning Project (2001) without Action plan, time and resources are wasted. Confusion regarding responsibilities amongst the staff members might arise.

This implies that there must be an agreed-upon action plan. Latta & Downey (1994) believe that group action-planning process is a formal improvement plan to which everyone would be committed and united in its completion. They also devised a thirteen-point action plan (Latta and Downey, 1994: 105-106):

- Establish a representation group (six to eight people)
- Review the analysed data and validate the improvement objective.
- Conduct an analysis of resources and constraints.
- Identify alternative solution to the problem
- Select the quality alternative solution that has best chance of meeting the improvement objective
- Agree on a format for improvement plan.
- Identify and select activities for implementing the solution strategy.
- List activities in the sequence they need to be completed.
- Individuals agree on issues as responsibilities, time frame, resources needed.
- Complete the improvement plan by placing the specifics on the planning sheet
- Everyone gets a copy of the plan developed

- Establish and agree on schedule for meeting to discuss progress
- Individually and as a group, implement the improvement plan

The elements of an action plan as shown on figure 4.6 are covered by the following six basic questions (School Development; 60-61):

- What must be done?
- When will it be done?
- By when will the target be achieved? (target date)
- Who is responsible for doing it?
- What resources are needed? (How much)
- How will we know when an activity has been successfully completed? (Performance Indicators).

Figure 4.6 An example of action plan

Target	What?	When?	Target date	Who?	How much?	Performance indicators
A programme of home visit is instituted.	- Draw up list of families requiring visits. - Prioritise order - Assign visits and set dates - Do visits - Write reports - Evaluate and decide how to continue	- By end of March - Before Easter - Week after Easter - During first six weeks, term 2 - Before end of term - First week of term 3	By middle of Term 3.	- Class teachers - Class teachers - Principal - All educators - Educator staff - Educator team	R500 for transport (money available in budget)	- List - Prioritise list for each class. - Schedule for each teacher - See reports - Written reports - Written recommendations

Source: North West Province (2001:61)

4.3.3.2 *Hoshin planning*

According to Costin (1996:14), a daily management system may not be sufficient to bring about needed improvement when the magnitude of a needed process improvement is widespread and involves the entire organisation. A breakthrough planning system may be needed. The system required is thus Hoshin Planning. Top management directs it but may involve teams throughout the organisation. The Hoshin planning system focuses the energy of the entire organisation on achieving a major improvement in a specific area of critical importance.

Hoshin is a Japanese term for the management concept of setting outrageous goals (Murgatroyd & Morgan, 1993; Hayward, 1998). Hoshin Planning is a method used to ensure that the mission, vision, goals and annual objectives of an organisation are communicated to and implemented by everyone from the executive level to the frontline level (Costin, 1996). It is a process of planning in which the whole notion of outrageous goals is shared within the organisation in a variety of ways.

There are seven principles that inform the Hoshin planning process. The principles are (Murgatroyd & Morgan 1993: 133-135)

- Participation of all stakeholders in the development of school vision statement;
- Empowerment that encourages individual's initiative and responsibility;
- Root causes should be tackled, not only symptoms;

- There should not be a link to performance appraisal;
- Quality and process improvements are prerequisites for sustainable improvements;
- Communicate vision and communicate with and between all in the organisation; and
- Focus on the process.

Murgatroyd and Morgan (1993) outlined six-step process that has been tried and tested in schools, hospitals and industry as the basis for Hoshin planning. It is assumed that a school would have articulated its vision and strategy before embarking on the following steps in Hoshin planning-:

Step 1: Imagining alternative circumstances

Teams in the organisation are asked to imagine what it will be like and what they would do if the school had more time to work with students.

Step 2: Considering the responses

Teams are to present their response to step 1 in the staff meeting. Careful listening by other members is crucial so that points of uncertainty could be clarified with presenters.

Step 3: Creating the Hoshin team and the outrageous goals.

Each team should identify one member to sit on cross-functional planning group. This team should be mandated to look at ideas from the various teams and should determine outrageous goals to be pursued by the school.

Step 4: Declaring the outrageous goals

The Hoshin cross-functional team should announce the outrageous goals. These goals should be achievable and challenging to everyone.

Step 5: Team empowerment

Every team and every member should be empowered to achieve the Hoshin goals. The members should be clear that What's are not negotiable while the How's are a matter for the team. The role of leadership is to communicate the goals aid and support the school's vision.

Step 6: Maximise feedback- good and bad

Each team should indicate how they progress in achieving the outrageous goals every month. Progress should be monitored constantly so that the degree of success is seen.

4.3.3.3 *PDSA Cycle*

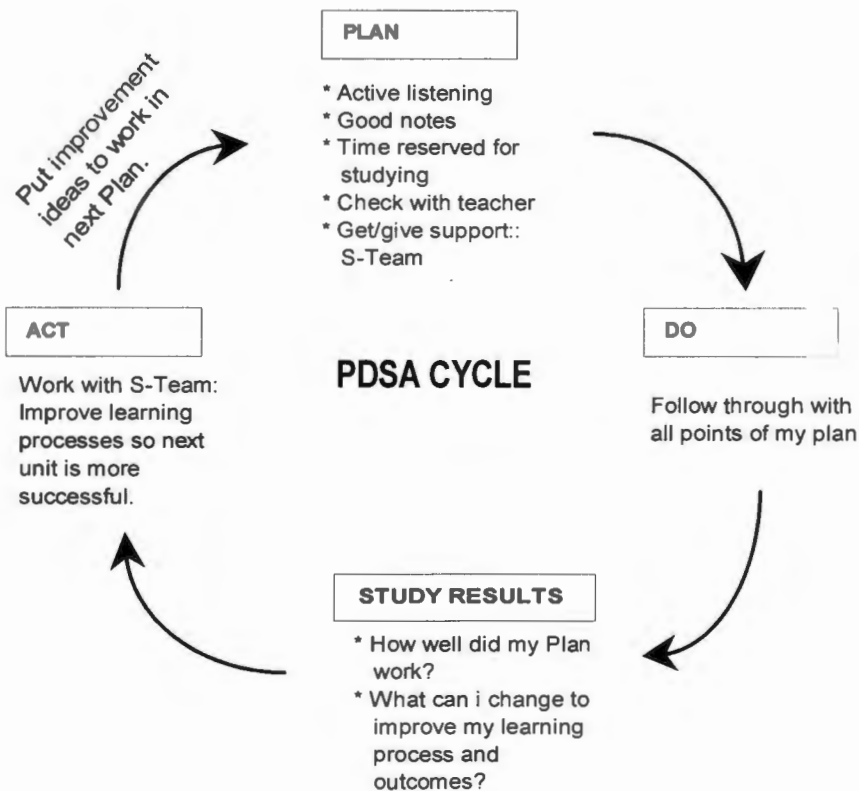
Costin (1996) believes that in order to become a high-performing team, the team members should learn and master the two most fundamental TQM concepts: continuous improvement and focus on the process. The Deming

cycle of PDSA – Plan, Do, Study, Act- is the simple and basic model for continuous improvement to be used. Figure 4.7 represents the PDSA model. According to Bonstingl (1992) the cycle is a useful tool for carrying on continuous improvement cycle. He also asserted that the PDSA cycle is the way students and people in general learn. Figure 4.7 indicates how students make never-ending commitment to improve the quality of their work. PDSA cycle has as its essence the notion of continuous improvement. In the cycle, the learner starts firstly by planning how to approach the work. The learner then does the work, and in the study stage, together with the educators they study the processes used to achieve the goals of the unit. In the last stage, strategies are devised to improve further the processes for the next work to be learned.

According to Costin (1996) many American corporations have learned the importance of the cycle and taught it to their teams. He suggested the following as important points, on what teams should be taught about (Costin, 1996:187):

- Understanding the concept of continuous improvement and its importance;
- Understanding the PDCA model for continuous improvement;

Figure 4.7 The PDSA Cycle



Source: Bonstingl, 1992: 60

- Understanding processes at work;
- Understanding process flow charting, from very general to very detailed; and
- Applying the PDCA model to many different kinds of individual and team activities and improvements.

In its simplest application, a team '*Plans*' some improvement- ideas, they '*Do*' it, then they '*Check*' (Audit) what they have done and its results. Finally they reflect and then '*Act*' on what they learned or experienced

(Costin, 1996:186). Another planning and implementation tool that will be discussed is De Bono thinking skills.

4.3.3.4 *De Bono thinking skills*

Edward De Bono developed and introduced many devices that are powerful to help with decision making (Murgatroyd & Morgan, 1994). His most important contribution being CORT programme (Cognitive Research Trust) that seeks to develop systematic thinking skills within an organisation. Schools that aim at continuous improvement, should stress effective use of thinking skills:

Murgatroyd & Morgan (1994:183) refer to another device for thinking skills – six thinking hats and six action shoes – as shown in Figure 4.8. These skills aim at organisational development.

They propose basic ways of working and thinking about problems and their solutions. For example, a team faced with a problem can adopt different thinking hats in dealing with the problem. Metaphorically or literally, the team could wear different coloured hats. If the different modes are used systematically, they could assist in getting to the crux of the problem. Once the team has thought systematically about a problem, a decision should be made about the action to be taken. De Bono's 'six action shoes' suggests that a team could adopt six action styles. Before deciding an appropriate action, the team should look carefully about what the actions would look like

Figure 4.8 Six thinking hats and Six action shoes

*Six thinking hats-different hats for different styles
(Watch my Hat!)*

White hat: Facts
 Red hat: Feelings
 Black hat: Negative judgement
 Yellow hat: Constructive suggestions
 Green hat: Brainstorming
 Blue hat: Conductor of thinking orchestra

*Six action shoes-different shoes for different actions
(Watch my feet!)*

Navy formal shoes: Routine behaviours
 Grey sneakers: collecting information and thinking
 Brown brogues: Pragmatism-doing what can be done
 Orange gumboots: Action to reduce danger
 Pink slippers: Sympathy, compassion and help
 Purple riding boots: Playing the status role

Source: Murgatroyd & Morgan (1994)

NWU
LIBRARY

for different action style. Murgatroyd & Morgan (1994) believe that 'thinking hats' and 'action-shoes' are useful devices for encouraging and enabling teams to become more self-managing over time. They are effective in getting to the heart of problems and deciding what actions can be taken. Of importance is that the device were extensively used in schools to indicate how staff meetings can be managed differently. An organisation planning for improvement needs stakeholders with appropriate skills. All staff members need to develop skill of working in teams.

4.4 INSTITUTIONS EXPERIENCES

4.4.1 South Bank University TQM initiative

In the context of the demands of quality assurance by Higher education Quality Councils, the South Bank University launched the total quality management initiative in 1992. There was a growing need to improve the efficiency and effectiveness of their service to students. Three main reasons for the TQM initiative that were cited by Chadwick (1994:131) as follows:

- Providing quality service is explicit in the institution's mission statement and reflects the fact that the majority of people in South Bank wish to do their job to the best of their abilities;
- The quality of South Bank's provision determines the university's success in attracting students and commercial contracts; and
- The HEFCE quality assessment will take account of the quality of the students learning experience. This experience is influenced by academic programmes and the service students receive from all areas of the university.

The TQM initiative was based on quality in organisation and service delivery and required a number of transformation phases. According to Chadwick (1994) South Bank are well underway and were introduced in the following three phases:

- PHASE 1: The phase began in 1991 and senior staff were involved in examining the corporate process and culture of the institution. Heads were engaged in drawing up draft statements and aims for their own

schools or departments. Other staff members identified the functions of each unit and the transformation needed. Different departments drew their own aims statements to describe their organisation's intended performance and a list of quality standard and related benchmarks to measure practice against the standards set. Agreed aims, statements, draft quality standards and benchmarks were published for all departments across South Bank University.

- PHASE II Involved the formulation of quality service agreements based on the draft standards and benchmarks. Geddes (1993) argues that quality cannot be imposed from above. It was believed that quality standards needed continual review and updating based on the monitoring of their practice and learning. Thus thirty-three different Customer/Supplier working Groups (CSWGs) across the academic schools, departments, that had direct contact with students and support department were set up. Each group was facilitated by a senior directorate colleague and provided with detailed workbooks out-lining TQM principles and specific guidelines on the process. The quality service agreements were to come into operation in the academic year 1993/1994.
- PHASE III: This phase started in 1994 and involved setting up quality improvement teams. The teams were to investigate which quality improvements goals of Phase II could be achieved and what plans to be implemented. Although measurement of quality is not easy, there should be some attempts to ascertain whether quality is improving, remaining the same or declining. These subsequent phases were to be

concerned with reviewing quality improvements achievements against plans, ensuring that any gains are held, evaluating and identifying success, and reviewing the annual review of quality service agreements would be firmly established as part of annual strategic planning cycle of South Bank University within five years.

Alongside the phases the university followed to assure quality, a comprehensive survey of students opinion was taken in 1993 - Student satisfaction questionnaire. When TQM initiative was launched in 1992. South Bank had few effective policies in place for addressing quality assurance in teaching. Thus, during the TQM initiative, its line of enquiry included teaching staff's competence and aptitude, the effectiveness of induction and staff development action taken to maintain and enhance quality in teaching and learning. In conclusion, Chadwick (1994) believes that quality is about being accountable to customers, be they students in or outside the community, through course evaluations, students opinion – survey or degree results. What is effective is an institution, which takes responsibility for quality on itself by internal self-evaluation.

4.4.2 Application of quality management at Mt Edgecumbe High School – Alaska

Tribus visited Mt Edgecumbe High School in 1990 because it was using TQM in education then. The school had adopted TQM as part of its culture. Mt Edgecumbe High School is a residential school with a very small enrolment as compared to the national average. With 210 students and a staff

of thirteen, most incoming students were from villages and settlements in Alaska, which mostly rural.

The school's superintendent planned courses in entrepreneurship and sought teachers who would use 'project – oriented learning' as a way to get the students into a habit of being purposeful in the application of what they learned (Tribus, 1994). David Langford, one of the staff members who was extremely enthusiastic, once attended a session with an executive in a company involved in quality movement. He became excited with TQM concept and read widely about quality. He concluded that Deming's ideas could be applied in education. Langford invited the superintendent to attend Deming's seminar and both were convinced that Deming's message would apply to their school.

Langford began to introduce Deming's ideas in his business classes by adding a special course on 'Continuous improvement'. As students were reading 'Out of the crisis', Langford was preparing workbooks for his students to develop data on their study habits. By applying simple run charts to their study habit, students began to discover and remove inefficiencies from their lives.

According to Sallis (1994), students in this school have rewritten Deming's fourteen points so that their application in education is more apparent. They also identified the various customer-supplier relationships. These attempts guided them towards improving continuously in their studies. Again the class schedule was changed to combine functions. For example, when a report for entrepreneurship class is written, the reports would also be

accepted as part of the English essay. In this way Deming's point of 'eliminate barriers between departments' was adopted (Sallis, 1994). Since the school started implementing Deming's ideas, students behaviour problems also decreased and they managed to enter and graduate in colleges.

4.5 SUMMARY

This chapter examined tools and techniques for quality schools. Particular attention was paid first to the issue of what quality schools entailed. Secondly, the chapter concentrated on tools and techniques that a school could use to implement effectively, manage and assure the quality of education provided. The last part looked into institutions that successfully used principles of TQM to manage and assure that the kind of education provided is of the required quality.

On the issue of quality schools, it has been found that quality schools are those that meet the needs of customers. Therefore, customers in the school system were identified and also classified into external and internal customers. It is clear that, customer-focus schools emphasises:

- Customer priorities;
- Lack of hierarchy;
- Self-monitoring and inspection;
- Collaboration;
- Horizontal communication;
- Cooperation;
- Flow chart; and

- Team responsibility.

In pursuit of quality, educators and learners must be continuously engaged in a process of finding opportunities for improving the quality of teaching learning process. For a school to be able to implement and deliver quality, there is a need to identify the present problems and analyse the school's situation. In this chapter a number of tools and techniques that could be used for problem identification and analysis were described. Planning and implementation techniques were also identified. These included the following three aspects:

- Group processes
 - Quality teams;
 - Quality council; and
 - Quality circles.
- Problem solving tools
 - Pareto analysis;
 - Cause effect diagram;
 - Scatter diagram; and
 - Swot analysis
- Planning and implementation
 - Action plan;
 - Hoshin planning;
 - PDSA cycle; and
 - De bono thinking skills.

The literature consulted expressed the importance of using the tool and techniques as initiatives for continuous improvement. Murgatroyd & Morgan (1994) stressed that the more systematically teams use these tools, the greater the likelihood that quality work will be done. This implies that the tools will be of assistance to the organisations that strive for continuous improvement. It is thus up to the school to decide which particular quality toolkit are to be used and which are most suitable for the abilities and interests of its stakeholders.

5. RESEARCH METHODOLOGY

5.1 INTRODUCTION

This chapter entails a description of empirical research which was undertaken. 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 aims of the study as stated in chapter 1, were the guiding force in this study. It aims at exploring the customers' perception on how to improve and assure the quality of education provided by schools. In addition to the different models of managing and assuring quality, as discussed in chapter 2, 3 and 4, the study aimed at developing a quality assurance programme, which would help school managers and educators to continuously improve and assure quality in their schools.

5.2 RESEARCH TOOLS

According to Borg and Gall (1989), questionnaires and interviews are the most common instruments for data collection in research. Thus, both the questionnaires and structured-interviews were employed for data collection in this study.

5.2.1 Questionnaire as a research tool

Researchers collect data through a variety of methods, using a sample of individuals presumed to have certain experiences, and interviewing them

**NWU
LIBRARY**

concerning their experiences. In survey research, methods mostly used are personal interviews, mail questionnaires and telephonic interviews (Best and Kahn, 1989; Molebaloa, 1996). The questionnaire is commonly used as a tool for data collection. Cohen and Manion (1985) stated that the mail questionnaire is the best form of survey in carrying out an educational inquiry. The most important aspect of this type of data collection is that it is the only means of communication between the respondents and the researcher (Legotlo, 1996; 1994). It is a device that enables respondents to answer questions posed by the researcher. A questionnaire is a document completed by respondents in their own time, usually without the supervision of the researcher (Wierma, 1985).

5.2.1.1 Advantages of questionnaires

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

- Low unit cost: travelling and subsistence costs are minimal;
- Homogeneous stimuli: the stimuli provided are identical since questionnaires are identical;
- Geographical coverage respondents from all parts of the country could be reached;
- Anonymity of respondents: the respondents names are not given;
- Speed: information from many respondents could be obtained within a month; and
- Ease of processing: the questionnaire could be carefully structured and precoded, and few open-ended questions are used.

5.2.1.2 *Disadvantages of questionnaires*

Despite the advantages of questionnaires as a method of data collection, if it is not used carefully, it might have the following disadvantages:

- Representativeness: high non-response rate is common;
- Impersonal: may cause frustration to some respondents;
- Negative attitudes to the questionnaire: questionnaires are commonly used these days and some respondents might have negative attitude towards them;
- Availability of addresses of the sample population poses some problems; and
- In all types of questionnaires, the danger of misinterpretation of questions exists as it is very difficult to formulate questions that, convey the same meaning to all readers (Ramjan, 1994: 193).

Despite these disadvantages, the mail questionnaire is still commonly used to collect data. Researchers have identified a number of factors and several aspects of design and layout in securing a good response rate to a postal questionnaire (Cohen and Manion, 1985; Borg and Gall, 1989). These factors are:

- The appearance of the questionnaire is vitally important. It should look easy and attractive.
- Clarity of wording and simplicity of design is essential. Clear instructions should guide the respondents.

- Contents of the questionnaire should be arranged in such a way as to maximise co-operation.
- The practice of sublettering questions is a useful technique for grouping together questions to do with a specific issue.
- The wording of self-completion questionnaire is of paramount importance and pretesting is crucial to its success.

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

5.2.2 Questionnaire construction

The construction of questionnaires requires considerable time and thoroughness. Great care should be taken in the construction of the questionnaire because the measuring instrument has the greatest influence on the reliability of the collected data. A well-designed questionnaire boosts the reliability and validity of the data to acceptable level of tolerance (Schnetler, 1989:44). Even though the questionnaire is commonly used as a tool for data collection, there are certain criticisms against its use. Wierma (1985; 146) and Schnetler (1989; 44) highlighted the following criticisms against the use of questionnaires:

- Excessive non-response rate;
- Poorly-constructed items;
- Questionnaires dealing with trivial information; and
- Data from different questions are difficult to syntheses.

Borg and Gall (1989:430-431) indicated the following rules for constructing a questionnaire:

- Clarity, items should mean the same to all 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;
- Biased questions are to be avoided;
- Questions should be simple and deal with a single concept, it should be worded as clearly as possible (Leedy, 1989).
- The information required from the respondents must be precise;
- The questionnaire should be constructed in such a manner that the data given are obtainable within the minimum of respondent's time (Ary et al. 1985); and
- There should not be too many or too few items on a specific element (Labuschagne, 1994).

5.2.2.1 Development of questionnaire items

The main aim of the questionnaire was to gather information about customers' perception on the skills required to continuously improve the quality of teaching and learning in their schools. Part of the instrument has been successfully used to determine the schools' readiness to change (Herman, 1983:38).

Three important strategies were employed in the development of the questionnaire:

Firstly, issues and challenges stated in the literature on strategies and skills required for managing, providing and assuring quality were thoroughly examined in chapter 2, 3 and 4.

Secondly, in August and October 2000, the researcher interviewed Prof. Farrell and Terry Dillon from Britain on how quality is been assured in schools (Dillon,2000; Farrel, 2001). The director of the newly established quality assurance directorate Dr. Mgijima (National department) and Mr Molale (North West Provincial Department) were also interviewed on how South Africa is approaching issues of quality assurance and improvement in schools. Again, in September 2000, extensive interviews were conducted with professors in the faculty of education and Business management in James Cooke's University in Cairns- Australia and Prof. Killen from University of Newcastle – Australia. The main focus of these interviews were to gather information on their view on quality assurance in schools and to learn about the Australian approach on assuring the quality of education in schools.

5.2.2.2 Format and content of the questionnaire

The questionnaire was divided into four sections (see Appendix A), according to the following focus:

SECTION A: (questions 1 – 7). The purpose of these questions was to gather the biographical and demographical information about each respondent. This information is essential to understand the background information of the respondent. It is important to know the profile of each respondent, and from which category of school are they from as compared to others.

SECTION B:(question 8.1 – 8.12). The purpose of these questions was to assess whether the schools are ready to transform using a 12-item instrument from School Readiness To Change (Herman, 1983). For each item the respondents were to reflect on a four-point scale the extent their schools are ready for change and quality improvement (1 = strong disagree; 2 = disagree; 3 = agree; 4 = strongly agree).

SECTION C: (question 9.1 – 9.16). To determine the attributes that educators should possess in order to provide high-quality educational experience, these questions were constructed to elicit attributes for providing quality education. In this 16-item instrument, respondents were asked to indicate their perception on a four-point scale (1= strongly disagree; 2= disagree; 3= agree; 4= strongly agree).

SECTION D: (question 10.1 –10.18 and 11 – 14). The objective of these questions was to determine the respondents' personal needs with regard the internal assessment of quality in schools. A space was also provided for respondents to comment on the best practices for assuring quality in schools. Questions 11 – 14 were also used in interviews with circuit managers and /or district managers.

5.2.3 Pre-testing the questionnaire

According to Leedy (1989), questionnaires should be pre-tested on a small population in what is often referred to as a pilot-study. A pilot-study is a small-scale preliminary investigation designed to acquaint the researcher with the flaws and problems that need attention before the major study. Pilot-study offers the researcher an opportunity to pre-test the instrument. The major purpose of pilot-study is to detect the problems that must be solved before the study (Legotlo, 1994), that is, to verify whether there are items the subjects may have difficulty in comprehending precisely or misunderstanding .

To determine any ambiguity and flaws, the questionnaire was pre-tested, using a total sample of 10 members of SMT's (5 principals and 5 deputy principals). All ten respondents were asked to complete the questionnaire and to indicate whether some seemed ambiguous to them, and also to comment on other points that might need to be considered to improve the instrument (Borg and Gall, 1989:435).

Pre-test results were checked, and suggestions made by the respondents were taken into consideration to improve the questionnaire. The sample population used during pre-testing was not used in the final study.

5.2.4 Final questionnaire

The final questionnaire after pre-testing was administered to 500 respondents from the 10 districts of education in the North West Province.

**NWU
LIBRARY**

5.2.5 Covering letter

A covering letter accompanied every mailed questionnaire. A covering letter is a tool employed to introduce the questionnaire to the respondents with the main purpose of getting them to respond to the questionnaire. It gives the respondents direction in the completion of the questionnaire, direction about returning the questionnaire and guarantees anonymity (Borg and Gall, 1989: 436; Legotlo, 1994: 168). The requirement of such a letter is that it should be short and neat but covering almost all the details.

A simple and straightforward covering letter that explained the purpose of the study accompanied the questionnaire to the respondents (Appendix C). The letter also reassured the respondents that all the information they provided would remain confidential. It also guided the respondents on how to return the questionnaire.

5.3 ADMINISTRATION PROCEDURES

Permission for access to schools was first secured from the 10 district managers in the North West Province. The lists of all schools (primary and secondary schools) in the province were obtained from the Project Centre. From the information obtained, ten (10) schools in each district were sampled and the location of those schools obtained from the respective district offices.

Since access to schools setting was readily achieved, the researcher first visited the sampled schools. The aim of the visits was to explain to the Principals the objectives of the study and the nature of data to be collected. In some schools the researcher met the Deputy principals. Most of them expressed their full co-operation in data collection. In some schools, Principals voiced out the concern that they usually help researchers by completing their questionnaires, but they are never informed about the outcomes or the results of these studies. Some asked whether there is place where such results are kept, where they could access them as they feel they might be of great help in their day-to-day running of their schools.

Questionnaires were distributed during the second visits in most districts. The researcher requested the principal to help with the distribution of questionnaires. In each school the questionnaire was to be completed by the principal, Deputy principal, and three HODs. The covering letter that accompanied the questionnaires (Appendix C) explained that in the case of schools without the Deputy principal or where the number of HODs is less than the required number, the questionnaire should be completed by senior teacher(s). The arrangements for collection of completed questionnaires were then made with the principals and circuit managers.

5.4 FOLLOW-UPS

Non-response is a major disadvantage of the questionnaire. The respondents may simply decide not to respond to the questionnaire. Cohen and Manion (1989) argue that although the degree of response to the questionnaire may correlate with the group being surveyed, certain measures should be taken to

ensure high response rate like a carefully planned questionnaire, self-stamped envelopes as well as self-explanatory covering letter. Follow-ups are also important in maximising response rate (Legotlo, 1996).

The researcher collected the questionnaires from the schools and the circuit office. Follow-ups were made telephonically with the principals of the selected schools and the circuit managers before collection. Thus, within three weeks majority of the questionnaires was collected.

5.5 POPULATION AND SAMPLING

According to Cohen and Manion (1989) population is readily identifiable when given sufficient resources to be contacted. Furthermore, population is a group of interest to the investigator, the group of which he or she would like the results of the project to be generalised. In this study, the survey population was to be drawn from all ten educational district of the North West Province. Thus, a list of all schools in the Province was obtained from the Project centre.

With the help of the District Managers a purposeful random sampling of ten (10) schools in each district (N=500) were selected to participate in the study. In each school, the instrument was administered to five respondents: the Principal, the Deputy principal, three HODs and /or senior educators in cases where the number of HODs are less than the required number as indicated in the covering letter (Appendix C). Again in each district, primary, secondary and combined schools were used in the sampled population. The use of the different categories of schools was very important to the

researcher, to determine if there is any significance difference in the views of the subject in the primary schools as compared to those in secondary schools.

5.6 DISTRIBUTION AND RESPONSE RATE

Questionnaires were distributed to 100 schools. Thus a sample of 500 respondents was selected to gather information on their perception on their needs in assuring and managing quality in schools.

Table 5.1 shows the distribution of sample population per district. It illustrates that 500 respondents participated in the study.

Table 5.1 Distribution and Responses rate of sampled population

DISTRICT	NO. OF SCHOOLS	NO OF SUBJECTS	RETURNED NO.	RETURNED %	NO. NOT RETURNED	% NOT RETURNED
1. Atamelang	10	50	42	84	8	16
2. Brits	10	50	39	78	11	22
3. Klerksdorp	10	50	35	70	15	30
4. Lichtenburg	10	50	50	100	-	-
5. Mabopane	10	50	36	72	14	28
6. Mafikeng	10	50	50	100	-	-
7. Potchefstroom	10	50	39	78	11	22
8. Rustenburg	10	50	32	64	18	36
9. Vryburg	10	50	50	100	-	-
10. Zeerust	10	50	23	46	27	54
TOTALS	100	500	396	79.2	104	20.8

Again, Table 5.1 reveals that of the total sampled population (500), only 396 (79.2%) returned usable questionnaires. This good response rate indicates the importance of regular follow-ups and the fact that questionnaire were personally delivered and collected by the researcher herself.

5.7 STATISTICAL TECHNIQUES

5.7.1 Descriptive data

A computer aided statistical analysis was employed. The SSPS –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. These included statistics like frequency distribution, percentages, means and standard deviation.

5.7.2 Qualitative data

In addition to frequency distribution and percentages of all items, practical significance and the statistical significance between group means were computed.

5.8 SUMMARY

In sum, the survey questionnaires were employed as the main instrument in the collection of data because of its advantages mentioned in 5.2.1.1. With the help of the University of North West statistical consultant, both descriptive and inferential statistics were employed to verify the importance of assuring quality in schools

6. DATA ANALYSIS AND INTERPRETATION

6.1 INTRODUCTION

This chapter reports on the results of the empirical investigation conducted to determine perceptions of educators, as well as views of respondents with regard to skills needed to manage and ensure quality of teaching and learning in schools. The qualitative and quantitative data collected through the investigation are summarised and discussed in this section.

6.2 REVIEW OF THE SUBJECTS

Of the total number of subjects, which were 500, 396 (79.2%) respondents returned the useable questionnaires (cf. 5.6).

6.3 BIOGRAPHICAL AND DATA OF RESPONDENTS

Table 6.1 was drawn to illustrate the picture of the biographical characteristics of the respondents. Such information helps to know who the respondents are. The information on both the principal and other members of the SMT are provided to highlight any difference and similarities in their views. A brief summary of the information provided in Table 6.1 is discussed.

TABLE 6.1 Description of the biographical data of respondents

1. AGE CATEGORY	<i>f</i>	%
1.1 Below 30	24	6.1
1.2 31 – 35	78	19.7
1.3 36 – 40	76	19.2
1.4 41 – 45	108	27.3
1.5 46 – 50	74	18.7
1.6 51 and above	36	9.1
TOTAL	396	100
2. GENDER		
Missing response	1	0.3
2.1 Male	175	44.2
2.2 Female	220	55.6
TOTAL	396	100
3. PRESENT POSITION		
3.1 Principal	85	21.5
3.2 Deputy Principal	53	13.4
3.3 Head Of Department	188	47.5
3.4 Educators	70	17.7
TOTAL	396	100
4. POSITION EXPERIENCE		
4.1 0 – 3 years	111	28.0
4.2 4 – 6 years	100	25.3
4.3 7 years and above	185	46.7
TOTAL	396	100
5. HIGHEST QUALIFICATION		
5.1 Diploma	171	43.2
5.2 Degree	140	35.4
5.3 Honours degree	64	16.2
5.4 Masters degree	7	1.8
5.5 Others	14	3.5
TOTAL	396	100

6. SCHOOL SETTLEMENT TYPE		
Missing response	1	0.3
6.1 Rural	256	64.6
6.2 Urban	139	35.1
TOTAL	396	100
7. SCHOOL CATEGORY		
7.1 Primary	181	45.7
7.2 Middle	62	15.7
7.3 High	107	27.0
7.4 Combined	46	11.6
TOTAL	396	100

6.3.1 Age category

The respondents reported their age by selecting one of the given six age groups. From Table 6.1 it is noted that 262 (66.2%) of the respondents were between 31 – 45 years old, while 110 (27.2%) respondents were more than 46 years old and only 24 (6.1%) old. This suggests that the majority of respondents (72.3%) are still far from the retiring age. They have a good chance to develop themselves on issues of improving and sharpening their professional blades. Through guidance and workshop they may accept and implement quality assurance programmes and improvement initiatives that come so rapidly in our education system. The implication is that within a decade, most schools would have experienced, seasoned and mature senior management teams, essential for improving the quality of learning and teaching.

6.3.2 Gender

There was one missing system in this variable. According to Table 6.1, 220 (55.6%) of the respondents were females and only 175 (44.2%) were males. Although the distribution of the male and female respondents is spread quite fairly, the study suggests that the current debate about gender equality in many spheres of life including education, is receiving attention.

6.3.3 Present position

Table 6.1 shows that of the total respondents, 188 (47.5%) were HODs, 85 (21.5%) were principals while only 53 (13.4%) were Deputy Principals. Schools with less than the required number of HODs and /or Deputy Principal, were requested to use their senior educators to complete the questionnaires. Hence 70 (17.7%) of respondents were educators. The lowest percentage of respondents held the Deputy Principal position. The implication is that because of the declining learner enrolment in many schools, contributed towards the number of Deputy Principals in the study.

6.3.4 Position experience

The respondents were also asked to state their experiences in the position they are holding. According to Table 6.1, 185 (47.7%) of respondents had an experience of over 7 years. Again 111 (28%) of respondents had an experience of 3 years while 100 (25.3%) have been in the position for 4 – 6 years. With the view of maintaining and improving the standards of

education in schools, experience is the best teacher. The services of the experienced educators are very essential, especially if they are willing to assist and guide the novice educators on instructional activities. They may be used as mentors to those who seek guidance. Their experience is essential in the process of improving quality of teaching and learning.

6.3.5 Highest qualification

The subjects were to report their highest qualifications as reflected on Table 6.1. Most of the respondents 171 (43.2%) held a diploma as the highest qualification, while 140 (35.4%) are in possession of a university degree. Due to the current debates and changes in the professional qualifications of educators, those with diploma might be regarded as professionally under-qualified. North West Province is one of the provinces of South Africa that has most educators who are under-qualified. Hence the current debate and negotiation with teacher formations concentrate on capacity building and professional upgrading of educators. Again the Department of Education has embarked on awarding bursaries to under-qualified educators to upgrade themselves for National Professional Education Diploma (NPED).

6.3.6 Settlement type of the school

Respondents were asked to indicate whether their schools were located in an urban or rural area. In this variable one case was missing. Table 6.1 indicates that 256 (64.6%) of respondents were teaching in rural schools, while 139 (35.1%) were in urban schools. It is a known fact that a large percentage of the North West Province is rural.

**NWU
LIBRARY**

6.3.7 School category

Table 6.1 shows that of the total respondents 181 (45.7%) were teaching in primary schools, 109 (42.7%) in secondary schools, while 46 (11.6%) in combined schools. The important finding is that quality should be provided and managed across all school types and categories. The designers of quality assurance programmes should design a programme that could be suitable for all categories of schools in the province.

6.4 PERCEPTIONS ON ASSURING AND IMPROVING QUALITY

The purpose of the study was to determine empirically the customers' perception on how to improve and assure quality of education in schools. The variables considered in the study were perceptions on:

- School readiness to change,
- Attributes of educational experience such as
 - Knowledge and understanding for quality improvement,
 - Skills for quality improvement,
 - Attitude on quality and
- Assessing quality in schools.

This section gives a discussion of these factors.

6.4.1 School's readiness to change (SRTC) and quality improvement

This section gives a brief summary of the respondents' views on the extent to which their schools are ready for any envisaged change or transformation that aims at improving the quality of education provided. The purpose of this section was to determine empirically the respondents'

perception on the extent to which their schools are ready for change. The views of a school- related quality approach involve change. The likelihood of success is much greater if the school aim at one, coordinated and complementary approach to transformation and a new systematic culture (Herman, 1983). Table 6.2 illustrates the respondents' perception on how ready their school are to transform and to start a journey to quality improvement. A brief summary of the findings as reflected on Table 6.2 are given.

TABLE 6.2: SCHOOL’S READINESS TO CHANGE

Items	No	SD	SD	D	D	A	A	SA	SA
	<i>f</i>	%	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%	<i>F</i>
8.1 My school has clear vision of what should be in future.			2	0.5	17	4.3	198	50	179
8.2 My school has a clear idea of needs that exist between the vision of what should be and its current state.	1	0.3	1	0.3	14	3.5	271	54.8	163
8.3 Internal forces are pressurising for change in my school.	2	0.5	20	5.1	48	12.1	182	46	144
8.4 External forces are pressurising for change in my school.	2	0.5	20	5.1	48	12.1	174	43.9	152
8.5 I believe that the changes required are great that they should transform my school structures and processes.	3	0.8	14	3.5	31	7.8	173	43.7	175
8.6 My school believes in continuous planning about ways to quality improvement.	1	0.3	4	1.0	15	3.8	181	45.7	195
8.7 My school’s management team, teachers, parents are constantly looking for ways to improve quality.	1	0.3	5	1.3	26	6.6	189	47.7	175
8.8 My school collects information about the impact, results and efforts related to students.	-	-	6	1.5	79	19.9	184	46.5	127
8.9 My school spends money to train those managing or learning about innovations that improve the school.	-	-	17	4.3	121	30.6	176	44.4	82
8.10 My school gives everyone credits for successes achieved and every success is publicly celebrated.	2	0.5	26	6.6	123	31.1	173	43.7	72
8.11 My school looks towards the future with positive vision.	-	-	2	0.5	22	5.6	205	51.8	167
8.12 My school provides continuing plans for improvement.	2	0.5	4	1.0	34	8.6	169	42.7	187

Key: SD = Strongly Disagree D = Disagree A = Agree SA = Strongly Agree

Item 8.1 and Item 8.2 My school has a clear vision of what it should be in future and my school has a clear idea of the needs that exist between the vision of what should be and its current state.

Table 6.2 shows that the majority of respondents 50% and 45.2% agree and strongly agree that their schools have clear visions of what they should be in future. Only 4.8% respondents disagree with the statement. Similarly, the majority of respondents (95%) indicated that their schools have clear directions of the needs that exist between the current state of the vision and what it should be in future. This indicates that most schools have vision. A possible explanation to these results could be ascribed to initiatives of the Department of Education to workshop principals on the development of vision and mission statements. The understanding of a school's vision and mission is very crucial to both the School Management Team and educators and Quality improvement efforts. The development of a school's vision and mission statement is an important aspect, which should not be ignored by the school management. It gives the school direction and serves as a yardstick to measure progress.

Item 8.3 and item 8.4 Internal and external forces are pressurising for change in my school.

The majority of the respondents (82%) agree that internal forces are pressurising for change in their schools. Similarly, the very same percentage (82%) of respondents strongly agrees that the external forces are pressurising their schools for change. Only 17.2% disagree that it is the internal forces that pressurises change in their schools. This view could be ascribed to the possibility that both the internal and external forces are contributory factors in bringing change in schools. Internal

issues such as curriculum change, demand for new staff members, could pressurise the school to make some changes in the daily running. This is also true for external forces such as new policies to be implemented. The implication is that internal and external forces could pressurise schools to effect changes, assure and improve quality.

ITEM 8.5 I believe that the changes required are great that they should transform my school structures and processes.

It is noted that 87.9% of the respondents believes that the changes required in improving the quality of education are great, while only 12.1% disagree with the statement. This implies that respondents regard the changes required in their schools bringing transformation to schools as structures and processes. The literature studies consulted also define quality as transformation (cf. 2.2.1.5), a process of change.

ITEM 8.6 My school believes in continuous planning about ways to improve.

Majority of respondents (94.9%) strongly agree that their schools stress the importance of continuous ways of planning in order to improve, while only 4.8% of the respondents disagree. This finding could be attributed to the fact that the literature regards planning as a continuous process, which is primarily concerned with the question of how goals are to be achieved. Van der Westhuizen (1991) argues that planning is a management task to master the future.

ITEM 8.7 My school's management team, teachers and parents are constantly looking for ways to improve.

In this item, 91.9% of the respondents strongly agree that the management team, together with teachers, are constantly looking for ways to improve. Only 7.9% of the respondents disagree with the statement. This finding indicates the importance of the role of the school management team in the improvement of quality of education. The literature also emphasises the importance of managing quality process in such a way that it instils a culture that would create and maintain an attitude for continuous improvements (Herman, 1993). Davies & West-Burnham (1997) argue that a school would achieve more when all stakeholders are managers of quality.

ITEM 8.8 My school collects information about the impact, results and efforts related to students.

According to Table 6.2, 78.6% of the respondents agree that information about the impact, results and efforts related to students are collected. This finding implies that record keeping is a very important process in tracing the success and failures in the process of implementing change. The information collected would then be used to indicate the area of critical importance on which the entire organisation or school would concentrate to achieve major improvements (cf.4.3.3.2).

ITEM 8.9

Table 6.2 reflects that more than half of the respondents (65.1%) agree that their schools spent money training those managing change, while

34.9% disagree. The explanation to this finding is that respondents realised that for quality to be achieved, key decision-makers should be educated. The literature supports the idea of starting programmes of education and retraining educators. These training programmes would enable educators to continuously upgrade their knowledge, skills and performance (cf. 3.2.1.1; 3.2.1.2; 3.2.4; 4.2.3.2). For example, in schools, staff development is necessary to ensure that educators understand the importance of continuous quality improvement. Thus, training is an important tool for total quality management.

ITEM 8.10 My school gives everyone credit for successes achieved and every success is publicly celebrated.

According to Table 6.2, 61.9% of the respondents strongly agree that credit for success is publicly celebrated. About 47.7% of the respondents do not agree that they are credited for the successes they achieved. This finding implies that acknowledging publicly the successes of educators boost their morale and commitment. It might be a tool of their quality of work and also for successful implementation of innovations intended to improve quality in schools. Bonstingl (1992) suggested that focus in schools should be on encouraging both learners and educators to explore hidden talents and built on the previous successes and understandings.

ITEM 8.11 My school looks towards the future with positive vision.

The overwhelming majority of respondents (94%) strongly agree that their schools look towards the future with positive vision. To be effective, schools require processes for developing their quality strategy that include, reflecting on their vision to be able to face the future.

Communicating the schools vision and mission to all stakeholders in the school is essential, especially in guiding the to school's activities towards its dreams. Thus, full development and implementation of the vision and mission of the school is in line with quality improvement.

ITEM 8.12 My school provides continuing plans for improvements.

In table 6.2, 89.9% of the respondents agree that continuing plans for improvement are provided in their schools, while only 6.1% do not agree with the statement. This finding implies that schools should develop and have school improvement plans if their activities are geared towards quality implementation and maintenance. The literature also indicated that planning is a continuous process, and without a plan, time and resources are wasted (cf. 4.3.3; 4.3.3.1; 4.3.3.2).

6.4.2 Attributes for educational experience

This section gives a brief summary of the attributes those educators working in an educational setting should possess in order to provide and assure high-quality educational experience. In order to gain a picture of the importance of educational experience, respondents were asked to indicate the extent to which they believe an attribute is important on a four-point scale. For each item the respondents' rated the importance of each attributes (1 = unimportant; 2 = fairly important; 3 = important and 4 = very important). The attributes were categorised as (3.2.7.3; 3.3.1.1; 3.3.2.2):

- Knowledge and understanding;
- Skills; and

- Attitudes.

6.4.2.1 Knowledge and understanding

Knowledge and understanding as a skill among educators to ensure that quality experience is an essential aspect that should not be ignored. Any school that takes a journey towards maintaining and assuring quality should arrange training and workshops to equip and update its staff with knowledge and understanding of the teaching-learning process. The teaching-learning process needs to be improved continuously by those in the front lines (cf. 3.2.7.3; 3.3.1.1; 3.3.2.2).

Item 9.1 Understanding what is necessary to ensure the provision of quality experiences.

Table 6.3 shows that almost all the respondents 99,3% felt that understanding what is necessary to ensure the provision of quality experience is very important. The finding on this item could be attributed to the post-apartheid education legislation that places quality of education firmly on the agenda of education transformation. Furthermore, the literature consulted shows that the system of profound knowledge implies an understanding of the theory of variation (cf. 3.2.1.3). According to Sallis (1993) reasons of quality failure could be attributed to educators who lack skills, knowledge and positive attitudes.

Item 9.2 Understanding how learners acquire knowledge.

Around 80,6% and 18,7% of the respondents felt that understanding how learners acquire knowledge is a very important attribute for providing

quality educational experience. Respondents believe that the item is very important as it would help educators to understanding learners and the way they learn.

Item 9.3 Understanding the needs of learners.

In this item, all respondents 100% believe that understanding the needs of learners is a very important attribute. This finding support what the literature suggests on customers in education (cf.3.3.1.2; 4.2; 4.2.1). The main focus should be on the learners needs because they are the reason for the school and the education system's existence. Learners are regarded by the literature as internal customers of the school (Bradley 1993; Sallis 1993; Steyn 1999) to whom education is supplied. Thus, it is important that those who deal with learners understand their needs, so as to meet their requirements.

ITEM 9.4 Appropriate experience of curriculum and subject knowledge.

Almost all respondents 99.5% agree that to provide high- quality education experienced educators should possess appropriate experience of curriculum and subject knowledge. Only 2 (0,5%) out of 394 respondents regards the item as unimportant. The implication of this finding may be attributed to the importance that principals should put mechanisms in place for monitoring curriculum quality. According to Duke (1987) such efforts are referred to as curriculum alignments, which help keep instruction in schools focussed.

Item 9.5 and 9.6 Ability to manage the class well and ability to create a conducive learning environment.

The opinion of the respondents on these items as outlined in Table 6.3, show that overwhelming number of respondents 98% felt that the ability to create manage class well and the ability to create a conducive learning environment (99.2%) is a very important attribute to be possessed for providing high quality educational experience.

TABLE 6.3: KNOWLEDGE AND UNDERSTANDING OF QUALITY IMPROVEMENT

Items	missing No		Unim- Portant f	Unim- portant %	Impo- -tant f	Impo- tant %	Fairly important f	Fairly important %	Very important F	Very important %
9.1 Understanding what is necessary to ensure the provision of quality experiences.	-	-	-	-	3	0.8	121	30.7	272	68.7
9.2 Understanding how learners acquire knowledge.	1	0.3	-	-	2	0.5	74	18.7	319	80.6
9.3 Understanding the needs of learners.	-	-	-	-	-	-	69	17.4	327	82.6
9.4 Appropriate experience of curriculum and subject knowledge.					2	0.5	82	20.7	312	78.8
9.5 Ability to manage the class well.	8	2.0	-	-	-	-	104	26.3	284	71.7
9.6 Ability to create a conducive learning environment.	3	0.8					88	22.2	305	77.

Key: 1 = Unimportant 2 = Fairly important 3 = Important 4 = Very important

6.4.2.2 Skills (Item 9.7- 9.12)

Appropriate skills among educators are required to assure and manage quality in schools. It is important to note that TQM paradigm emphasises the customer priority, self- monitoring and evaluation, collaboration, horizontal, communication and team responsibility. In the quality literature the following are regarded as very important skills:

- Skill to work in teams;
- Skill to implement change;
- Skill to effective data recording;
- Skill for monitoring and assessing learners; and
- Interactive communicative skill.

According to Table 6.4 it is clear that all the items (9.7- 9.12) were rated by more than 95% of the respondents as very important skills. The first two items rated 100% are:-

- **Item 9.10** Organisational skill for effective monitoring and assessing learners (100%).
- **Item 9.11** Interactive and communication skill (99.7%)

The skills needed to monitor and assess learners appear to be the most important in assuring and maintaining quality in schools. The first level of quality control is the classroom (cf. 4.3.1.3). It involves determining the extent to which individual learners are learning what they are expected to learn. Thus, educators in classroom setting need essential skills on monitoring and assessing learners. School principals should also

monitor and assess school improvement efforts and related staff activities to ensure progress and assure quality. Such knowledge will contribute positively towards assurance of quality provided in schools.

TABLE 6.4 SKILLS FOR QUALITY IMPROVEMENT

Items	missing No	Unim- portant	Unim- portant	Impo- tant	Impo- tant	Fairly important	Fairly important	Very important	Very important
9.7 Development of particular skills and expertise in working in teams.	-	-	-	18	4.5	104	26.3	274	69.2
9.8 Skills in implementing change.	1	1	0.3	3	0.8	123	31.1	268	67.7
9.9 Organisational skills for effective data recording.	-	-	-	27	6.8	107	27.0	262	66.2
9.10 Organisational skills for effective Monitoring and assessing learners.	-	-	-	-	-	115	29.0	281	71.0
9.11 Interactive and communication skills.	-	-	-	1	0.3	118	29.8	277	69.9
9.12 Skills to provide equal opportunities For learners.	-	-	-	6	1.5	124	31.3	266	67.2

Key: 1 = Unimportant 2 = Fairly important 3 = Important 4 = Very important



Table 6.4 also shows that respondent rated Item 9.7 as the second most important (99.7%). The heart in TQM is teamwork and it involves interaction between role players. The literature consulted (cf. 3.3.1.1) also support that it successful TQM organisation is one in which communication between teams is powerful, simple and effective. Interaction necessitates communication. It is thus very important that role players, especially education school setting should have a better interpersonal and communication skills.

It is also important to indicate the findings of the following item, which has a very close relationship with item 9.11 discussed in the preceding paragraph.

Item 9.7 Development of particular skills and expertise in working in teams.

As stated earlier, successful organisations implementing TQM encourage working in teams. For these teams to contribute effectively in discussions, members need to develop and have particular skills in working in teams (cf. 4.4.1.2).

6.4.2.3 Attitude (9.13 – 9.16)

Item 9.13 High expectation for learners and self

The majority of the respondents, 97.3% agree and strongly agree that in a school that aims at improving and monitoring the quality of education provided, educators should have high expectations for learners and for themselves. This finding is in line with the literature on characteristics of

effective schools (Teu, 1997:71), that educators in effective schools have high expectations that their learners can achieve. It simply means that for a school to embark on the road for managing quality, the educators' attitude need to be positive and their expectations for the learners' achievement need to be high.

TABLE 6.5 ATTITUDE FOR QUALITY IMPROVEMENT

	missing		Unim-	Unim-	Impo	Impo	Fairly	Fairly	Very	Very
Items	No		Portant	portant	-tant	tant	important	important	important	important
	f	%	f	%	f	%	f	%	f	%
9.13 High expectation for learners and self.	1	0.3	-	-	10	2.5	125	31.6	260	65.7
9.14 Readiness to value learners as people with rights.	-	-	1	0.3	11	2.8	136	34.3	248	62.6
9.15 Respect and appreciation of all school Community.	-	-	-	-	8	2.0	116	29.3	272	68.7
9.16 Commitment to develop partnership with parents	-	-	-	-	3	0.8	111	28.0	282	71.2

Key: 1 = Unimportant 2 = Fairly important 3 = Important 4 = Very important

Item 9.14 Readiness to value learners as people with rights.

According to Table 6.5, the majority of respondents (97.3%) believe that it is important that educators have a positive attitude towards learners and value them as people with rights. This finding is in line with the constitution of the country, which preaches the importance of respecting the rights of children, and their right to be given the opportunity to learn. It is thus, important that educators value learners as people with rights, especially the right to be educated and to receive quality education. If learners were valued as people who have the right to learn, their role would change. They would be listened to, and become actual rather than passive learners. Then the educator would act as resource person exhibiting coaching behaviour.

Item 9.15 Respect and appreciation of all stakeholders.

Item 9.16 Commitment to develop partnership with parents.

According to Table 6.5, majority of the respondents (96.9%) regard respect and appreciation of school community as a very important attribute that educators should display. Again, almost all respondents (99.2%) believe that developing partnership with parents is very crucial, because it would ultimately improve the quality of education the school is providing. Parents and the community are customers of the school. The kind of service the community expects from the school would be the one that would meet their requirements. If educators show respect and appreciation to the community, parents would be willing to be involved and participate in their children's education. The literature on parental involvement also maintains that involving parents would make them

more knowledgeable about the school. They would be in a much better position to evaluate the school fairly and effectively.

To sum up, the study has illustrated that educators and schools are aware that, in order to provide and have a high-quality experience, it is important to have positive attitude towards their work, knowledge and understanding of educational activities. They should also have organisational skills such as, communication and interactive skills, which would assist them in dealing with changes in educational situations.

6.4.3 Assessing quality in schools

The majority of organisations, including schools, execute their quality control, quality assurance and maintenance of standards through assessment. Quality assessment refers to the judgement of performance against criteria – either internally or externally. The assessment of quality of education should meet the general and specific requirements demanded from education itself, if it is to earn the characteristics of quality. Thus, quality of teaching and learning should be assessed to examine whether or not the specified standards and aims are being maintained and improved. But assessing quality requires knowledge of policies and procedures on how to go about the with assessment.

In this section, respondents were asked to indicate the extent to which the given items describe their personal needs with regard to assessment of quality in schools. Table 6.6, illustrates the responses of respondents on the question of quality assessment and a brief discussion of the findings is given. The discussion of items is clustered according to the following themes, and thus discussed as a collective:

- Policies and procedures;
- School development plan;
- Relations with parents;
- Learners; and
- Assessment and evaluation.

6.4.3.1 Policies and procedures

Item 10.1 How to assess the appropriateness of school policy and procedures (97.5%).

Item 10.2 Willingness of staff to implement policies and procedures (99.5%).

Item 10.3 How to involve stakeholders participate in the formulation of policies and procedures (96.2%).

TABLE 6.6: ASSESSING QUALITY IN SCHOOLS

Items	Missing	No	Unim- Portant	Unim- portant	Impo- -tant	Impo- tant	Fairly important	Fairly important	Very important	Very important
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
10.1 How to assess the appropriateness of school policy and procedures.	1	0.3	-	-	3	0.8	138	38.4	254	64.1
10.2 Willingness of staff to implement policies and procedures.	1	0.3	-	-	1	0.3	121	30.6	273	68.9
10.3 How to involve stakeholders participate in the formulation of policies and procedures.	-	-	-	-	15	3.8	99	25.0	282	71.2
10.4 How to assess the effectiveness of school records keeping	-	-	2	0.5	15	3.8	104	26.3	275	69.4
10.5 How to put in place effective procedures for keeping discipline.	-	-	-	-	3	0.8	133	33.6	260	65.7
10.6 How to put in place effective procedures for keeping discipline.	1	0.3	-	-	1	0.3	106	26.8	288	72.7
10.7 Understanding the behaviour of learners.	-	-	-	-	2	0.5	119	30.1	275	69.4
10.8 Assessing the interest learners' show in their schoolwork.	-	-	-	-	11	2.8	115	29.0	270	68.2
10.9 Developing school developmental plan.	-	-	2	0.5	9	2.3	91	23.0	294	74.2
10.10. How to incorporate both the school management and departmental views.	-	-	1	0.3	4	1.0	124	31.3	267	67.4
10.11 Ability to make sure that all staff members are aware of the plans.	1	0.3	-	-	3	0.8	113	28.5	279	70.5
10.12 Ability to encourage participation in team- work.	1	0.3	-	-	7	1.8	121	30.6	267	67.4
10.13 How to use evaluation to improve quality of work.	-	-	-	-	4	1.0	153	38.6	239	60.4
10.14 Understanding how to implement improvement process and goal setting.	-	-	-	-	12	3.0	124	31.3	260	65.7
10.15 Knowing how to relate to school governing body and parents.	-	-	-	-	7	1.8	134	33.8	255	64.4
10.16 School showing due respect to parents of learners.	-	-	-	-	5	1.3	117	29.5	274	69.2
10.17 Involving parents in school activities(e.gHomework).	-	-	2	0.5	11	2.8	82	20.7	301	76.0
10.18 Accepting parents ideas for improvement of the school.	2	0.5	2	0.5	25	6.3	111	28.0	256	64.6

In all the three items, the majority of respondents (98.9%, 99.6% and 96.2%) agrees and strongly agrees that the formulation, assessment and implementation of schools' policies and procedures are very important aspects in assessing quality in schools. These findings indicate the importance of schools to have appropriate policies and procedures in place. It is important that all stakeholders in the school community should participate in their formulation. This idea that all stakeholders should participate in policy formulation is supported by the literature consulted (cf. 4.2.2.5; 4.2.3; 4.2.3.1; 4.3.3).

The findings also show that educators' commitment and dedication in the assessment and implementation of policies is essential. Lack of commitment and dedication on the part of educators might have a negative impact on the initiatives towards assuring quality in schools. Continuous improvement and active involvement of every educator would improve quality of education. Thus, educators should be motivated and encouraged to participate in policy formulation and implementation. This is also true for other stakeholders who should be part of schools' policy formulators and implementers.



Item 10.5 How to put in place effective procedures for keeping discipline (99.3%).

Item 10.6 How to put in place effective procedures for keeping discipline (99.5%).

Almost all respondents (99.3% and 99.5%) felt that it is very important to know how to put effective procedures for dealing with absence, late coming and maintaining discipline in place. This finding supports what is underlined by the policy on Whole School Evaluation with regard to areas to be

evaluated during on-site evaluation. For example in one area for evaluation, the 'basic functionality of the school', the evaluators have to check and observe the existence and implementation of procedures on late coming, absence and discipline. It is important to note that these procedures and regulations form the important part of the school policy.

6.4.3.2 School Development Plan (SDP)

Item 10.9 Developing school developmental plan (97.2%).

Item 10.10 How to incorporate both the school management and departmental views (98.7%).

Item 10.11 Ability to make sure that all staff members are aware of the Plans (99%).

Item 10.12 Ability to encourage participation in team-work (97%).

Item 10.14 Understanding how to implement improvement process and goal setting (98%).

As reflected in Table 6.6, an overwhelming number of the respondents in all the five items (97.2%; 98.7%; 99%; 97% and 98%) support the importance for schools to develop a school developmental plan. This finding is in line with the requirement of the Department of Education as stated in South African School Act and Democratic school governance for North West Province (2000), that each school have a developmental plan. It is important that all stakeholders be involved when it is developed. The developmental plan should focus on raising the quality of teaching and learning, and should be based on wide consultation.

The literature consulted also indicates that the SDP involves group planning. Group planning process is a formal improvement plan to which everyone

would be committed and united in its completion (cf. 3.3.1.1; 4.3.3.1). This kind of planning should incorporate both the SMT and departmental views. The school management should also make sure that staff members are fully aware of the plans. Working toward the development of SDP involves teamwork. It is very important that the school-community be encouraged to work as teams.

6.4.3.3 Parents

Item 10.15 Knowing how to relate to school governing body and parents (98.2%).

Item 10.16 School showing due respect to parents of learners (98.7%).

Item 10.17 Involving parents in school activities e.g. Homework (96.7%).

Item 10.18 Accepting parents ideas for improvement of the school (92.6%).

With regard to item 10.15-10.18, over 90% of respondents indicated that it is very important for the school to work closely and harmoniously with parents. These findings indicate that respondents recognise the importance to know how to relate and show respect to parents of learners and the SGB's. They agreed that parents should be involved in school activities and their ideas for the improvement of the school should be listened to and welcomed.

The finding supports what the literature on parental involvement suggests. According to Gorton (1984), the most important step that schools should take to develop good school community relations is to study and understand the local community. This knowledge will help the school to relate soundly with parents of learners and members of the SGB. The result of good relations with parents is the key element towards involving them in school activities. The literature on parental involvement also explains explicitly that

parents are critical elements in school improvement, they are the children's first teachers (Gorton, 1984; Schargel, 1993; Squelch & Lemmer, 1994). Thus, their involvement could serve to encourage learners' efforts and accomplishments.

6.4.3.4 Learners

Item 10.7 Understanding the behaviour of learners.

Item 10.8 Assessing the interest learners' show in their schoolwork.

Table 6.6 shows that 99.5% of respondents felt that understanding the behaviour of learners is a very important element in assessing quality in schools. This finding is in line with the policy on Whole School Evaluation, which states that the behaviour of learners in lessons and around school needs to be evaluated. The implication is that the contribution learners make towards positive learning environment is essential in the assessment of quality. For example, the level of graffiti and damage to school property caused by learners will indicate learners' lack of interest and respect in their school and schoolwork. Thus, their respect for school equipment, materials, furniture and premises, has impact on the management of quality in schools. How well learners behave and show interest in their school, is very crucial.

6.4.3.5 Assessment and evaluation

Item 10.4 How to assess the effectiveness of school records keeping.

Item 10.13 How to use evaluation to improve quality of work.

Majority of respondents 95.7% felt that it is important for educators to know how to assess the effectiveness of school records. This finding is in line with the literature that those who manage should at all level focus on teaching everyone to evaluate his/her work (cf.4.2.3.4). It is very important that educators assess their records and use those them to improve their daily activities in the school.

6.5 RESPONDENTS' VIEWS ON BEST PRACTICES OF QUALITY

This section is based on four open-ended questions (item 11- item 14). The aim of these items was to get additional information from the respondents' perspectives about the best practices and kinds of problems they experience when they put mechanisms in place to assure quality.

In item 11 respondents were to state what they regard as best practices of assuring quality. The respondents identified the following practices of assuring and improving quality in ranked order:

- Working towards practical plan or planning ahead (73%);
- Involvement and commitment of stakeholders (70%);
- Teamwork (70%);
- Setting standards and goals (63%);
- Clear policies (62%);

- Assessment and evaluation (61%); and
- Time management (60%).

The importance of planning has been identified by the majority of respondents (70%) as being a very essential aspect for schools. Some of the respondents went further by explaining that the plans in schools help the staff to “*get where they want to go*”. This implies that plans give the schools directions. One of the respondents wrote: “plans provide a direction for success and help us to organise our own professional life as well as organise instructional improvement programmes that involve many people”.

Respondents were also asked to state in their own words the kinds of problems they experience when putting quality mechanism in place. In item 12 the following represent the views of the majority of respondents:

- Lack of resources or infrastructure;
- Low teachers morale, teacher not motivated and committed;
- Lack of parental involvement;
- Reluctance to change;
- Commuting learners and educators; and
- Disciplinary measures.

With regard to item 13, the respondents were required to give their views on what the community say about their schools. In this item respondents used different statements to express what people in the community say about their schools. These statements were classified into negative and positive statements as follows:

Positive statements:

- Impressed;
- Admire learners in uniform;
- Well behaviour learners;
- Satisfied;
- Grateful;
- Have discipline; and
- Educators as role models to learners.

These statements indicate that there are those schools that the communities are satisfied with, when coming to the day-to-day running of the school. The implication is that the community is impressed because in these schools, there is discipline, reflected by learners who see educators as their role models. Learners in these schools are always on school uniform and respect their educators. Schools give service to the community and in this regard the community is the customer (cf. 4.2.1; 4.2.1.1; 4.2.1.2). The literature consulted emphasises the need for schools to meet the needs of customers. Thus, the positive statements reflect satisfaction on the community.

Negative statements:

- Roaming in streets;
- Ill-disciplined learners;
- Teaching does not take place effectively; and
- No results.

Most of the negative statements given indicate that the community is worried and not satisfied about the way the school is run. Some of the

respondents indicated that the majority of parents take their children out of such schools, and they as result experience low enrolment. From the perspectives of parents, learners are taken from one school to the other because the school does not meet their needs and expectations. This movement of learners from one school to the other confirms what the literature say that clients are no longer willing to accept substandard products in any market place.

The purpose of the question asked on item 14 was to give respondents a chance to make a general comment about the quality of education in their schools. The following represent what they say about the quality of education in their school:

- Commitment educators and Learners Representatives Council;
- Good, based on school's vision and mission;
- Parents and community fully involved;
- Discipline and order;
- Need for support/ workshop, extra lesson or flexitime;
- Lack of resources; and
- Poverty and socio-economic background impact negatively.

Firstly, the first four comments reflect characteristics of a customer-focused school (cf. 4.2.1.2). These customer-focused schools possess certain characteristics that contribute towards the way activities are handled. The importance of the vision and mission cannot be overemphasised since it gives the school activities direction.

The last three comments from the respondents give a picture of a school whose quality is impaired or disturbed by the socio- economic background and lack of resources. The environment in which the school is operating can have a negative impact on the quality of education. These include learners, who come to school with empty stomach or who travel a long way before reaching the school. Sometimes, unemployed parents who are unable to pay school fees and thus resources cannot be bought. The government still has to look at ways to alleviating this kind of problems to ensure equity.

6.6 MEAN SCORE RATING ON SCHOOL READINESS TO CHANGE

An attempt was made to get a picture of the mean score ratings for each item on school readiness to change. Items with mean score of above 3 are regarded as very important requirements for managing and assuring quality in schools.

Table 6.7 displays the mean scores arranged in rank order of items on school readiness to change. In these items respondents strongly agree that schools are ready for change towards managing and assuring quality. Out of the twelve (12) items in this section only two were rated below 3.

Table 6.7 Ranked mean scores on School Readiness to Change

RANK	ITEM NO	ITEM	$\bar{X}$	SD
1	8.6	My school believes in continuous planning about ways to improve.	3.44	0.62
2	8.1	My school has a clear vision of what it should be in the future.	3.39	0.60
3	8.2	My school has a clear idea of the needs that exist between the vision of what it should be and its current state.	3.37	0.57
4	8.12	My school provides continuing plans for improvement.	3.36	0.68
5	8.11	My school looks towards the future with positive vision.	3.35	0.61
6	8.7	My school's management team, teachers, parents are constantly looking for ways to improve.	3.35	0.66
7	8.5	I believe that the changes required are great that they should transform my school structures and processes.	3.29	0.76
8	8.4	External forces are pressurising for change in my school.	3.16	0.83
9	8.3	Internal forces are pressurising for change in my school.	3.14	0.81
10	8.8	My school collects information about the impact, results and efforts related to students.	3.09	0.75
11	8.9	My school spends money to train those managing or learning about innovations that improve the school.	2.82	0.81
12	8.10	My school gives everyone credits for successes achieved and every success is publicly celebrated.	2.74	0.83

The first items with the highest mean (around $\bar{X} = 3.4$) in this section are:-

Item 8.6 My school believes in continuous planning about ways to improve ($\bar{X} = 3.44$)

Item 8.1 My school has a clear vision of what it should be in the future ($\bar{X} = 3.39$)

Item 8.2 My school has clear idea of the needs that exist between the vision of what it should be and its current state ($\bar{X} = 3.37$)

Item 8.12 My school provides continuing plans for improvement ($\bar{X} = 3.36$)

Item 8.11 My school looks towards the future with positive vision ($\bar{X} = 3.35$)

The respondents regard these first items with the highest mean as the most important statements. All items have the concept of vision and planning. The literature consulted have indicated that communicating the schools vision to all stakeholders in the school, is important as it will guide the school's activities towards its dreams. But of importance is that these activities need to be guided by clear plan, which are continuous (cf. 2.4.4; 3.2.2.1; 3.3.1; 4.2.1.2; 4.3.3). This implies that improvement should be ongoing and gradual. This is only possible if the school is directed by vision, accompanied by a clear plan of activities for improvement. What these findings suggest is that schools should have a vision to direct its activities of improving the quality of education they provide. Correct and effective planning of such activities need to be known.

The issues of schools having a clear idea and knowledge of the vision of what it should be and its current state are documented in the literature on

school development plan and action plan (4.3.2.4; 4.3.3). Schools and their senior management teams are expected to implement and monitor schools planning in a logical and careful way in order to fulfill the vision of the school. These findings suggest that the school management and all stakeholders need to be trained on developing the school vision and reviewing the activities through which the vision is to be realised. They need to learn strategies in planning, including long, medium and short term planning (cf.4.2.3.1). Those who are to manage and assure quality in schools, need skills to cope with roles in the implementation of the plan.

The following are the two lowest mean score items on school readiness to change :

Item 8.9: My school spent money to train those managing or learning about innovations that improve the school ($\bar{X} = 2.81$)

Item 8.10: My school gives everyone credit for successes achieved and every success is publicly celebrated ($\bar{X} = 2.74$)

It is important to note that, although the two items are rated the lowest, their mean scores which are almost three (3) also express the importance of the items in managing and improving quality in school. From the respondents' view, it is important that those who are to manage or learn about quality improvement should be thoroughly trained. This finding is in agreement with what the literature consulted is suggesting (cf.4.2.1.1; 3.2.4; 3.2.1). It is important that those managing and assuring quality, learn skills and strategies to acknowledge achievers publicly. This is an important aspect of increasing the educator's morale and making them work even harder.

The lower rating to these items as compared to the others could be explained against the financial background in which most schools find themselves. The financial implications in most schools disturb the process of quality improvement and management. Due to financial constraints, some of the intended activities, such as training that need money or celebrating success publicly may not happen as planned.

To sum up, the findings suggest that the best goal and specification will not result in successful implementation of Quality Management without the implementation of tactical plans that spell out the answers to the questions of why, who, what, where, when and how? In any school, planning is a necessity if an effective and efficient operation is to take place. If one knows the destination to be reached (vision) and the road to be traveled (action plans) to get to that destination in a timely, qualitative and efficient manner then productivity, success, feeling of ownership and celebration will result.

6.7 COMPARISON OF MEANS

The Statistical Package for Social Sciences (SPSS) computer programme was used to analyse data. To determine whether the groups differ significantly among themselves, the Analysis of Variance (ANOVA) was used. ANOVA is an inferential technique, which could be used to determine whether three or four means are significantly different from each other (Borg

and Gall, 1979; 427). Again in this study the F-value was used to determine the level of statistically significance difference among various factors.

To test the mean scores between and within the groups, scores were categorised into five groups as follow:

- X1 = School Readiness to Change (items 8.1 – 8.12);
- X2 = Knowledge and understanding (item 9.1 – 9.6);
- X3 = Skills for quality improvement (item 9.7 – 9.12);
- X4 = Attitude on quality (item 9.13 – 9.16); and
- Y = Assessing quality (item 10.1 – 10.18).

6.7.1 Analysis of variance, age category

Table 6.8 represents the results of the means and F-value. It was assumed that there is a significant difference between the age category groups. It is evident from the table that the F-value which is greater than 4 is significant at 0.01 level. The results suggest that it is only X1 (School Readiness to Change) and X2 (knowledge and understanding) that indicate that they are significantly related to age.

The findings suggest that the older the respondents the more likely would they see the importance for schools to be ready for change. Again, the older the respondents the greater they will indicate importance of having relevant attributes for educational experience. Having been in the system for sometime, they regard the importance of acquiring relevant knowledge and

understanding in quality issues as an important attribute towards quality assurance and improvement.

Table 6.8 Relationship between age category groups

		SUM OF SQUARED	df	MEAN SQUARE	F	SIG.
X1 * Age category	between group	469.386	5	93.877	4.337	.001*
	Within groups	8442.694		21.648		
	Total	8912.1				
X2 * Age category	between group	76.100	5	15.220	4.862	.000*
	Within groups	1220.809		3.130		
	Total	1296.9				
X3 * Age category	between group	14.841	5	2.968	.554	.735
	Within groups	2088.5		5.355		
	Total	2103.35				
X4 * Age category	between group	20.287	5	4.057	1.677	.139
	Within groups	943.620		2.420		
	Total	963.907				
Y* Age category	between group	215.497	5	43.099	1.205	.306
	Within groups	13953.4		35.778		
	Total	14168.9				

6.7.2 Analysis of variance, gender

**NWU
LIBRARY**

Table 6.9 indicates the results of the mean scores and the F-value of the groups. The results reveal that in all the five groups, there is a significant relationship between gender groups and are significant at .001. This implies that both groups agree that schools should be ready to embark on the road to quality assurance and improvements which calls all stakeholders in the school to acquire necessary knowledge and skills needed in assessing and improving quality of teaching and learning. The implication is that

regardless of whether male or female, respondents regard quality assurance and improvement as very important aspects in schools.

Table 6.9 Relationship between gender groups

		SUM OF SQUARED	df	MEAN SQUARE	F	SIG.
X1 *gender	between group	138.055	1	138.055	6.206	.013*
	Within groups	8742.745		22.246		
	Total	888.800				
X2 * gender	between group	39.664	1	39.664	12.421	.000*
	Within groups	1254.943		3.193		
	Total	1294.608				
X3 *gender	between group	79.497	1	79.479	15.469	.000*
	Within groups	2019.683		5,139		
	Total	2099.180				
X4 * gender	between group	27.044	1	27.044	11.369	.001*
	Within groups	934.864		2.379		
	Total	961.909				
Y* gender	between group	235.228	1	235.228	6.635	.010*
	Within groups	13933.658		35.455		
	Total	14168.886				

6.7.3 Analysis of variance, school settlement

An attempt was made to find out whether there would be a difference between rural and urban respondents with regard to the practice and the need for quality assurance and improvement. Although more of respondents were from schools in the rural areas, the finding suggests that in both types of settlement the importance of assuring and improving quality is acknowledged in the same way. This implies that schools in rural as well as those in urban areas should adopt quality assurance and improvement practices. Regardless of the school settlement, schools are required to

improve quality education and ultimately be able to assure and improve it continuously.

Table 6.10 Relationship between settlement groups

		SUM OF SQUARED	df	MEAN SQUARE	F	SIG.
X1 * settlement	between group	173.163	2	86.581	3.894	.021*
	Within groups	8738.918		22.236		
	Total	8912.081				
X2 * settlement	between group	12.938	2	6.469	1.980	.139
	Within groups	1283.971		3.267		
	Total	1296.909				
X3 * settlement	between group	56.008	2	28.004	5.376	.005*
	Within groups	2047.345		5.210		
	Total	2103.354				
X4 * settlement	between group	16.958	2	8.479	3.519	.031*
	Within groups	946.948		2.410		
	Total	963.907				
Y* settlement	between group	43.420	2	21.710	.604	.547
	Within groups	14125.489		35.943		
	Total	14168.909				

6.7.4 Analysis of variance, school category

Table 6.11 represents the results of the mean scores and F-value with regard to school category. It was hypothesised that there would be no significant difference between mean scores of respondents in the different school categories. As reflected in table 6.11, only items in X1, X3 and Y show that there is a statistically significant difference between school categories. The F-values are more than 3 and significant at .001. This illustrates the importance of quality assurance and improvement practices in all levels and types of schools. Quality need to be managed, assured and improved in all

categories. Emphasis should start to shift from concentrating only in the matriculation final results. There is a need that from the primary schools across, the assurance of quality should be practiced.

Table 6.11 Relationship between school category and groups

		SUM OF SQUARED	df	MEAN SQUARE	F	SIG.
X1 * school category	between group	263.496	3	87.832	3.981	.008*
	Within groups	8648.585		22.063		
	Total	8912.081				
X2 * school category	between group	2.175	3	.725	.219	.883
	Within groups	1294.734		3.303		
	Total	1296.909				
X3 *school category	between group	58.965	3	19.655	3.769	.011*
	Within groups	2044.389		5.215		
	Total	2103.354				
X4 *school category	between group	1.542	3	.514	.209	.890
	Within groups	962.364		2.455		
	Total	963.907				
Y* school category	between group	483.731	3	161.244	4.619	.003*
	Within groups	13685.178		34.911		
	Total	14168.909				

6.8 CORRELATION OF RELATIONSHIP BETWEEN VARIABLES

An attempt was made to group items into five variables (cf. 6.7). It was anticipated that all five variables would statistically correlate significantly to each other with regard to the importance of the practice of assuring and improving quality in schools. Table 6. 12 reflects the results of the correlation. The results revealed that all the five variables significantly contribute to the variance in assuring and improving quality in schools. Inter-correlation between X3, and X4 (.526); and between X3 and Y the

highest (.521). The implication is that each of the variables is a very important attribute to be possessed by those who are to manage and assure

Table 6.12 Correlation relationship among variables

	X1	X2	X3	X4	Y
X1 Pearson correlation	1.000	.183**	.333**	.252**	.405**
Sig. 92-tailed		.00	.000	.000	.000
N	396	396	396	396	396
X2 Pearson correlation	.183**	1.000	.488**	.461**	.327**
Sig. 92-tailed	.000		.000	.000	.000
N	396	396	396	396	396
X3 Pearson correlation	.333**	.488**	1.000	.526**	.521**
Sig. 92-tailed	.000	.00		.000	.000
N	396	396	396	396	396
X4 Pearson correlation	.252**	.461**	.526**	1.000	.471**
Sig. 92-tailed	.000	.000	.000		.000
N	396	396	396	396	396
Y Pearson correlation	.405**	.327**	.521**	.471**	1.000
Sig. 92-tailed	.000	.000	.000	.000	
N	396	396	396	396	396

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

quality in schools. Again, those dealing with quality, for them to be able to assess quality, relevant skills and correct attitude are important attributes.

To explore the strength of the relationship between four independent variables (X1, X2, X3 and X4) and one dependent variable (Y), linear regression model was used. Table 6.13 shows the model summary.

Table 6.13 Analysis of total variation

MODEL	R	R SQUARE	F	SIG.
1	.613	.376	58.779	.000

According to the table, $R = .613$ and $R \text{ square} = .376$. This finding indicates that the model can only account for 37.6% with regard to the strength of the relationship between the independent variables and dependent variables. The implication is that independent variables, namely the experience of having knowledge and understanding, skills and attitude as attributes for quality practices contribute only 37% of the total variation of the dependent variable (Y).

These then suggest that 62% is not accounted for according to the model. Although the model suggests that knowledge of how to assess quality does not depend on other variables, this might be a stumbling block to the process of quality assurance. Educators need to have specific skills that will help them in assessing quality of the teaching and learning activities.

6.9 SUMMARY

This chapter outlined the findings of the empirical investigation conducted to determine the good practices to the improvement and assurance of quality in public schools. Major findings revealed that there are important factors and attributes that educators or those who are to manage quality processes

should possess such as, having knowledge and understanding of the process of quality assurance and improvement, acquiring relevant skills to deal with quality practices and a positive attitude to be fully involved in the process of assuring and improving education quality.

The empirical investigation revealed the following major findings:

- Majority of respondents indicated that their schools are ready to innovate any change that lead to the improvement of the school activities. Quality assurance and improvement involve change. For a school to be able to manage the practices of quality, it must be ready to change its usual way of doing things.
- The study illustrated that, for schools to provide and acquire high quality experience, they should have a positive attitude towards their work, thorough knowledge and understanding of educational activities and have good communication and interactive skills to be able to deal with changes in schools.
- With regard to the needs of those managing and involved with quality practices, the findings revealed the following as important needs with regard to assessment in schools:
 - policies and procedures;
 - school development plan;
 - relations with parents;
 - learners; and
 - methods of assessment and evaluation.
- Best practices of assuring and improving quality as revealed by the empirical investigation include:

- developing practical plans and planning ahead;
 - involvement and commitment of all stakeholders;
 - teamwork;
 - setting standards and goals;
 - clear policies; and
 - evaluation and assessment procedures.
- The following are kinds of problems that were experienced by schools when putting mechanisms in place to assure and improve quality:
 - lack of resources or infrastructure;
 - low educators morale;
 - lack of parental involvement;
 - resisting change;
 - disciplinary measures.

NWU
LIBRARY

7. QUALITY ASSURANCE PROGRAMME FOR PUBLIC SCHOOLS IN NORTH WEST PROVINCE

7.1 INTRODUCTION

Internationally there is an increased need that school managers, that is the principals and the SMT, respond positively to their delegated responsibilities by managing for quality. Even in the North West Province of South Africa, schools are expected to be more accountable and own school developments. School's decisions and performance are open to much increased public scrutiny. Without a comprehensive internal quality assurance programme that could guide schools to put in place mechanisms of investigating what goes on in their school and help managers improve their schools for the benefit of the communities they serve - especially the learners and their parents - the performance of schools will continuously decline.

From the theoretical framework provided in chapters 2, 3 and 4, and the empirical investigation conducted in chapters 5 and 6, a quality assurance programme for public schools is developed in this chapter. As stated in chapter 1(cf. 1.3), the main aim of the study is to develop a quality assurance programme for public schools in the North West Province.

Important and critical issues in the use of models of PDSA and Strategic planning in schools are initially given attention in order to lay foundation in the development of the programme. Though attention is specifically focused on the development of quality assurance programme, implementation of the proposed programme is also considered in this chapter.

7.2 FRAMES FOR DEVELOPING QUALITY ASSURANCE PROGRAMME

The development of a quality assurance programme for schools is directed by the assumption and perceptions that models and programmes are attempts made to represent the reality (Legotlo, 1994). The intended programme attempts to deal with issues of concern in helping schools to effectively manage and assure quality of education they provide. Since the intention of this chapter is to develop a quality assurance programme for public schools, attention is firstly paid to the models combining assessment and planning as the basis of the programme to be developed.

Assessing and planning skills are generic. They would help schools to organise their professional life as well as organise improvement programme that involve many people. According to Glickman et al. (1998) assessing and planning enable schools to take stock of present conditions, analyse consequences and choose events, activities and resources. Such thinking about assessing and planning in bringing about a vision of assuring quality in schools, is a necessary step. In order to create and implement that vision, those who are to manage or implement the process, need technical skills in assessing and planning. In this regard, assessing involves determining where the school and its staff have been and where they are currently, while planning includes deciding where you want to go and choosing the path you and your staff hopes to transverse in order to reach that destination.

A planning process has a particular role to play in the life of the schools. The outcome of the various procedures is a plan that helps the user to set a course everyone is able to refer to. Goddard & Leask (1992) argue that the three major components to planning are the statement of aims and policies, the development of strategy and operational plan.

There are two models that combine assessment and planning, and these are the PDSA cycle and strategic planning. Although both models were originally developed for the business and industry, they have recently been applied to education. Both models attempt to address the dynamic, unpredictable nature of complex organisations. In the development of quality assurance programme, attempts are made to link the two models in a simplified way, and their combination could be employed.

7.2.1 The PDSA cycle

Deming's 14 points for managers (cf. 3.2.1.1), seven deadly sins (cf. 3.2.1.2) and data based approach to quality control have had enormous impact on Japan and North America. Educators such as Bonstingl have jumped on to TQM bandwagon, adapting the ideas of Deming and others associated with TQM to teaching and school leadership, (cf. 3.2.7). One process with its origins in total quality movement is the process of PDSA cycle. This process is relevant to the discussion of assessment and planning, which has been discussed in chapter 4 (cf. 4.3.3.3). In this model the PDSA cycle has four stages (cf. figure 4.5):

Stage 1, in the **planning stage**, assessment and planning takes place,
Stage 2, in the **doing stage**, the plan is implemented, usually on a small scale,
Stage 3, in the **study stage**, data are collected on the implementation process and its effect considered carefully, and
Stage 4, in the **acting stage** the data collected is analysed.

Conclusions about strengths and weaknesses of the plan and its implementation are drawn, a new cycle then begins with formulation of a revised plan.

The PDSA cycle (cf. 3.2.3; 4.3.3.3) is the heart and soul of continuous quality improvement. It provides a useful and logical path for developing quality assurance framework. The construction of an overall planning cycle underpins the action plans. It enables the various significant points in the financial and academic years to be plotted in relation to crucial decision-making events. These points can be plotted on a circular diagram and provide a useful reference tool for planning (cf. figure 4.5).

Plans are not a substitute for development or an end in itself. Instead, it is a means to an end, the formulation of all plans need to be the result of an integrated approach to school development. It is thus very important that schools in their way to assuring quality and also as a preparation for external evaluation, should start by planning the activities that would lead to the development of the whole school.

7.2.2 Strategic planning

One of the most crucial aspects of developmental planning is a formation of a strategy. Strategic planning is a continuous and systematic approach to the way the school organises itself and its environment. Assuring quality in schools and improving the quality of education provided by schools, involve thorough planning on the part of the school. Strategic planning is thus, an approach which schools can adopt in order to assure and improve quality of teaching and learning. This will help the school to ensure that it has the greatest amount of time to develop in relation to the outside pressures and is able to locate the various activities within a coherent framework. Therefore, strategic planning assumes that the implementation of plan and results will be affected by the organisation's internal and external environment. The model to be formulated should try to address these aspects.

There are many versions of strategic planning as well as applications to education. The following nine-step strategic planning process will also guide the formulation of quality assurance model for public schools:

- Step 1: Identify common beliefs;
- Step 2: Identify the school's vision;
- Step 3: Identify the school's mission;
- Step 4: Formulate policies;
- Step 5: Conduct external analysis to identify threats and opportunities in carrying out the mission;

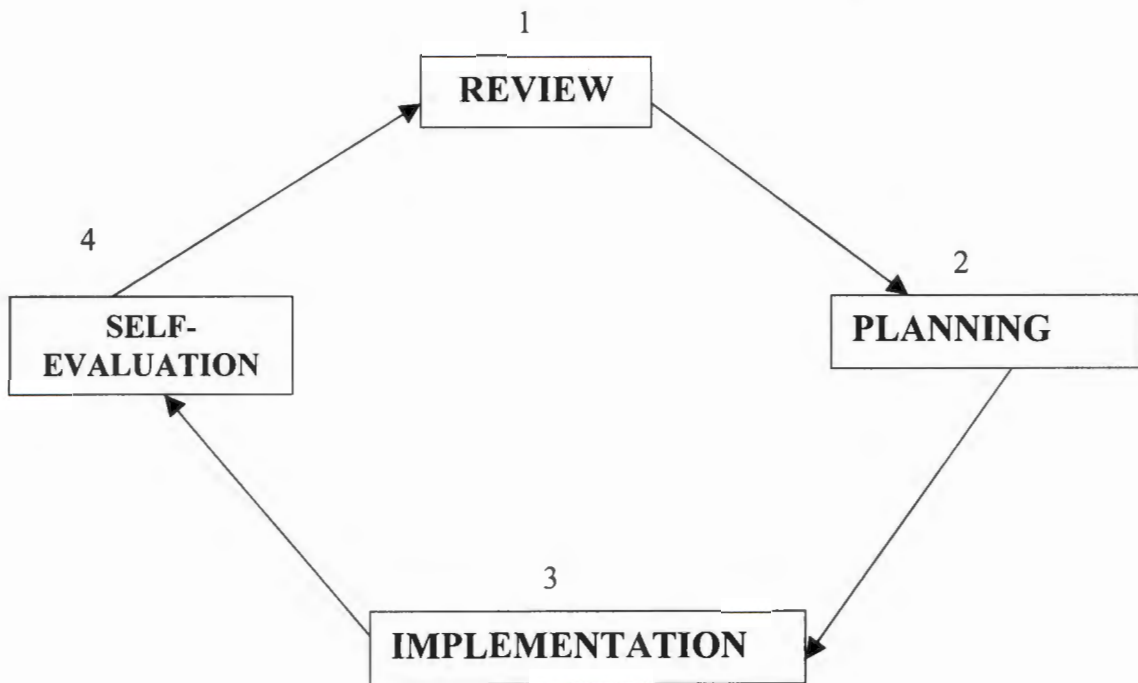
- Step 6: Conduct internal analysis to determine the school's strengths and weaknesses in respect to its mission;
- Step 7: State objectives which should be tied directly to the schools mission;
- Step 8: Develop and analyse alternative strategies - action teams can be formed; and
- Step 9: Design action plan – action teams choose the strategies most likely to achieve the objectives.

The first four steps involve review of school's existing beliefs, vision, mission and policies. In school level the reviewing process may include departmental reviews. Within the cycle of review, each department should be helped to evaluate its performance and assemble a review document. The actual planning process begins from step 5. The two models, that is, the PDSA cycle and the strategic planning form the foundation for planning of a quality assurance programme for public schools.

The planning process for quality assurance is presented in four phases, which form a cycle (figure 7.1).

Each phase examines school policy and objectives, school's regulations, the teaching and learning process, human and physical resources, management and administration. The completion of each cycle also involves the planning of another cycle. In this sense, the process is ongoing and demands the involvement and participation of all staff members. Quality assurance and improvement is also a continuous process. It should involve planning the process of assuring quality and improving the teaching and learning process.

Figure 7.1 The planning cycle for quality assurance programme



The mechanisms for assuring quality should be put in place and implemented. At the same time it should be evaluated to ascertain its effectiveness. New mechanisms may be introduced on the basis of the review results or improved.

7.3 QUALITY ASSURANCE PROGRAMME

An overall picture of the proposed quality assurance programme is provided in figure 7.3. In developing the programme for internal use by public schools, an indication of identifying role players is essential. This includes school's senior management, members of the school governing body, educators and even learners in the case of secondary schools. For all these

role players to participate effectively and to respond positively to their delegated responsibilities of providing and managing quality of education, they must be fully involved and committed. Quality is everybody's responsibility (cf.3.3.1.1; 3.3.1.2).

Quality Assurance Programme is a well-structured plan, with clear stated actions, processes and structures in place including mission, vision, values, assumptions and strategies to ensure that delivery of education in schools is of highest quality (cf.). The programme is designed to offer an effective educational experience for those who are tasked with the responsibility of managing and assuring quality, including the educators.

The Quality Assurance Programme for Public Schools is designed to take into consideration the discovered importance of managing, improving and assuring quality of education. Managing and assuring quality at school level require that all role players to be empowered. This is very important because those in operational and management roles in schools, see quality management as a new style of working and of thinking. The empirical evidence in chapter 6 indicated that role players in managing and assuring quality in schools, need certain skills, knowledge and understanding in order for them to be more effective, efficient and accountable in carrying out their roles. Schools should not wait for someone to decide what has to be done, but should start to take stock of the way they are functioning.

7.3.1 Rationale for Public Schools Quality Assurance Programme (PSQAP)

The programme is designed to be used by public schools in the North West Province of South Africa. It aims at helping schools to be more effective in managing and assuring quality. The improvement of quality of education depends on the quality of managerial and leadership capabilities of both the school principals and educators.

The Public School Quality Assurance Programme is developed from the well-known fact that since 1994, there has been transition and transformation in the education system of South Africa. This transition impacted negatively on schools in addition to the past barriers implanted by the apartheid era. Schools have been operating without any system in place to monitor and evaluate the teaching and learning process. Principals also, because of the teachers unions' refusal to class visitation and inspection, (cf. 2.5.2; 2.5.2.1) could not effectively monitor and supervise the teaching and learning process. With the birth of the new policies on Quality Assurance and Whole School Evaluation, schools should start to put in place mechanisms of looking at themselves with the aim of evaluating their own activities. Public schools, especially the historically disadvantaged should now be ready to be compared with the historically white or former model C schools. They are thus, compelled to think about the quality of their activities, their staff and resources. The practice of not managing and assuring quality of school activities is unhealthy for schools in South Africa. A well-structured quality assurance programme is thus, the answer to the problems of uncompetitiveness of schools when compared nationally and internationally with other schools.

7.3.2 Goals and objectives of Public Schools Quality Assurance Programme

The findings of the empirical study identified the very important educational experiences to be possessed by those involved in managing and assuring quality in schools (cf. 6.4; 6.4.1; 6.4.2; 6.4.3). These identified educational experiences form the basis for the development of quality assurance programme. For the schools and for those responsible for quality assurance quality management to effectively perform their roles, there must be clear goals and objectives to direct school activities. In that way, goals and objectives of the programme will direct the implementation and evaluation of quality assurance mechanisms that are put in place to assure quality.

It should be noted that quality assurance systems have multiple purposes. For the school and for those responsible to assure quality, the objectives could be summarized as:

- To improve public schools and reduce educational wastage;
- To facilitate continuous quality improvement through the sharing of good practice and innovations;
- To ensure that any unacceptable provision is speedily addressed;
- To provide assurance to the public regarding general level of quality;
- To provide assurance to public and other stakeholders that a particular set of academic standards is achieved;

- To demonstrate efficiency in all quality management functions at all levels; and
- To enable rationalization decisions to be made in schools at senior management level and middle management level;

Without a well-structured quality assurance programme, these objectives cannot be actualised. The programme should clearly indicate how the given objectives will be achieved and who will be responsible for what and at which level. Taking into account the limited resources in schools, the objectives might be prioritized. This will also suggest a comprehensive budget to be made for the implementation of the quality assurance programme.

In describing the objectives of the proposed quality assurance programme, it is not suggested that a crash programme of quality assurance must be implemented in public schools in North West Province of South Africa. On contrary, the purpose of the ideal quality assurance programme should be phased in over a cycle of three to five years. The reason for a slow phase in is to allow role players to develop expertise in dealing with quality issues.

7.4 DEVELOPMENT AND IMPLEMENTATION OF THE PROGRAMME

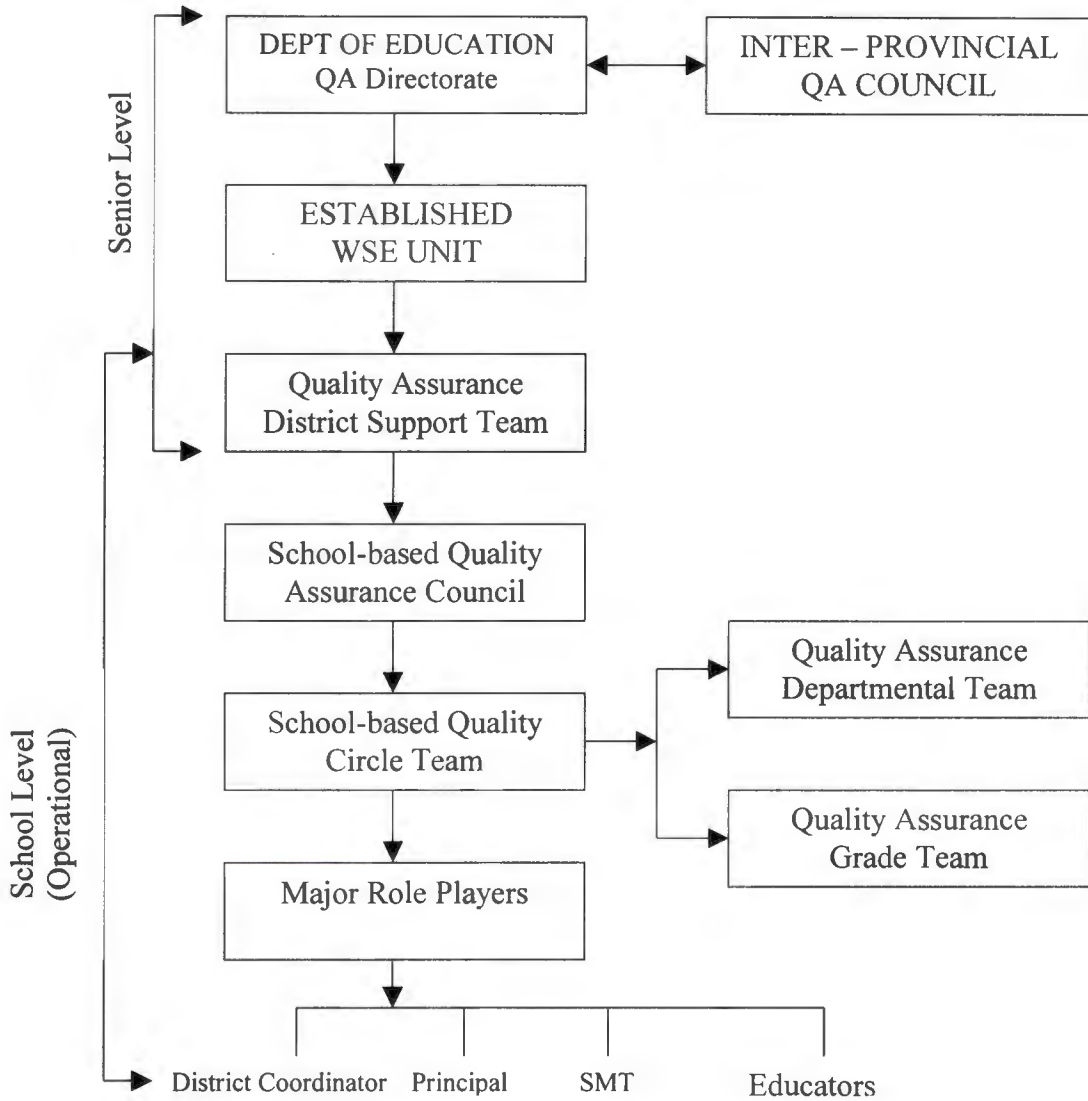
The Public School Quality Assurance Programme is targeted primarily to those who manage and aspire to manage public schools. It is useful then to think in terms of the following matrix (see fig. 7.2), which intersects possible users with possible needs.

Table 7.1 Users of Public School Quality Assurance Programme

USERS	OBJECTIVES			
	Policy Development	Curriculum Development	Staff Development	Personal Development
<i>Senior Management Team</i>	<i>as a source of prompts and checklists for action</i>	<i>assistance and interpretation of curriculum</i>	<i>implement existing policies and arrange developmental programs</i>	<i>direct assistance in teaching and learning</i>
<i>SGB</i>	<i>use of case studies as training material</i>		<i>finance programs</i>	<i>training work-shop on issues of governance</i>
<i>Middle Managers</i>				<i>to help career development Towards management position</i>
<i>Staff</i>		<i>use of data collection techniques to enhance classroom research & self-appraisal</i>		

Although the intended users reflect those at school level, it is thus very important to indicate that the programme is developed taking into consideration the operational structures as outlined by the National Policy on Whole School Evaluation. The WSE process form part of the school process of assuring quality and is thus part of the operational structures of the programme. To ensure that the stated objectives of the PSQAP are realized, all the activities by all users should be well coordinated.

Figure 7.2 The development and implementation structure



7.4.1 Senior level

The development of PSQAP takes into account the existence of subsection 8 (10) of NEPA Act no. 2 of 1996 and the National policy on Whole School Evaluation. NEPA states that the minister shall direct that the standards of education provision, delivery and performance throughout South Africa be monitored and evaluated at specific intervals. Thus the policy on WSE and Systemic Evaluation were put in place. The WSE policy has been designed to ensure that school evaluation is carried out according to agreed national model (cf. 2.5.4.4). It is used to refer to those services, whose main function is to maintain and control standards, evaluate performance, advice and support schools in their continual efforts to improve their effectiveness. The focus is on both the internal monitoring and the external evaluation.

The PSQAP could be used to prepare and help schools to be ready for the external evaluation. It could also provide guidelines for the completion of school self-evaluation to be used by the WSE team for on site evaluation. In this way, duplication of functions will not be experienced.

7.4.2 Quality Assurance District Support Team (QADST)

Schools work with District and Circuit offices at grass root level. According to the policy on WSE, the District takes major responsibility for providing, monitoring and supporting schools in their territory. This kind of support should be provided on an on-going basis for the purpose of continuous quality improvement.

Thus, on the basis of policy specification, the proposed structure for QADST should comprise of:

- The District Manager;
- District coordinator for Quality Assurance (chairperson);
- All Circuit Managers;
- Representative from subject advisory services;
- Representative from governance unit; and
- Representatives from examination unit.

The District coordinator for Quality Assurance with the assistance the District Manager as representatives of the Department of Education, have to ensure that the programme reaches its desired goals and objectives. For a systemic implementation of quality assurance programme in all districts, the QADST should:

- Design a district quality assurance plan and policy;
- For proximity, establish circuits quality assurance teams;
- Develop the district and circuit budget for quality assurance;
- Coordinate school development programme;
- Guide schools in curriculum issues;
- Design the calendar of events for providing on-going monitoring and support at district and circuits levels; and
- Provide feedback (report) about district monitoring and support activities to the provincial Department of Education.

Major themes for District Quality Assurance policy should include:

- Vision and mission;
- Goals and values;
- Principles;
- Curriculum;
- Governance;
- Leadership and management.

7.4.3 School-based Quality Assurance Council (SQAC)

The White Paper on Education and Training (1995:21) explicitly states the necessity of the improvement of quality of education and training services in South Africa. It acknowledges the decline in the quality of performance in many educational institutions particularly schools. Thus, each school management should join hands in the process of ensuring the success of the learning and teaching process.

NWU
LIBRARY

For schools to carry out the role of managing and assuring quality more efficiently, it should establish a School-based Quality Assurance Council (SQAC). The SQAC is located at the level of a school and is the driver and think tank who initiates the quality concept (cf. 3.2.6; 3.3.1.1; 4.3.1.1). The SQAC as leaders are supposed to take charge of school quality activities which should be based on the following principles:

- Quality in schools is guaranteed when responsibility is located to the processes of teaching and learning. In this way, it is maintained and enhanced through total commitment of educators and learners,
- Focus is on learners and learning. The primary focus of any school should be the needs and views of its learners. The quality of learning is the central issue, teaching becomes everything which educators do to facilitate effective learning,
- Quality is best assured by collaboration. Stakeholders must be central to the quality process. Quality Assurance is a continuous and active process in which everyone in the school should be dedicated to,
- Quality assurance mechanisms must be in place and be explicit, so that schools are able to demonstrate their commitment to maintain and raise the quality of their work in a consistent manner with their recognised objectives, and
- Quality is about feedback.

The proposed structure of the SQAC consists of :

- The Principal (chairperson);
- Deputy Principal;
- All Heads of Departments;
- School QA coordinator;
- District or circuit coordinator (ex officio member);
- Representative of SGB; and
- Representative of LRC in the secondary schools.

The main functions of the SQAC is to:

- Design a school quality assurance plan;
- Set clear achievable expectations for quality improvement;
- Set clear goals and implementation strategies;
- Coordinate in-house workshops and staff development activities;
- Set up Departmental and/or Grade quality teams;
- Develop and manage school quality Assurance and improvement budgets;
- In conjunction with the Departmental and Grade Teams determine the calendar of quality events;
- Provide feedback about school-based quality activities to the QADST; and
- Conduct school self-review.

7.4.4 School-based Quality Circles (SQC)

In schools, the principal together with School Management Team (SMT) work with the whole staff. To ensure full participation and empowerment, the SMT should establish the School-based Quality Circle Teams (SQCT), which will eventually lead to the formation of Quality Assurance Departmental Team (QADT) and Quality Assurance Grade Team (QAGT). The establishment of these teams will depend on the structure of the school. In primary schools, where one educator teaches all learning areas or subjects in one class, the team may be formed by educators teaching the same grade.

In schools where subject teaching is done, educators who teach the same subject may form teams. Again, depending on the school enrolment, bigger schools may use both types of teams to allow staff members to be more involved in different teams. Such involvement that does not only include senior management, but it also could make a difference towards the quality improvement initiatives.

To ensure total involvement, training of all staff members on quality assurance and quality improvement should be conducted. Such training will maximize the effective participation of staff in school quality assurance and improvement activities. Moreover, everyone will make contribution to quality which will reflect in his or her behavioural and personal contribution to quality efforts.

The main function of SQCT is:

- to initiate the formation of the QADT and QAGT when necessary;
- to coordinate the activities of the QADT and QAGT; and
- to report on the activities of the QADT and QAGT to the School-Based Quality Assurance Council;

All Heads of Departments should be members of the SQCT. The position of chairperson should rotate among the members on an annual basis.

7.4.4.1 Quality Assurance Departmental Team (QADT) and Quality Assurance Grade Team (QAGT)

It is very essential that sometimes teams be formed because there is a project that needs quick attention. On the basis of an urgent solution and the kind of problem needed, a QADT and / or QAGT may be formed.

The establishment of these teams will again depend on the structure of the school, as is the case with the SQCT. Primary schools, where one educator teaches all learning areas or subjects, the QAGT may be established. In schools where subject teaching is done, the QADT may be established.

To ensure total involvement, training of all staff members on quality assurance and quality improvement should be conducted. Such training will maximize the effective participation of staff members in school quality assurance and improvement activities. Moreover, everyone will make contribution to quality which will reflect in his or her behavioural and personal contribution to quality efforts.

Since Quality Teams have limited life span, and are usually established on the basis of a particular problem or project, the PSQAP also takes this into consideration (cf. 4.3.1.2). It only provides guidelines from the existing structure within the school. Involving staff members, either those teaching same grade or same subject gives most equal chances of being members of the quality teams. The benefit is that all members will acknowledge the importance of their contribution and participation.

7.4.5 Major role players of PSQAP at school level

The proposed quality assurance programme should be managed and supported by relevant role players. It is imperative that the role players as displayed in figure 7.3 should understand their roles and be more committed to the initiatives of quality processes.

7.4.5.1 The district coordinator

The district coordinator as a member of QADST and also an ex officio of SQAC, has a very important role to play in helping schools to realise the importance of the internal approaches to quality assurance.

The main functions of the district coordinator's are to:

- Liaise between the school and district on issues relating to quality activities;
- Attend school meetings on quality issues, give guidance and support where necessary;
- Arrange with relevant stakeholders on services needed by schools;
- Provide formative feedback to the school on quality progress; and
- Report to the QADST about the progress schools make and the kind of support needed.

7.4.5.2 The school principal

The school principal as a representative of the Department of Education is the lead professional on many issues and has to ensure that the programme reaches its desired goals and objectives. As the head figure in the school he or she must be conscious of the key words in quality improvement process and be the champion to drive it. The principal as an instructional leader, takes responsibility to initiate and maintain the process of assuring quality and school improvement. He or she should start by spending sufficient time before implementation to help everyone to accept changes, pilot and monitor new approaches. The principal must see that stakeholders are well informed about the process and procedures of managing and supporting quality initiatives. For the stakeholders to be informed, the principal should arrange staff development workshops that will enable the staff to continuously upgrade their knowledge, skills and performance.

The principal as an educational leader also in the planning, staffing, monitoring and evaluation of quality activities can:

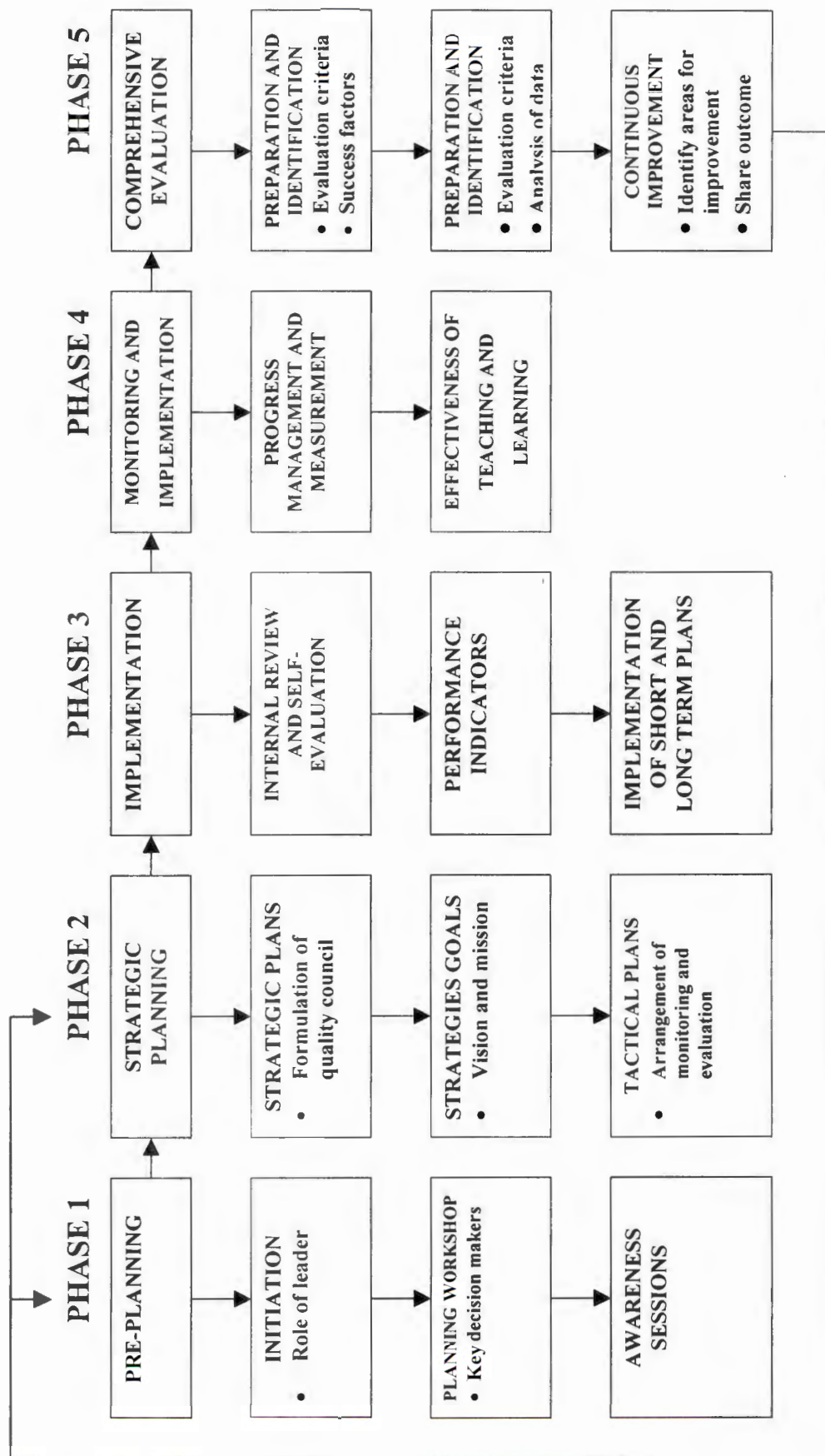
- focus members attention to what is important to the school's future;
- encourage participation of members in planning and structuring school's development;
- encourage team spirit, not only in programme planning, but also in school planning;
- facilitate members to establish appropriate educational mission and development of goals for learners and educators from the reflection on the external and internal environmental impacts;

- ensure the development of school plans and instructional programme plans closely related to the established educational goals;
- maximize opportunities for learners to learn and staff development through appropriate structuring;
- ensure that staffing and directing activities contribute to the professional development of staff and learning effectiveness of learners;
- encourage educator professionalism through appropriate staffing and directing activities;
- help members to understand the contribution of monitoring and evaluation to the improvement of the instructional process and development of staff;
- help members to become familiar with recent developments of educational evaluation and monitoring and their applications to enhance educational quality and quality improvement; and
- facilitate members to use the educational indicators to monitor and improve the teaching process and educational outcomes.

7.5 THE PUBLIC SCHOOL QUALITY ASSURANCE PROGRAMME

It is clear from the empirical investigation that schools need to be ready to embark on the process of assuring quality and quality improvement. Hence the PSQAP wish to propose a programme to be used by schools to develop their own approaches to quality assurance systems. Figure 7.3 summarises the proposed PSQAP that comprise 5 stages. Each stage has sub activities

Figure 7.3 The Public Schools Quality Assurance Programme



focusing on procedures to be followed by schools in the process of managing and improving quality.

The main proposal that underpins the programme is that the improvement of quality is everyone's job and is led by the principal and the School Management Team (SMT). The development of quality is a continuous process, based on a well-managed regime of review and development linking the following components:

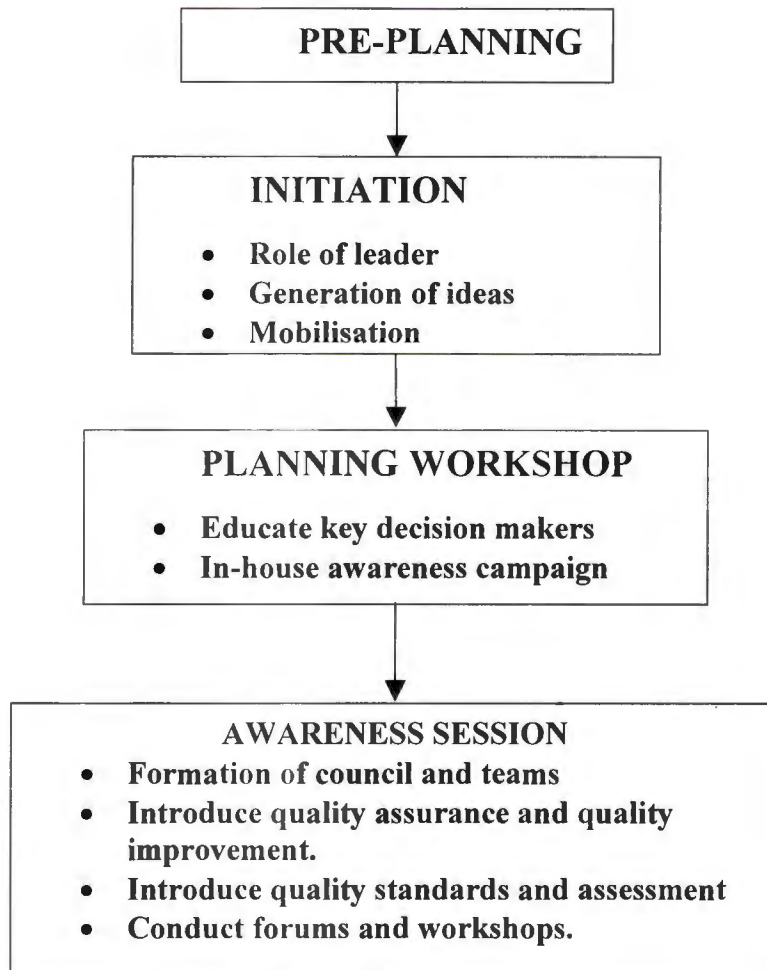
- **Internal cycle of self-evaluation** which is based on pre-planning for quality improvement activities which include school development plan, setting of targets to enable the checking of progress and followed by an annual review meeting where improved existing or new targets are formed,
- **Data on school performance** must be tracked to provide comparison of the school profile on yearly basis. This will assist schools to know how they cope with regard to classroom management and students' learning.
- Schools need **feedback** on performance from those who are involved in the school on how they think it is doing and on what should be done. This includes feedback from learners, staff, parents and the community. Such information will enhance the school's self-evaluation, planning and development.
- **Whole school evaluation report**, conducted by the School-based Quality Assurance Council and also the external

evaluation according to the policy on WSE should be part of future planning for the school quality improvements.

7.5.1 Phase 1: Pre-planning

Figure 7.4 outlines the basic activities that schools should attempt in the pre-planning phase for quality assurance and quality improvement. This phase should offer the opportunity to understand that quality initiatives involve changes. It involves change in school activities, attitude, practice and belief. Structures and material school leadership plays a very essential role in leading and initiating quality activities. The phase of initiation is mainly intended to provide mental and procedural awareness that the process of assuring and improving quality begins with the genesis of an idea by the principal, who is the leader.

Figure 7.4 Pre-planning phase



Role of leader (2.4.3.1; 3.2.7.4; 3.3.2.2; 4.2.2.5)

According to the proposed programme, the role of the leader is crucial for quality assurance and quality improvement. The role of the principal in quality initiatives is related to the process of influencing other behaviour and goal development and achievement. If the sequence of the programme is the first, then the principal or school leadership must initiate an idea towards

quality improvement. If the sequence represents continuation of an ongoing cycle of assuring and improving quality, then the decision taken or report of annual review and feedback will trigger the idea towards improvement.

Once an idea has been developed, the principal shares the idea with his/ her SMT for modification, leader commitment is crucial to the success of the programme (cf.3.2.4). The better the SMT knows the intentions of the principal - both means and ends - the better they can promote the idea and its implementation to other staff members. The initiation phase is characterized by the mobilization of senior management around the idea. For the idea to receive fair support, the contribution of the staff must be invited and considered. Thus, the exercise involves exchange of views on the idea by those who will be involved in the process of quality improvement and assurance.

Planning workshop (4.2.3.1; 3.2.4; 3.3.2.2; 3.3.4)

The first requirement in planning, before implementation of any idea or programme, is to educate all key decision makers. Ownership can only be broadened when decision-makers have good understanding of what is involved in quality management and improvement. The selection of interim working party in the pre-planning phase is a very important step to be considered. Planning workshop must focus on:

- Identifying customers needs and wants; and
- Making an initial management commitment including:

- Establishing an awareness committee;
- Allocating resources;
- Identifying staff responsibilities;
- Setting target time; and
- Involving all stakeholders.

Awareness sessions

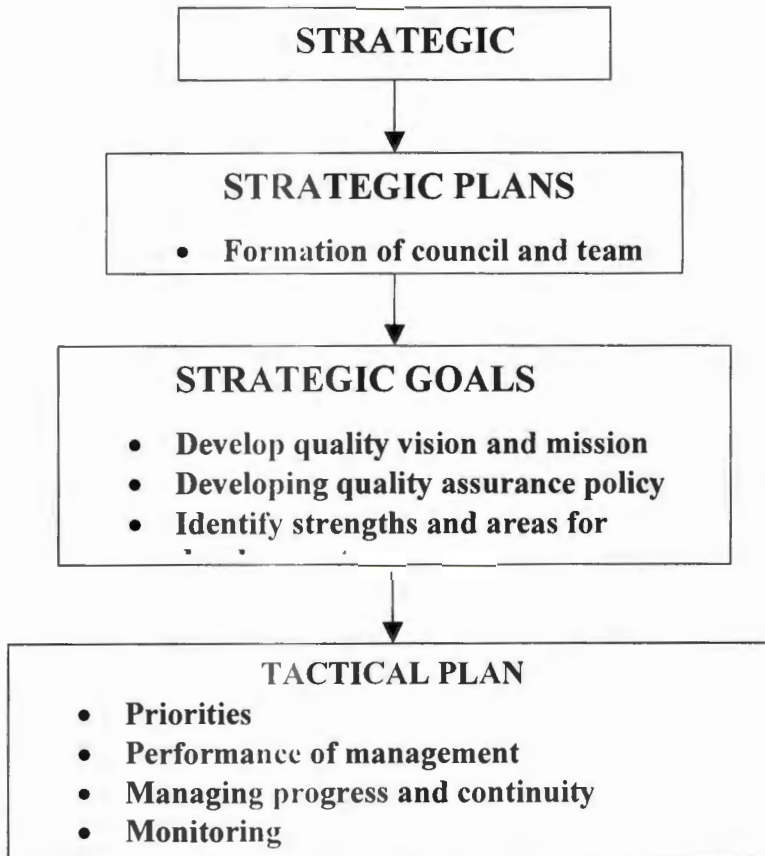
The awareness session, according to the programme, starts once the Principal and the senior management have exchanged views about quality assurance and improvement. The awareness session should provide an opportunity for members of the staff to see the actual necessity of embarking on issues of quality assurance and improvement. Staff members should be made aware of and receive full details on quality and about mechanisms of improving the quality of teaching and learning. In this phase, forums and workshops on quality assurance and improvement should be conducted. Use of facilitators with expertise in quality assurance from the university or Department of education should be utilised.

7.5.2 Strategic planning phase



The strategic planning phase is a crucial aspect for the school and for those who are to manage the quality processes. The phase has a number of activities as outlined in figure 7.5.

Figure 7.5 Strategic planning phase



Strategic plans

The strategic plans to be addressed include:

- Formulation of quality council (4.3.1.1; 7.4.3)

The establishment of School Quality Assurance Council is the important step in this phase. The composition of quality council is

outlined in 7.4.3. Once the council is established, they should start planning the activities thoroughly to assure and assess quality.

- Strategic goals

Another important requirement in the strategic planning phase is the development of strategic goals. Once the quality council is in place, they should develop quality vision and mission, values and measures, and the quality assurance policy. The school's mission should be a clear statement, which would be understood by all participators. In the same way the values of the schools should be clearly stated and express the principles upon which the mission will be achieved. Drawing up of vision and mission, quality assurance and improvement plan involves:

- Identifying strengths and weaknesses (4.3.2..4); and
- Identifying areas for improvement (4.3.2.1; 4.3.2.2)

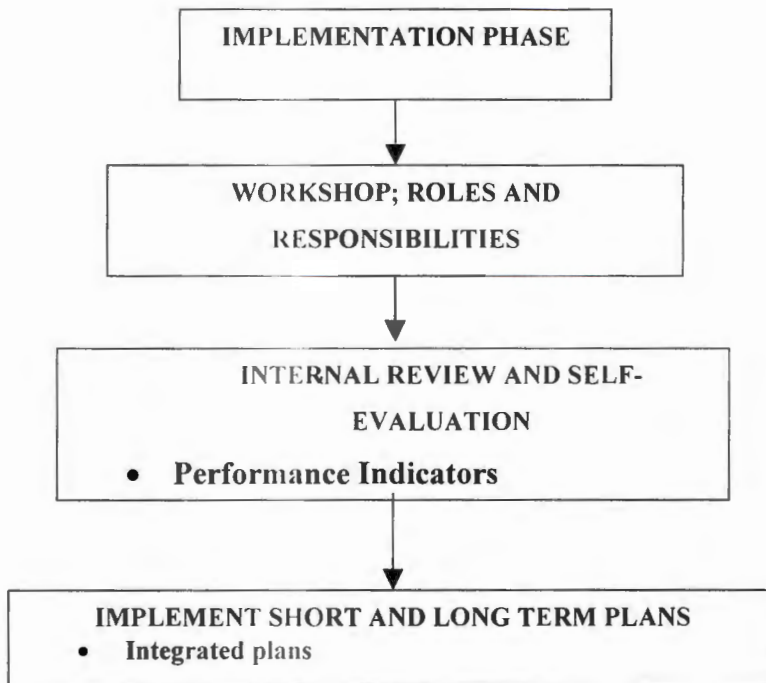
Tactical plans

In the strategic planning phase tactical plans should be put in place. Firstly, the areas for improvement should be prioritised with the aim of improving performance. Mechanism for managing progression and continuity must be in place. The last and important feature in this phase is to arrange procedures and strategies for monitoring and evaluating progress registered as a means of assuring and improving quality (2.5.4; 3.2.2.1; 3.3.1.1; 3.4.2.3; 4.3.3.2).

7.5.3 Implementation phase

In the implementation phase there are several important activities taking place. Several meetings and workshops should be conducted so that all participants in the process of assuring and improving quality are well informed about the activities. The phase goes beyond informational material and Figure 7.6 below outlines the activities of the implementation phase.

Figure 7.6 Implementation phase activities



Roles and responsibilities

It is important that each member understand his or her roles in the process of quality improvement. The first meeting in this phase should concentrate on

the activities to be carried out. Activities to be carried out in the implementation phase should involve:

- Establishment of implementation teams;
- Allocation of resources;
- Assigning of responsibilities;
- Setting of targets; and
- Establishment of facilitators and coaching.

Internal review and self-evaluation (cf. 2.4.4; 4.2.3.4)

Knowing where the school comes from, serves as the point of departure in the process of assuring and improving quality. According to the PSQAP, the internal review in schools should include:

- *Review of school aims* , these aims should form the starting point of any internal review. This review should indicate whether the school is achieving its stated aims especially in teaching learning activities, it is the SMT's responsibility to gather evidence of whole school performance.
- *Review of the School Developmental Plan*, which will enable all members of the staff to have a coherent view of the direction and priorities to be taken for school improvement.
- *Departmental review*, each department should hold a meeting to review its performance in respect of:
 - Examination results or continuous assessment marks;

- Assessment procedures;
 - Planning of classroom activities and curriculum;
 - Approaches to teamwork; and
 - Approaches to group work in classrooms
- *Policy review*, involves the need to convert policy statements into good practice to be sustained over an extended period. Thus, the process of reviewing and evaluating existing policies is very important. For the process of assuring and improving the quality of teaching and learning in schools, the following policies are important:
- Learning area policy or subject policy;
 - Marking policy;
 - Assessment policy; and
 - Homework policy

Performance indicators

Schools need feedback on their performance. There is a need for SMT to have good quality management information that enhances the school's self-evaluation to monitor and report the school's achievements. Thus, this programme propose the following performance indicators:

- School profile data; and
- Institution-derived indicators

Table 7.2 proposes the school profile data to be followed by schools. It must be noted that not all activities are indicated in the table. Depending on the needs and environment of the school, additions may be done.

TABLE 7.2 Performance indicators

WEEKLY OR MONTHLY INDICATORS	STAKEHOLDER RESPONSIBLE
Attendance rate (learners) - % according to Departmental specification.	Class educator, totalled by HOD
Attendance rate (staff) - % breakdown, illness, personal or staff development	Selected HOD
Budget - % of budget spent	Principal and Treasurer or Secretary
ANNUAL INDICATORS	STAKEHOLDER RESPONSIBLE
Student data - number of roll as compared to school Standard number - applications and admissions - languages - eligible for fee exemption	Principal Admission Committee SMT SMT and SGB
Test/exam/ Promotion data - continuous assessment marks - test marks - promotion % and to ascertain achievement across ability range.	educators educators HOD's
Curriculum data - hours/ week taught - % of curriculum time - learning areas or subject taught	Time-table committee Time-table committee SMT
Staff data - teaching staff profiles - support staff profiles - contacts ratio - average class size	Principal Deputy principal SMT & time-table committee SMT
Budget data - % spent on , teaching staff, support Staff, resources, learners, awards.	Principal, treasurer/ secretary and SGB
Parental data - amount contributed per year - % attending parents evenings or/ meetings - % helping with homework	Principal, treasurer/ secretary and SGB Principal and SGB SMT and Educators
Premises data - redecoration cycle - grounds for extra curricular - infrastructure	Support staff Sports committee Principal and SGB

Wherever possible, the data should be compared over a period of time to ensure quality.

Implement short-term and long term plans (cf. 4.2.3; 4.2.3.1)

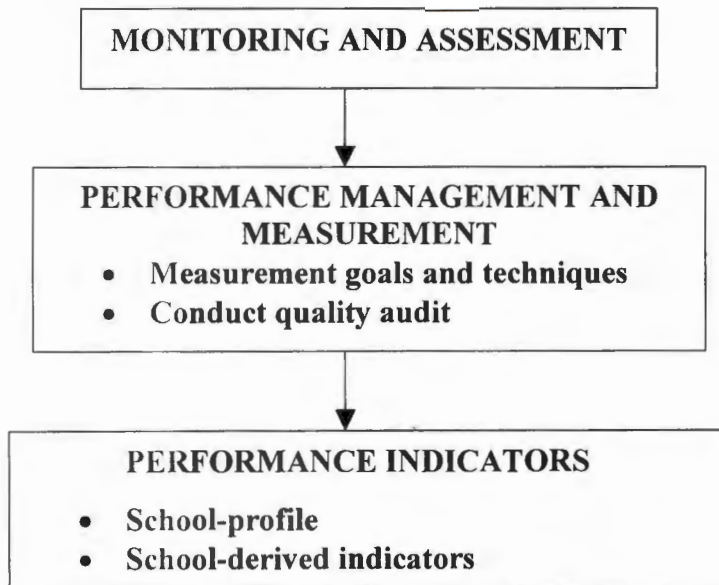
On the basis of the information obtained during school's review and self-evaluation, the implementation of the plans aiming at improving the quality of teaching and learning will then follow. The short term plans and the long terms plans must be integrated. The implementation of these plans involves:

- Revisiting strategies and plans;
- Prioritising plans;
- Setting target dates, and
- Taking action.

7.5.4 Monitoring and assessment

Monitoring and assessment are the most important features of quality improvement process (2.4.4.3). Activities to be carried out during this phase are clearly outlined in figure 7.7. Continuous monitoring and assessment of all activities taking place in the school is very important because it measures the progress registered by all stakeholders. Measuring progress in a school is an important attribute of a school striving towards quality improvement.

Figure 7.7 Monitoring and assessment phase



Progress management and measurement

Progress management should be the responsibility of the school quality council. The following activities need to be addressed:

- Use measurement goals and techniques;
- Use quality award criteria;
- Conduct quality audit on regular intervals;
- Use of success factors; and
- Model progress

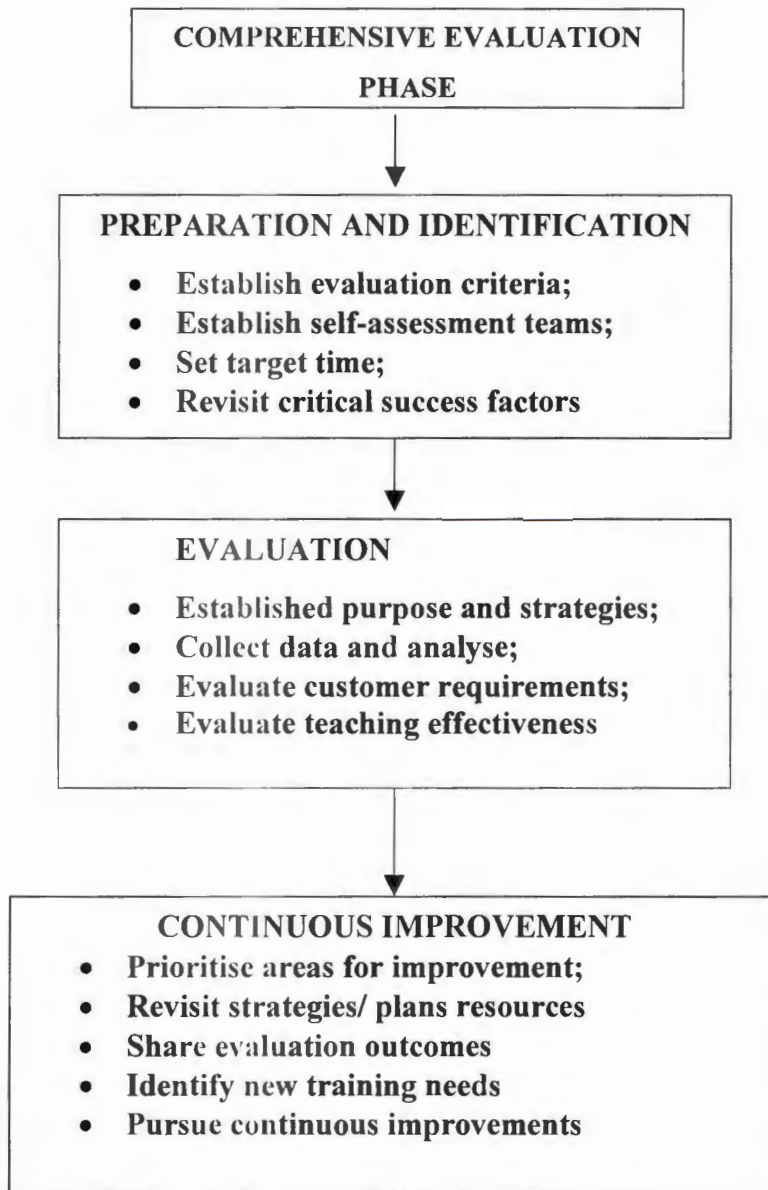
Progress measurement should thus include;

- Use of measurement tools and techniques;
- Self-assessment; and
- Revisit success factors.

7.5.5 Comprehensive evaluation phase

The process of quality improvement needs to be evaluated. The aim of the evaluation is to measure whether the objectives of the programme are achieved. It should be the school's quality team that spell out the criteria for evaluating the process and also the time frames that should be stated. The activities to be addressed are clearly outlined on figure 7.8.

Figure 7.8 Comprehensive evaluation phase activities



Preparation and Identification

In this phase as reflected in the Figure 7.8, a thorough preparation and identification of areas to be evaluated is the first step. Once the areas have been identified the following are to be addressed:

- evaluation criteria;
- evaluation teams; and
- revisiting of success criteria.

Evaluation

The school-based quality team should conduct evaluation so as to identify gaps in the implementation phase. Firstly, they must outline the purpose of evaluation to stakeholders and put in place strategies for evaluation. The evaluation team should collect data, through scrutinizing documents, learners and educators. These data must be analysed and a report on this instance be prepared. Data collected when the effectiveness of teaching and learning is to be evaluated should include:

- Physical and human resources;
- Provision of resources for teaching;
- Provision of resources for learners' use;
- The planning and preparation of the lesson;
- Reading, writing and group work activities;
- Additional classroom support; and
- Use of homework.

Continuous improvement

On the basis of the report by the evaluation team, areas for improvement should be prioritized by the quality council. Plans and strategies need to be in place to pursue improvements. In order to pursue improvements,

evaluation outcomes must be shared and discussed with all the staff. New training needs should finally be identified to allow the process to restart.

Evaluation of the success made should include the following activities:

- Continuous evaluation of learners;
- Continuous evaluation of educators;
- Continuous evaluation of SMT; and
- Continuous evaluation of the teaching and learning activities.

7.6 SUMMARY

The PSQAP has been outlined to facilitate an understanding of a school quality assurance programme for schools. The purpose of the programme is to help schools put quality improvement mechanisms in place and be accountable for the quality of education they are providing. Information on how the programme could be started and managed is also outlined.

The development and implementation structure of the PSQAP takes into consideration the main users of the programme (7.3). It also outlines the activities to be addressed in the process of quality assurance and improvement. Some of the implications of the programme to schools are:

- Cooperative learning strategies at all grades;
- Ongoing in-service training for staff members;
- Common vision among learners, staff and SGB; and
- Team approach in school activities.

8. SUMMARY, FINDINGS AND RECOMMENDATIONS

8.1 INTRODUCTION

This chapter presents a brief summary of the study. It further reflects the major findings of the empirical study and a programme that schools could use to assure quality of teaching and learning. Furthermore, a reflection is also made on recommendations for the process of quality assurance and improvement in schools as well as areas for further research.

8.2 SUMMARY

In chapter 1 the aim of the study and a statement of the problem are outlined. A concern is expressed about the effectiveness and quality of education provided by schools. Education departments in different countries and even schools are more concerned about ways of improving quality in schools (cf. 1.1; 1.2). In an attempt to improve the quality of education provided, schools need to be quality and service oriented. To be quality and service oriented involve relating and caring about goals, needs, desires and interests of customers.

Chapter 2 outlines the nature and scope of quality management. From the literature consulted, it became clear that there is no consensus view among researchers about the meaning of quality especially in education (cf. 2.2; 2.2.1; 2.2.2). Most argue that “you can’t define it, but you know it when you see it”. Although it was found in the literature that the definition and

indicators used to describe quality may be different, researchers indicated five broad approaches in the definition of quality; quality as exceptional, perfection, fitness for purpose, value for money and as transformation (2.2.1; 2.2.1.1 – 2.2.1.5).

Again the literature indicated that quality needs to be managed and quality assurance is part of quality management. From this perspective it may be concluded that, quality management is a complete process set up to ensure that the quality activities actually happen in schools. The conceptualization of Quality Assurance in schools should include internal mechanisms to check the quality of service provided (cf. 2.2.3; 2.4.4). The literature also revealed that quality assurance in higher education has received attention more than in schools, even in South Africa (cf. 2.5.1.1). In higher education, quality assurance examines the aims, contents, resourcing, programmes and courses (cf. 2.2.3). Schools as organizations need to examine their aims and objectives, contents of teaching and learning and even resources that enhance their teaching activities.

This chapter also focused on policies and legislative framework in South Africa that formed the starting point of quality assurance in schools. It clearly outlines the situation in schools before the policies were developed on assuring and improving quality of education in schools. The framework of quality assurance in South Africa also received attention in this chapter (cf. 2.5.4; fig. 2.2).

Chapter 3 provides the contribution made by quality movement theorists about the underlying principles of quality management and quality improvements (cf. 3.2). It emerged from the literature consulted that quality issues originated from Total Quality Management, a movement in industry. The contributions made by the different quality gurus were outlined in this chapter (cf. 3.2.1; 3.2.2; 3.2.3; 3.2.4; 3.2.5; 3.2.6; 3.2.7). It is clear from the literature consulted that their principles on managing, assuring and improving quality in organizations play an important part of the quality activities. The literature findings indicated that the principles as outlined by the quality movement in industry could also be applicable to education (cf. 3.2.7).

Furthermore, the literature revealed that most quality theorists regard training as a prerequisite for success in almost all working situations. Models of quality management also received attention (cf. 3.3; 3.3.1; 3.3.1.1; 3.3.1.2; 3.3.2; 3.3.2.1). It is clear from the literature consulted that successful implementation of TQM depends on:

- Vision, strategy and goals;
- Teams and teamwork; and
- Tools for daily management.

Chapter 4 provides ways in which schools could work systematically to achieve quality through skillful process management (cf. 4.2; 4.2.1; 4.2.2; 4.2.3). It outlines tools and techniques to measure the quality progress (cf. 4.3). Although these tools and techniques were and are still used

successfully in industry, the researcher believes that schools could use them to effectively implement, manage and assure the process of quality of teaching and learning. From the literature consulted, it emerged that measuring of the activities taking place in school forms the genesis of the road towards quality assurance and improvement. The tools and techniques as used in industry were outlined in this chapter. The literature findings revealed how each of these tools is to be used to measure quality progress (cf. 4.3.1; 4.3.2; 4.3.3; 4.3.4). Customers in education are not willing to accept substandard products. Hence, the assumptions and characteristics of customer-focus school were also outlined in the chapter (4.2; 4.2.1; 4.2.2; 4.2.3). The chapter also briefly outlines some institution's experience that adopted TQM as part of their culture towards the improvement of their service to students (4.4; 4.4.1; 4.4.2).

In chapter 5 and 6, an empirical study was conducted to determine the skills needed by educators and the SMT to manage, assure and improve the quality of teaching and learning in schools.

From the empirical investigation, it emerged that for schools to embark on the process of assuring and improving quality, schools should be ready to accept transformation. Because the process should be driven by the school staff-members, it came out clearly that those who are to manage the process of quality assurance and improvement and those to implement the process, need a thorough training in issues of quality.

Furthermore, the empirical investigation revealed the importance for educators to have knowledge and understanding, relevant skills and positive attitude in order to provide high quality educational experience. The study also revealed that the quality of teaching and learning should be assessed to examine whether or not the specified standard and aims are improved or at least maintained. The findings revealed the need for educators to have thorough knowledge on how to go about assessing quality in their classrooms and the school as a whole (cf. 6.5).

In chapter 7, a programme for quality assurance in public schools was developed. The development of the programme was guided by findings from the literature and results of the empirical investigation conducted. School community (cf. 7.4; fig 7.2) specifically developed the programme, Public School Quality Assurance Programme (PSQAP) for internal use. Although the programme was developed for public schools, schools need to be ready for external evaluation. Hence, the senior level in the development and implementation structures is included (cf. 7.4). The programme developed has five phases that aim at helping the school principal, SMT and educators, those who should assure and manage quality in their schools to be more effective in the process of quality assurance and improvement.

From the study, a number of important findings have emerged concerning the process of assuring and improving quality in organizations, including in schools. These findings are discussed in the next section.

8.3 RESEARCH FINDINGS

The researcher submits that there were five aims in this study (cf. 1.3). With regard to the first aim, namely to determine from literature the nature and scope of Quality management and Quality Assurance, the following findings were made:

- Quality management and quality assurance are products of Total Quality Management. Quality movement originated in Japanese industries and expanded to other parts of the world (cf. 2.3.1; 2.3.2; 2.3.3). Hence TQM theorists such as Deming, Juran and Crosby concentrated on quality in the manufacturing industry. But there are those theorists who concentrated on quality in education such as Bonstingl and Murgatroyd and Morgan. Both wrote and conducted workshops on the application of the quality concept in education (cf. 3.2.7; 3.3.1.1).
- QA fulfils the functions of transparency, validation, accountability and improvement. An effective quality assurance programme has clearly articulated goals and purposes (cf. 2.4.2). It also has principles that originated from TQM which suggest that every process within the organisation contributes to the overall quality in the organization (cf. 2.4.3). These principles suggest that the process of assuring quality:
 - is led by the management;
 - requires good customer-supplier relationship;

- requires the prevention rather than detection of faults;
- is everybody's responsibility;
- requires a non-stop search for improvement.

The following principles for quality assurance are important (cf. 2.4.3) specifically for schools :

- Focusing on learners and learning;
 - Quality must reflect stakeholders' needs;
 - Quality has to be demonstratable;
 - Quality is about feedback.
- An effective programme that could produce a successful implementation of quality management and assurance depends on vision, strategy and goals, teams and tools for daily management (cf. 4.3).
 - Self-evaluation is the heart of the process of quality assurance.

With regard to the second aim, namely to examine QA models, the following findings emerged:

- Although quality assurance framework for South Africa is still in its infancy stage, structures for monitoring and evaluation has been put in place (cf. 2.5.3). Many countries have their own way of assuring and managing quality in schools.

- In Nigeria, the inspectorate division in the Federal Department of Education is charged with responsibility of providing and ensuring quality of education (cf. 3.4.1).
- In Australia, each state is responsible for provision management and control of education. Thus in Queensland, the school Planning and Accountability Framework (cf. fig 3.5) ensures that state schools operate as part of a public education system within the context of the local school to devise programme and solutions that meet identified needs.
- In Britain, the work of Her Majesty's Inspectors of Schools (HMI's) has been a quality assurance activity (cf. 3.4.2). Their duty is to undertake a careful observation of teaching and learning; and also to check whether appropriate standards of teaching and learning are achieved.
- Very few well-structured models have been designed for assuring activities. The following are models that were specifically designed for schools-:
 - TQM model for school leadership (cf. 3.3.1.1; fig 3.1);
 - Total Quality School Model (cf. 3.3.1.2; fig 3.2);
 - Quest for educational quality model (cf. 3.3.4; fig 3.4).

- The literature revealed that comprehensive planning model for implementing and maintaining quality use. It should encompass the mega, micro and macro needs (cf. 4.2.3.2). Team approach to monitoring and evaluation is key in the process of quality management. Self-evaluation is a critical approach to school assessment, and its main concern should be to improve teaching and learning (cf. 4.2.3.4).

From empirical investigation the following were major findings:

- The empirical investigation conducted revealed that schools should be ready to innovate any change that lead to the improvement of the school activities. Quality assurance and improvement involve change. In that respect, for schools to be able to manage the practices of quality, they must be ready to change its usual way of doing things.
- Furthermore, for educators to provide and acquire high quality experience, they should have positive attitude towards their work, thorough knowledge and understanding of educational activities and have good communication and interactive skills to be able to deal with changes in schools.
- With regard to the needs of those managing and involved with quality practices, the findings revealed the following as important needs with regard to assessment in schools:
 - policies and procedures;
 - school development plan;

- relations with parents;
- learners; and
- methods of assessment and evaluation.

The study also revealed that stakeholders are aware of the good practices of assuring and improving quality such as, developing practical plan and planning ahead, involvement and commitment of all stakeholders, teamwork and availability of clear policies.

- The following are kinds of problems that were experienced by schools when putting mechanisms in place to assure and improve quality:
 - lack of resources or infrastructure;
 - low educators morale;
 - lack of parental involvement;
 - resisting change;
 - disciplinary measures.

Regarding the last aim of the study, to develop a quality assurance programme for public schools in North West Province, the following findings were made:

- The implementation structure should take into account and guide the understanding of main users of the programme for the effective and efficient implementation.
- The activities to be carried by all users of the programme should be well coordinated. There is a need for formulation of guidelines and

workshops to ensure that the objectives of the PSQAP are actualized and realized.

- In this study a programme with five phases is developed with the aim that it be used internally by public schools as a means to be accountable for the improvement of the teaching and learning activities. The important aspect of self-evaluation is that it should be conducted in each phase of the programme.
- The quality assurance programme should be evaluated to ensure that it is not outdated but it is in line with new developments in the system and caters for the needs of those implementing and managing quality processes in schools.

8.4 RECOMMENDATIONS

Recommendation 1

More attention should be paid to the professional development of educators with regard to process of quality assurance and improvement.

Motivation

More than ever-before educators need to be supported so that they are able to deal effectively with the challenges associated with the history of denying school inspectors, subject advisers and principals entrance in schools and

their classrooms, they need to be trained and workshopped on issues of accountability and quality improvement. Without effective performance of the duties and responsibilities, the quality of teaching and learning, overall performance in schools will remain in crisis.

Recommendation 2

Training workshops should be conducted where the staff would have opportunity to rethink about their teaching styles and other processes in the school.

Motivation

There is a great emphasis on the importance of training the stakeholders in organization. Educators should be given opportunities to share ideas on common problems. Workshops need to be arranged on continuous intervals to equip all stakeholders with quality principles, and also the knowledge and skills of assessing quality. Through training in workshops, they will know and understand their roles in contributing to the schools success.

Recommendation 3

Principals together with the SMT should create the correct organizational climate and build teamwork.

NWU
LIBRARY

Motivation

The senior management needs to create an organizational climate that will encourage the staff to innovate and strive for continuous improvement. Unless the organizational climate is right, the implementation of quality assurance and improvement processes would fail. Teams are the most effective mechanisms for planning and bringing about quality improvements. These teams will be effective when they are empowered with skills to make decisions and to implement quality principles.

Recommendation 4

Schools to develop effective quality circles and teams.

Motivation

The existence of quality circles and teams is the cornerstone in the implementation of quality practices in schools. These quality circles and teams could be formed around a particular grade, subject/learning area or department in a school. Quality circles and teams need to work harmoniously within themselves and with other groups in the school.

Recommendation 5

The principal and the quality council should initiate the self-evaluation process and train or empower stakeholders to conduct self-evaluation.

Motivation

School self-evaluation is the heart of the process of quality assurance and improvement. The potential for creating enthusiasm about self-evaluation processes lies in the preparation and design steps to be followed when conducting self-evaluation. Educators learn better when thoroughly given an in-service training by their leaders. They need to be trained and in-serviced on issues of how to review existing data and collect new facts and opinions. Arrangement of workshops on regular intervals would be a necessity in this regard.

Recommendation 6

The Department of Education should offer training sessions and support schools in quality theory and practice.

Motivation

The process of assuring and managing the quality of teaching and learning activities by schools could be effective if it is supported by the Department of education. Personnel at all levels, particularly in schools, need formal training in quality philosophy and its practical implementation. Without training sessions conducted by departmental officials from circuit and district offices or quality Assurance unit, the quality of education provided by schools will remain a crisis. The birth of the Chief Directorate: Quality Assurance and policy on Whole School Evaluation, call for the undivided

attention to help schools to be accountable and put into place mechanisms to assure, manage and improve quality of education.

Recommendation 7 (for further research)

South Africa is still in its infancy stage with regard to the process of quality assurance, particularly in schools. There has been a limited research on the application and implementation of quality theory in schools. In this study an attempt has been made to develop a quality assurance programme for public schools. The programme has not been tried but is offered to pre-empt the possibility of schools' performance to decrease. In this respect the researcher suggests:

- A longitudinal case study of a school or schools which will implement a quality assurance programme; and
- A quantitative research on the state of readiness for external evaluation by schools that implemented the developed programme.

8.5 CONCLUSION

In conclusion, although the implementation of principles for quality management and improvements may present a modest beginning with great promise, it has the capacity to bring about immense improvements in the work schools in South Africa. There is an increased demand that schools should begin to be accountable for all activities taking place in the schools, they should be customer focused and satisfy their customers. Communities nowadays remove their children from one school to the other with the

purpose of seeking satisfaction. They are no more willing to accept substandard kind of education. The question of concern is what kind of a school is going to satisfy communities and parents.

This study suggested a quality assurance programme to be used by public schools so that they are able to take stock of the quality of activities in their schools and ultimately seek a way of continuously improving these activities. Importantly nowadays there is an outcry for quality schools, quality educators, quality learners, quality of teaching and learning. The researcher believes that quality of everything, especially in schools, lies in being able to put mechanisms in place for managing, assuring and improving quality of education.

BIBLIOGRAPHY

- ABBOTT, L. & RODGERS, R.** 1994. Quality education in the early years. Buckingham: Open University press.
- ANC.** 1994a. Policy framework for education and training: discussion document. ANC education department.
- ANC.** 1994b. Implementation plan for education and training. ANC education department.
- ANGUS, L.** 1992. Quality schooling, conservative education policy and educational change in Australia. *Journal of educational policy*, 7(4): 379-397.
- ARCARO, J.S.** 1995. Quality in education: an implementation handbook. Florida: St Lucie Press.
- ASH, M.** 1992. In the pursuit of quality (in Tomlinson, H.(ed).The search for standards). London: Longman.
- ASHWORTH, A. & HARVEY, R.C.** 1994. Assessing quality in further and higher education. *Higher education policy series*, 24.
- ATKINSON, P.** 1991. Creating cultural change-the key to successful total quality management. London: IFS Ltd.
- BABB, S.** 1998. Quality assurance for education and training providers. *People dynamics*, 16 (2): 44 – 45.
- BALL, S.** 1995. Politics and policy-making in education. London; Routledge.
- BARRY, T.J.** 1991. Management excellence through quality. Milwaukee, Winsconsin: ASQC Quality process.
- BLAIR, B.** 1989. Quality control circle- can we do it together? *IPM Journal*. Feb.
- BLANDFORD, S.** 1997. Middle management in schools: how to harmonise managing and teaching for an effective school. London: Pitmann.

- BEAVIS, A.K. 1995.** An attempt to implement TQM: a principal reflects. *The practising administrator*, 17: 4- 6, 23, and 24.
- BERGQUIST. W.H. 1995.** Quality through access, access with quality. San Francisco: Jossey-Bass publishers.
- BEST, J, & KAHN, J. 1989.** Research in education. Englewood cliffs: Prentice-hall.
- BORG, W.R. & GALL, M.D. 1989.** Educational research: an introduction. New York: Longman.
- BONGSTINGL, J.J. 1992.** The quality revolution in education. *Educational leadership*, 1(7): 4 – 9.
- BOWRING-CARR, C. & WEST-BURNHAM, J. 1994.** Managing quality in schools. Harlow, Essex: Longman.
- BRADLEY, L.H. 1993.** Total quality management for schools. Lancaster: Technomic.
- BRANNON, D.R. PARRISH, B. & BRANNON, H. 1983.** Four dimensions of quality in effective schools: how important for principals? *NASSP Bulletin*, Oct.
- BRENNAN, J. 1996.** Quality assessment and decision-making in higher education: a comparative approach (In Strydom, A.H., Lategan, L.O.K., & Muller, A. Quality assurance in South African higher education: National and international perspectives). Bloemfontein: University of Orange Free State.
- BROWN, S. RACE, P. & SMITH, B. 1997.** 500 tips of quality enhancement in universities and colleges. London: Kogan page.
- CARRO'N, G. 1994.** Inspection and supervision: reflections on international experiences (in Swartz.ed. School management, and support) proceedings of a conference held at Eskom centre. Midrand. 18-19 August.
- CHADWICK, P. 1994.** Organisation and TQM. (in Nightingale, P. & O'Neil, M. 1994. Achieving quality learning in higher education). London: Kogan page.

- CHENG, Y.C. 1995.** School education quality: conceptualization, monitoring and enhancement. (In Siu, P.K. & Tam, T.K. eds) *Quality in education: inside from perspectives. Hong Kong Education Research Association:* 123 – 147.
- CHENG, Y.C. 1996.** School effectiveness and school-based management: a mechanism for development. London: Falmer press.
- CHENG, Y.C. & TAM, W.M. 1997.** Multi-models of quality in education. *Quality assurance in ducation*,5(1):22-31.
- CHETTY, D., CHISOLM, L., GARDINER, M., MAGAU, N. & VINJEVOLD, P. 1993.** Rethinking teacher appraisal in South Africa: policy option and strategies. Johannesburg: University of Witswaterands.
- COHEN, L. & MANION, L. 1989.** Research methods in education. London: Routledge.
- COSTIN, H. 1996.** Management development and training: a TQM approach. Orlando: The Dryden press.
- CROSBY, P. 1979.** Quality is free: the art of making quality certain. New York: McGraw Hill.
- CROSBY, P. 1984.** Quality without tears. New York: Plume.
- CROSBY, P. 1989.** Let's talk quality. New York : Penguin.
- CROSBY, P. 1992.** Completeness-quality for the 21st century. New York: Plume.
- CUTTANCE, P. 1994.** Monitoring educational quality school effectiveness and school improvement, 5(2): 101- 125.
- DAVIES, B. & WEST-BURNHAM, J. 1997.** Reengineering & total quality in schools. London: Pitmann.
- DALE, B.G. (ed). 1997.** Managing quality (2nd edition). Hertfordshire: Prentice-Hall.

De BONO, E. 1991. Six action shoes. New York: Harper.

DE HAAN, J. HUMMELS, E. & CLAESSEN, J. 1999. Quality assurance and organisational development: an approach based on ideal types (in Fourie, M. Strydom, A.H. & Stetar, J. Reconsidering quality assurance in higher education: perspectives on programme assessment and accreditation). Bloemfontein: University of Orange Free State.

DEPARTMENT OF EDUCATION (RSA). 1999. Education for all 2000 assessment: South African report. Government printers: Pretoria.

DEPARTMENT OF EDUCATION (RSA). 1998. A policy framework for quality assurance in the education and training system in South Africa. Pretoria: Government printers.

DEPARTMENT OF EDUCATION (RSA). 1998. An audit of Provincial quality assurance activities. Pretoria: Government printers.

DEPARTMENT OF EDUCATION (RSA). 1998. Quality assurance audit phase 1. Pretoria; Government printers.

DEPARTMENT OF EDUCATION (RSA). 1998. Quality assurance audit phase 2. Pretoria; Government printers.

DEPARTMENT OF EDUCATION (RSA). 1997. Developmental appraisal for educators. Pretoria: ELRC.

DEPARTMENT OF EDUCATION (RSA). 1995. White paper on education and training. Notice 196. Government gazette, 357 (16312): 1 – 80. Pretoria, Government printers.

DILLON, T. 2000. Interview with author. Rustenburg.

DOHERTY, G.D. (ed). 1994. Developing quality systems in education. London: Routledge.

DOHERTY, G.D. 1997. Quality standards, paradigm and developments. *Quality assurance in education*, 5(4): 239-248.

- DUKE, D.L.** 1987. School Leadership and instructional improvement. New York: Random house.
- DZVIMBO, K.P.** 1994. Total management in education: views and comments from selected Zimbabwean school management practices. (Paper presented at the International Conference on total quality management in education. RAU, Johannesburg).
- FARELL, G.** 2000. Interview with author. Cape town.
- FREEMAN, R.** 1994. Quality assurance in secondary education. *Quality assurance in education*, 2(1): 21 – 25.
- FULLER, B.** 1986. Defining quality, in Hannaway, J & Lockheed M.E. (eds). The contribution of social science to educational policy and practice: 1965 – 1985. Berkeley, CA: McCutchan.
- GARDINER,** 1996. Appraising the appraisers: the report on appraisal instruments of heads of departments, principals and Subject Advisors. Johannesburg: EPU, university of Witwatersrand.
- GARVIN, D.A.** 1984. What does product quality really mean? *Sloan management review*, 26(2): 25 - 42.
- GARVIN, D.A.** 1988. Managing quality: strategic and competitive edge. New York: The Free Press.
- GLASSER, W.** 1992. The quality school: managing students without coercion. New York: Harper Perennial.
- GODDARD, D. & LEASK, M.** 1992. The search for quality: planning for improvement and managing change. London: Paul Chapman.
- GORTON, R.A.** 1983. School administration and supervision: leadership and challenges. Dubuque, IA: Wm.C Brown company.
- GREEN, C. (ed).** 1994. The quality imperative. New York: McGraw Hill.
- GREENWOOD, M.S. & GAUNT, H.J.** 1994. Total quality management for schools. London: Cassell.

- GRISAY, A. & MAHLCK, L.** 1991. The quality of education in developing countries: a review of some research studies and policy documents. Paris: UNESCO.
- GROL, R & LAWRENCE, M.** 1995. Quality improvement by peer review. Oxford: Oxford university press.
- GRONROOS, C. & GUMMESSON, E.** 1985. Service marketing: Nordic school perspective. Stockholms: University of Stckholms.
- HALL, C. & WOODHOUSE, D.** 1999. Accreditation and approval in New Zealand: major surgery for National Qualification Framework? (in Fourie, M. Strydom, A.H. & Stetar, J. Reconsidering quality assurance in higher education: perspectives on programme assessment and accreditation). Bloemfontein: University of Orange Free State.
- HAMPTON, G.** 1994. The Buckpool experience of developing quality systems (in Doherty, G.D. ed. Developing quality systems in education). London: Routledge.
- HANSEN, W.L.** 1993. Bridging total quality improvement into the college classroom. *Higher education*, 25: 259 – 279.
- HARVEY, L.** 1996. Quality monitoring and students learning (In Strydom, A.H., Lategan, L.O.K., & Muller, A. Quality assurance in South African higher education: National and international perspectives). Bloemfontein: University of Orange Free State.
- HARVEY, D.F. & BROWN, D.R.** 1996. An experiential approach to organizational development (5 ed). New Jersey: Prentice Hall.
- HAYWARD, R.P.** 1998 Action research on total quality education in a South African primary school. Unpublished PHD thesis: University of South Africa.
- HERMAN, J.J.** 1993. Holistic quality: managing, restructuring, and empowering schools. California: Corwin press.
- HITTMAN, J.A.** 1993. TQM and COI in postsecondary education. *Quality progress*: 77 – 80, Oct.

- HO, S.K. & WEARN, K.** 1996. A higher education TQM excellence model: HETQMEX. *Quality assurance in education*, 4(2): 35-42.
- HOFSTEE, W.K.B.** 1992. Independent educational assessment in the interest of educational quality (In Vedder, P. Measuring the quality of education). Amsterdam: Swets & Zeitlinger.
- HOLT, M.** 1993. Dr. Deming and the improvement of schooling; no instant pudding. *Journal of curriculum and supervision*, 9(1): 6 – 23, Fall.
- HOLT, M.** 1993. The educational consequences of W. Deming. *Phil delta kappan*: 382-388.
- HORINE, J.E. HAILEY, W.A. & RUBACH, L.** 1993. Transforming schools. *Quality progress*, 26 (10): 31 – 33.
- HORWITZ, C.** 1990. Total quality management: an approach for education. *Educational management and administration*, 8(2): 55 – 58.
- HOY, W.K. & MISKEL, C.G.** 1996. Educational theory: research and practice (5th ed). New York: McGraw-Hill.
- HUGHES, H.** 1988. Education as an expert industry (in Hogbin G.R. (Ed). *Withering heights: the state of higher education in Australia*. Sydney: Allen & Unwin. P. 217 – 255.
- HUGHES, P. (ed).** 1988. The challenge of identifying and marketing quality in education Sydney: NSW.
- IDRUS, N.** 1996. Towards total quality management in academia. *Quality assurance in education*, 4(3):34-40.
- IMAI, M.** 1986. Kaizen: the key to Japanese competitive success. New York: Random House.
- ISHIKAWA, K.** 1988. What is total quality control? The Japanese way. Eaglewood Cliffs. Prentice-hall.
- JABLONSKI, J.R.** 1992. Implementing TQM: competing in the nineties through total quality management. San Diego: Pfeiffer and company.

- JACKSON, N.F. AIKEN, M.W. VANJANI, M.B & HASA B.S.** 1995. Support group decision via computer systems. *Quality progress*, 28(5):75-78, May.
- JACKSON, N.** 1997. The role of evaluation in self-regulating higher education institution (In JACKSON, N. ed. Managing quality and standards in UK higher education). London: Higher education quality council.
- KANJI, G.K. & ASHER, M.** 1993. Total quality management process: a systematic approach. Advances in total quality management series. Oxford: Carfax publishing company.
- KEHOE, D.F.** 1996. The fundamentals of quality management. London: Chapman.
- KELLS, H.R.** 1988. Self study process: a guide for post secondary and similar service – orientated institutions and programs (3rd ed). New York: Macmillan.
- KELLS, H.R.** 1992. Self-regulation in higher education: a perspective on collaborative systems of quality assurance and control. London: Jessica Kingsley publishers.
- KILLEN, M.** 2000. Interview with author. Richard bay.
- KISTAN, C.** 1999. Quality assurance in South Africa. *Quality assurance in education*, 7(3): 125-133.
- KNIGHT, P.** 1993. Turmoil in success. *Quality assurance in education*, 1(1): 9-14.
- LATEGAN, L.** 1996. State of the art of and quality assurance at South African universities (In Strydom, A.H., Lategan, L.O.K., & Muller, A. Quality assurance in South African higher education: National and international perspectives). Bloemfontein: University of Orange Free State.
- LATTA, R.F. & DOWNEY, C.J.** 1994. Tools for achieving TQE. California: Corwin.
- LATZKO, W.J. & SAUNDER, D.M.** 1995. Four days with Dr Deming. Reading: Addison-Wesley.

- LAWTON, D.** 1994. Defining quality (Ribbin, P. & Burrdge,E. eds. Improving education, promoting quality in schools). London: Cassell.
- LEDDICK, S.** 1993. Quality management in schools. *Journal for quality and participation*, 16(1): 38-43.
- LEGOTLO, M.W.** 1994. An induction programme for newly-appointed principals in Bophuthatswana. Unpublished Phd thesis, Pochefstroom: PUCHE.
- LEGOTLO, M.W.** 1996. Some elements of research: students' handbook. Mmabatho. University of North West.
- LEGOTLO, M.W. & TEU, C.M.** 1998. School effectiveness: what make secondary schools effective? Paper read at SASE conference. Kei Mouth – East London..
- LEGOTLO, M.W. & TEU, C.M.** 1999. Attributes of effective school principals. Paper read at SASE conference. Rustenburg.
- LEGOTLO, M.W. & TEU, C.M.** 2000. Effective high schools in a province in South Africa. Paper read at AERA conference. New Orleans.
- LEGOTLO, M.W. & TEU, C.M.** 2000. Good performing high schools: educators' perception. Paper read at SASE conference. New Orleans.
- LILLIS,** 1994. Improving basic education: precondition for successful inspection and supervision. Paris: IIEP.
- LISTON, C.** 1999. Managing quality and standards. Buckingham: Open University press.
- LODER, C.P.J. (ed).** 1990. quality assurance and accountability in higher education. London: Kogan page.
- MACCHIA P.** 1992. Total quality education and instructional system development. *Educational technology*. July.

- MACROBERTS, I.** 1994. Sandwell College and BS 5750: a syncretistic pilgrimage (in DOHERTY, G.D. (ed). Developing quality systems in education. London: Routledge.
- MARSH, J.** 1997. An analysis of the application of Total quality in US and UK education (in Reengineering & total quality in schools.). London: Pitman publishing.
- McARDLE, L. ROWLINSON, M. PROCTER, S. HASSARD, J. & FORRESTER, P.** 1995. Total quality management and participation: employee empowerment, or the enhancement of exploitation? (in Wilkinson & Willmott, ed. Making quality critical: new perspectives on organisation change). London: Routledge.
- MCKAY, J. & KEMBER, D.** 1999. Quality assurance systems and educational development: part 1-the limitations of quality control. *Quality assurance in education*, 7(1): 25-29.
- MCMILLAN, J.H. & SCHUMACHER, S.** 1993. RESEARCH IN education: a conceptual instruction (3rd ed). New York. Harper.
- MGIJIMA, DR.** 2001. Interview with author. Rustenburg.
- MILLER, R.L. & CANGEMI, J.P.** 1993. Why total quality management fails: perspective of top management, *Journal of Management Development*, 12, 7, 40 – 50.
- MOLEBALOA, M.R.** 1997. teachers organizations: an overview of challenges facing teachers organisations in collecting bargaining in Brits district. Unpublished MED dissertations. Uniwest.
- MOORE, D.R.** 1993. Chicago school reform meet TQM. *Journal of quality and participation*, 16 (1): 6 – 11, Feb.
- MORGAN, C & MURGATROYD, S.** 1994. Total quality management in the public sector: an international perspective. Buckingham: Open University press.
- MOSLEY, J.** 1997. Quality circle time in the primary classroom. Cambridgeshire: LDA.
- MUNROE-FAURE. L.M.** 1992. Implementing TQM. London: Pitman.

- MUNROE-FAURE, L.M. MUNROE-FAURE, M. & BONES, E.** 1993. Achieving quality standards: a step to step guide to B55750/ISO 9000. London: Pitman.
- MURGATROY, S. & MORGAN, C.** 1993. Total quality management and the school. Bristol, P.A. Open University press.
- MUSAAZI, J.C.S.** 1992. The theory and practice of educational administration. London: Macmillan.
- NAGEL, T. & KVERNBEEK, T.** 1997. A dialogue about the quality of education. *Quality assurance in education*, 5(2). 101 – 109.
- NCHE (National Commission on Higher Education).** 1997. South African Qualification Authority Act (no. 58). Pretoria: Government Printers.
- NEWALL, D. & DALE, B.** 1991. The introduction and development of quality improvement process: a study. *International journal of production research*, 29(9): 1747-1769.
- NIGHTINGALE, P. & O'NEIL, M.** 1994. Achieving quality learning in higher education. London: Kogan page.
- NORUWANA, J.** 1996. Quality and quality assurance in historical disadvantaged institutions (in Strydom, A.H., Lategan, L.O.K., & Muller, A. Quality assurance in South African higher education: National and international perspectives). Bloemfontein: University of Orange Free State.
- OAKLAND, J.C.** 1989. Total Quality Management. London: Heinemann.
- PAINE, C.** 2000. Interview with the author. Cairns- Australia.
- PAINE, J. TURNER, P. & PRYKE, R.** 1992. Total quality in education. Sydney: Ashton scholastic.
- PARASURAMAN, A. ZEITHAML, V.A. & BERRY, L.L.** 1985. A conceptual model of service quality and its implications for future research. *Journal of marketing*, 4(4): 41 – 50.

- PETERS, T.J. & AUSTIN, N.** 1985. A passion for excellence. Glasgow: Fontana – Collins.
- PETERS, T.J. & WATERMAN, R.H.** 1982. In search of excellence. New York; Harper & Row.
- PHELE, R.S.** 1997. The quest for quality education – teachers' role and commitment in reconstructing the culture of learning, teaching and service. *The Free State teacher*, 5 – 9.
- POTTER, D. & POWELL, G.** 1992. Managing a better school. Heinemann.
- RAPPAPORT, L.A.** 1993. A school-based quality management programme. *NASSP Bulletin*, 77 (554): 16 – 20 Sept.
- REYNOLDS, L.** 1994. Beyond total quality management. London: Sheldon.
- RIBBINS, P. & BURRIDGE, E.** 1992. Improving education, promoting quality in schools. London: Cassell.
- RICHARDSON, K.E.** 1998. Quantifiable feedback: can it really measure quality? *Quality assurance in education*, 6(4): 212-219.
- RIVERS, D.** 1993. Creating quality middle schools. *Journal for quality and participation*, 16(1):56-59.
- RINEHART, G.** 1993. Quality education. Milwaukee: ASQC Quality press.
- SALLIS, E.** 1993. Total quality management in education. London: Kogan page.
- SASSER, W. OLSEN, R. & WYCKOFF, D.** 1978. Management of service operation. Boston: Allyn & Bacon.
- SCHARGEL, F.P.** 1993. Total quality in education. *Quality progress*, 10: 67 – 70, Oct.
- SCHNETLER, J.** 1989. Principles of constructing questions and practice (in Schnetler, J. Survey methods and practice. Pretoria.

- SPENCER, B.A.** 1994. Models of organisation and total management: a comparison and critical evaluation. *Academy of management review*, 19 (3), 446-471.
- SQUELCH, E. & LEMMER, J.** 1994. Eight keys to effective schools in South Africa. Halfway house: Southern book publishers.
- STEYN, G.** 1996. The quest for quality in our schools. *Educare* 25(1&2): 120-136
- STEYN, G.** 1999. Out of crises: transforming schools through total quality management. *South African journal of education*, 9(4): 357-363.
- STRYDOM, A.H.** 1993. Future quality assurance in universities in South Africa. *SAJHE*, 7(1): 83 – 88.
- STRYDOM, A.H., LATEGAN, L.O.K., & MULLER, A.** 1996. Quality assurance in South African higher education: National and international perspectives). Bloemfontein: University of Orange Free State.
- STRYDOM, K.** 1996. A quality assurance model meeting the ideals and realities of South African highest education. (in Strydom, A.H., Lategan, L.O.K., & Muller, A. Quality assurance in South African higher education: National and international perspectives). Bloemfontein: University of Orange Free State.
- TEU C.M.** 1997. School effectiveness: teachers' perception on factors that makes schools effective in Mafikeng and Zeerust district. Unpublished Med mini-dissertation: University of North West.
- TRIBUS, M.** 1990. The application of quality management principles in education at Mt Edgecumbe High School, Sitka, Alaska.
- TRIBUS, M.** 1993. Quality management in education. *Journal for quality and participation*. 16(1): 12 – 17, Feb.
- TROTT, C.** 1997 The child as a client (in Reengineering & total quality in schools.). London: Pitman publishing.
- TUCKER, S.** 1996. Benchmarking: a guide for educators. California: Corwin press.

- TUCKMAN, A.** 1995. Ideology, quality and TQM (in Wilkinson & Willmott, ed. *Making quality critical: new perspectives on organisation change*). London: Routledge.
- VADI, I.** 1998. In defense of quality public education. *The New Teacher*. 5(1): 8 – 9.
- VAN DER WESTHUIZEN, P.C.** 1991. Effective educational management. Pretoria: Kagiso Haum.
- VAN DOU, M.G.** 2000. Teachers perceptions on the implementations of total quality management in secondary schools in the Lichtenburg and Zeerust districts of North West Province. Unpublished M.ed dissertation. Mafikeng: University of North West.
- VAN RENSBURG, C.A.J. & WOLVAARDT, H.S.** 1993. Perspectives on quality assurance at South African technikons. *South African Journal for higher education*, 7(2): 89 – 94.
- VARGAS, B. WORTMAN, R. & ZAVALA, E.** 1996. Interpretation of Deming's 14 points of management. International competitiveness INTB 4365: College of Business administration. University of Texas – Pan American. Spring.
- VERKLEIJ, A.C.L.** 1999. Different approaches to defining research quality. *Quality issues on higher education bulletin*, 5(2): 7 – 10.
- WALTON, M.** 1989. The Deming management method. London; Mercury..
- WATERMEYER,** 1997. Quality assurance in high schools through regression analysis. Unpublished M.Ed dissertation, University of Cape Town.
- WEAVER, C.N.** 1991. TQM: a step by step guide to implantation, Milwaukee, WI; ASQC, Quality Press, P. VI.
- WELLER, L.D.** 1996. Return on quality: a new factor in assessing quality. *International journal of educational management*, 10 (1): 30 – 40.

- WELLER, L.D. & MCELWEE, G.** 1997. Strategic management of quality: an American and British perspective. *Journal of research and development*, 30:201 – 213.
- WESTBURNHAM, J.** 1992. Managing quality in schools: issues in school management. Harlow: Longman.
- WESTBURNHAM, J.** 1994. Inspection, evaluation and quality assurance. (In Bush, T & Westburnham, J. ed. *The principles of educational management*). Essex: Longman.
- WHITAKER, J & MOSES M.C.,** 1994. The restructuring handbook. A guide to school revitalization. Massachusetts: Allyn & Bacon.
- WHITTY, G.** 1989. The new right and the national curriculum: state control or market forces. *Journal of education policy*, 4(4):323-341.
- WILSON, J.** 1993. Total quality in education. *Journal for quality and participation*, 16(1): 62-66.
- WILLIAMS, R.L.** 1994. Essentials of quality management. New York: Amazon.
- WILKINSON, A & WILLMOTT, H. (ed.)** Making quality critical: new perspectives on organisation change. London: Routledge.
- WIERSMA, W.** 1995. Research method in education: an introduction(6th ed). Singapore: Allyn Bacon.
- WOODHOUSE, D.** 1998. 1998. Audit manual handbook for institutions and members for panels (3rd ed.):Wellington: New Zealand.
- YORKE, M.** 1997. This way with QA. *Quality assurance in education*, 5(2): 97-100.
- YORKE, M.** 1999. Assuring quality and standards in globalised higher education. *Quality assurance in education*, 7(1): 14-24.

APPENDIX A

QUESTIONNAIRE NO:

050

CARD NO:

--	--

SECTION A

BIOGRAPHICAL AND DEMOGRAPHICAL DATA

1. Age category.

1.1 Below 30	1	
1.2 31 - 36	2	
1.3 36 - 40	3	
1.4 41 - 45	4	X
1.5 46 - 50	5	
1.6 51 and over	6	

2. Gender

2.1 Male		
2.2 Female		X

3. Your present position

3.1 Principal	1	
3.2 Deputy Principal	2	
3.3 Head Of Department	3	X
3.4 Educator	4	

4. For how long have you been in this position?

4.1 0 - 3 years	1	
4.2 4 - 6 years	2	
4.3 7 years and over	3	X

5. Highest qualification

5.1 Diploma	1	
5.2 Degree	2	X
5.3 Honours degree	3	X
5.4 Masters degree	4	
5.5 Doctorate	5	
5.6 Others, specify... P.T.C.	6	

6. Settlement type of your school

6.1 Rural

1	
2	X

6.2 Urban

7. School category

7.1 Primary school

1	
2	
3	X
4	

7.2 Middle school

7.3 High school

7.4 Combined school

SECTION B

8. SCHOOL READINESS TO CHANGE

Please indicate by means of a cross (X) the number that most clearly indicates your attitude towards the statements listed below.

- 8.1 My school has clear vision of what should be in the future.
- 8.2 My school has clear idea of the needs that exist between the vision of what should be and its current state.
- 8.3 Internal forces are pressurizing for change in my school.
- 8.4 External forces are pressurizing for change in my school.
- 8.5 I believe that the changes required are great that they should transform my school structures and processes.
- 8.6 My school believes in continuous planning about ways to improve.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	X	4
1	2	X	4
1	2	X	4
1	2	X	4
1	2	X	4
1	2	X	4

- 8.7 My school's management team, teachers, parents are constantly looking for ways to improve.
- 8.8 My school collects information about the impact, results and efforts related to students.
- 8.9 My school spends money to train those managing or learning about innovations that improve the school
- 8.10 My school gives everyone credit for successes achieved and every success is publicly celebrated.
- 8.11 My school looks toward the future with positive vision.
- 8.12 My school provides continuing plans for improvement.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4

9. ATTRIBUTES FOR EDUCATIONAL EXPERIENCE

Listed below are attributes that educators working in an educational setting should possess in order to provide high-quality educational experience. Please read through the list and for each item, use the rating scale to the right of each item to indicate the extent to which you belief an attribute is important for providing quality educational experience.

KNOWLEDGE AND UNDERSTANDING

- 9.1 Understanding what is necessary to ensure the provision of quality experiences.
- 9.2 Understanding how learners acquire knowledge.
- 9.3 Understanding the needs of learners.
- 9.4 Appropriate experience of curriculum and subject knowledge.

Unimportant	Fairly Unimportant	Important	Very important
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4

9.5 Ability to manage the class well.

9.6 Ability to create a conducive learning environment.

Unimportant	Fairly Important	Important	Very important
1	2	3	4
1	2	3	4

SKILLS

9.7 Development of particular skills and expertise in working in teams.

9.8 Skills in implementing change.

9.9 Organizational skills for effective data recording.

9.10 Organizational skills for effective monitoring and assessing learners.

9.11 Interactive and communication skills.

9.12 Skills to provide equal opportunities for learners.

1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4

ATTITUDE

9.13 High expectation for learners and self.

9.14 Readiness to value learners as people with rights.

9.15 Respect and appreciation of all school community.

9.16 Commitment to develop partnership with parents.

1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4

SECTION B

10. ASSESSING QUALITY IN SCHOOLS

Please put an X in the block that best describes your personal needs to the following statements.

10.1 How to assess the appropriateness of school policy and procedures.

10.2 Willingness of staff to implement policies and procedures.

Unimportant	Fairly Important	Important	Very important
1	2	3	4
1	2	3	4

- 10.15 Knowing how to relate to school governing body and parents.**

[illegible]

11. What do you think are the best practices for assuring quality in a school?

Team work as educators, management and parents. Auxiliary services of social workers, psychologists and guidance teachers are required to address social and personal problems of learners.

12. What kinds of problems are you experiencing in putting quality mechanism in place?

Involvement of parents

13. What do you think people in the community are saying about your school with regard to quality practices?

Are impressed that learners are gradually focusing on their studies.

14. Give your general comments about quality of education in your school.

The decision taken by educators is usually implemented

APPENDIX B



NORTH WEST PROVINCE

DEPARTMENT OF EDUCATION NORTH WEST PROVINCE

POTCHEFSTROOM DISTRICT OFFICE

P/BAG X919, POTCHEFSTROOM 2520, GREYLING STRAET, TEEMANE BUILDING
PHONE (018) 2973810 / 2998295 - FAX (018) 2977439

Enq K. J. Thapi
Tel (018) 299 8146

7 June 2001

To All Principals (of Selected Schools in the Potchefstroom District)

Sir/Madam

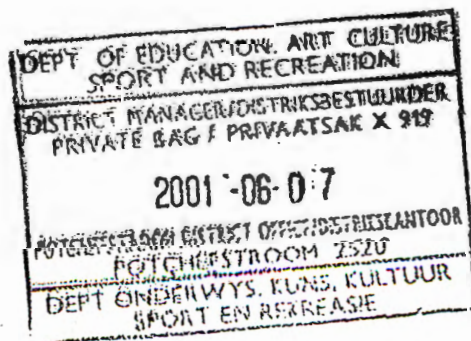
This serves to inform you that the bearer(s) from the University of North West's Department of Educational Planning and Administration have requested and received permission from the above district office to access your school to conduct research.

The bearers are PHD and D. Ed. Students conducting research on quality assurance in public schools.

Please give them the necessary co-operation.

Thank you in anticipation.


D. BOSMAN
DISTRICT MANAGER



APPENDIX C

University
of North-West



Department of Planning and
Administration

Private Bag X2046 MMABATHO 2735

Republic of South Africa

Telephone: (018) 3892121

Fax No.: (018) 3925775

Date: 28 May 2001

Your reference

Our reference

DISTRICT MANAGERS
CIRCUIT MANAGERS
PRINCIPALS
EDUCATORS

RESEARCH PROJECT: FIELDWORK

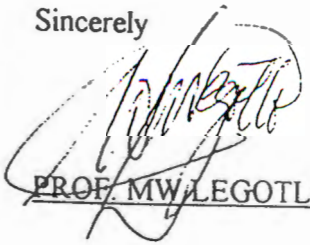
The Department of Educational Planning and Administration hereby request you to grant our PHD and D.ED student(s) permission to conduct research in schools under your jurisdiction.

TOPIC: QUALITY ASSURANCE PROGRAMME FOR
PUBLIC SCHOOLS

STUDENT NAME: TEU M.C

Thanking you in anticipation

Sincerely


PROF. MW. LEGOTLO

APENDIX D

University
of North-West



Department of Planning and
Administration

Private Bag X2046 MMABATHO 2735

Republic of South Africa

Telephone: (018) 3892121 / 3892552

Fax No.: (018) 3925775

Date: 28 May 2001

Your reference

Our reference

THE PRINCIPAL

PHAKELA COMBINED

TIGANE

KLERKSDORP DISTRICT

Dear Sir/Madam

QUALITY ASSURANCE PROGRAMME FOR PUBLIC SCHOOLS

We are conducting a study on the importance of quality assurance in schools and how it could enhance the quality of education provided by an individual school. The ultimate aim of the study is to design a **QUALITY ASSURANCE PROGRAMME FOR PUBLIC SCHOOLS.**

You are kindly requested to complete and distribute the enclosed questionnaires as follows:

- ♦ ONE to be completed by the PRINCIPAL,
- ♦ FOUR by the SMT or any senior educator (in the case where the number of SMT is less than four)

Thanking you very much for participating in this study.

A handwritten signature in dark ink, appearing to read 'M/er' or similar, followed by the printed name 'M C TEU'.

M C TEU