

# **TOTAL QUALITY MANAGEMENT AS A RESPONSE TO EDUCATIONAL CHANGES IN SCHOOL MANAGEMENT**

by

Matodzi Henry Lukhwareni

submitted in partial fulfilment of the requirements for the degree of

**PHILOSOPHIAE DOCTOR**

in the

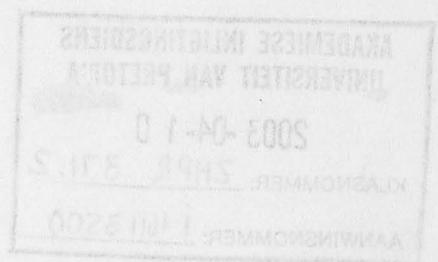
**DEPARTMENT OF EDUCATION MANAGEMENT**

**FACULTY OF EDUCATION**

**UNIVERSITY OF PRETORIA**

Supervisor: Prof Dr AJ van der Bank

October 2002



b15480422

AKADEMIESE INLIGTINGSDIENS UNIVERSITEIT VAN PRETORIA
2003-04-10
KLASNOMMER: ZAPR 371.2
AANWINSNOMMER: 11613500

LUKHWARENI

# JOHANN F. MULLER

 37883  
Faerie Glen  
0043  
 0829566694  
FAX 0129915842

---

## TO WHOM IT MAY CONCERN

This is to certify that I have edited the PhD-dissertation of Mr M.H. Lukhwareni.

As I have not seen the final document, I cannot certify that all the suggested changes have been effected.

Sincerely



Johann F. Muller

2001-08-27

To Whom It May Concern:

I, JH Owen, from the Department of Statistics, University of Pretoria, hereby declare that I did the programming for the analyses of the data with statistical advise from Miss R. Ehlers.

The interpretation of the results was done by the student.

DECLARATION OF ORIGINALITY

JH Owen

JH OWEN at the time for the award of the Doctor of Philosophiae Doctor at the University of Pretoria  
I declare that the work, has not previously been submitted by me for a degree at this or at  
any other University, and that it is my own work, in design and execution, and that all material  
from other sources has been properly cited.

JH Owen

Signed: JH Owen

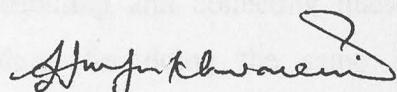
## ACKNOWLEDGEMENTS

I would like to thank my supervisor Dr. S. J. M. van der Watt for his guidance and support throughout the duration of this research. I am highly grateful to him for his valuable advice and the time he spent in the completion of this research.

I would like to thank my co-supervisor Prof. Dr. G. J. Botha for his indispensable assistance and supervision and also Prof. Dr. J. C. du Plessis for his indispensable supervision and contribution which contributed immensely to the completion of this research.

## DECLARATION OF ORIGINALITY

I declare that the thesis for the degree of Philosophiae Doctor at the University of Pretoria hereby submitted by me, has not previously been submitted by me for a degree at this or at another university, and that it is my own work in design and execution, and that all material contained therein has been duly recognised.



Signed: MH Lukhwareni

## ACKNOWLEDGEMENTS

To make more dramatic progress in life, we must be able to understand the mutually interacting and complex dynamics of the whole system of human co-existence. I am highly indebted to the following people for their contributions in the realisation of this mammoth task.

- ◆ Professor AJ van der Bank, my supervisor and promotor, for the indispensable guidance, commitment, motivation and supervision which contributed immensely towards the completion of this study.
- ◆ The Northern Province Department of Education, and in particular the Northern Region for permission to conduct research at schools under its jurisdiction.
- ◆ School management teams and educators in the Northern Region for their prompt responses and interest in the research.
- ◆ Mrs Marlene Botha for typing this manuscript.
- ◆ Mr Johann Muller for language editing and the Afrikaans translations.
- ◆ Mrs JH Owen and Miss Ehlern for their assistance in the statistical analysis of data.
- ◆ Mr BM Budeli for distributing and collecting questionnaires in the Soutpansberg district; Mr CN Chelopo for doing the same in the Sekgosese district and Mr NE Nthangeni for performing the same task in the Malamulele district.
- ◆ My wife Joyce, three sons Phathutshedzo, Thendo, Mulanga and two daughters Shandukani, and Rinae for their patience, understanding and sacrifices.
- ◆ God the Almighty for life, the good health and courage which was bestowed on me to realise this dream.

## SUMMARY

**Total Quality Management as a Response to Educational Changes in School Management**

by

Matodzi Henry Lukhwareni

Supervisor: Prof Dr AJ van der Bank

Department: Educational Management

Degree: Philosophiae Doctor

When criticism of the ability of schools to deliver quality education and quality results undermined faith in the existing schools, total quality management, also known as continuous improvement, became a powerful symbol of responding to the nation's educational and social predicament. The call for total quality management (TQM) as a response to educational changes is a way of asking that schools be rededicated to ideals to which people are deeply committed – quality education and quality performance. The aims of this study are to investigate whether the changes which were introduced in the South African education system since 1994 have in any way brought about any improvement in the quality of education offered and whether there are schools which offer quality education and are managed in the TQM-way. This study furthermore seeks to conduct an empirical study on TQM and change in schools and to develop a model and strategies to implement TQM in schools.

An in-depth literature study on TQM and educational change was conducted. Chapter 1 introduced the statement of the problem for this research project, the hypothesis, the aims, the methodologies and the programme of the research project. Chapter 2 deals fully with TQM, citing the points of view of various authors and researchers on this topic. Information relating to research conducted abroad was obtained, studied, applied and acknowledged. Chapter 3 deals extensively with change and the management thereof. The viewpoints of several authors were also sought and acknowledged. An empirical study was conducted, based on a structured questionnaire which was sent to randomly selected school management teams and educators of primary, intermediate and secondary schools. This process was described in

Chapter 4 and the statements in the questionnaire were based on the literature study and the researcher's experience as an educational manager. The completed questionnaires were returned and scoring and data analysis were done by means of the SAS-statistical package. The analysis and interpretation of data were also undertaken by the researcher.

From the findings it has emerged that the changes introduced since 1994 did indeed bring about some continuous improvements. The following are the most important findings:

- ◆ Schools which engage the TQM-approach, offer quality education and are effective or quality schools.
- ◆ Educational changes in South Africa are aimed at the continuous improvement of performance.
- ◆ The adoption of a TQM-strategy will transform schools into quality schools offering quality education.
- ◆ Some schools are developing into quality schools.

The findings of the empirical study are tabled in Chapter 4. A total quality management model was developed in Chapter 5. This model is aimed at helping schools overcome inefficiencies and ineffectiveness by engaging total quality management as their daily *modus operandi*.

## KEY WORDS

Total Quality Management (TQM)

School management team

Educational change

Customer

Continuous improvement

Quality assurance

Quality tools and techniques

Total quality

School improvement

Quality gurus

## OPSOMMING

Algehele Kwaliteitsbestuur as ‘n reaksie op onderwysverandering in skoolbestuur

deur

Matodzi Henry Lukhwareni

Promotor: Prof Dr AJ van der Bank  
 Departement: Onderwysbestuur  
 Graad: Philosophiae Doctor

As gevolg van kritiek oor die vermoë van skole om kwaliteit onderwys en uitslae van hoogstaande gehalte te lewer, is geloof in skole nadelig beïnvloed, en het algehele kwaliteitsbestuur (ook bekend as voortdurende verbetering) ‘n kragtige simbool geword van die reaksie op die opvoedkundige en sosiale dilemma van die nasie. Die oproep tot algehele kwaliteitsbestuur (AKB) as ‘n reaksie op onderwysveranderinge is ‘n manier waarop skole versoek word om hulself opnuut toe te wy aan daardie waardes waartoe mense verbind is – kwaliteitsonderwys en kwaliteitsprestasie. Die doelstellings van hierdie studie is om ondersoek in te stel of die veranderinge wat in die Suid-Afrikaanse onderwyssstelsel geïmplementeer is sedert 1994, enigsins veranderinge teweeg bring het in die lewering van kwaliteitsonderwys; of daar skole is wat kwaliteitsonderwys lewer en volgens AKB-beginsels bestuur word. Hierdie studie poog voorts om ‘n empiriese studie ten opsigte van AKB uit te voer en om ‘n modus en strategie te ontwikkel om AKB in skole te implementeer.

‘n Diepgaande literatuurstudie met betrekking tot AKB en onderwysverandering is onderneem. Hoofstuk 1 bespreek die probleemstelling van hierdie ondersoek, die hipotese, die doelstellings, die metodologie en die navorsing in geheel. Hoofstuk 2 bespreek AKB en haal die menings van verskeie outeurs en navorsers oor hierdie onderwerp aan. Inligting met betrekking tot navorsing wat reeds oorsee gedoen is, is bekom, bestudeer, toegepas en erken. Hoofstuk 3 bespreek verandering en die bestuur daarvan. Standpunte van verskeie outeurs is ook geraadpleeg en erken. ‘n Empiriese studie is uitgevoer wat gebaseer is op ‘n gestruktureerde vraelys. Die vraelys is gestuur aan bestuurspanne van geselekteerde primêre,

intermediêre en sekondêre skole. Hierdie proses is in Hoofstuk 4 beskryf en die stellings in die vraelys is gebaseer op die literatuurstudie en die navorser se ervaring as ‘n onderwysbestuurder. Die voltooide vraelyste is terugontvang en *scoring* en data-ontleding is gedoen deur middel van die SAS-statistiese pakket. Die data-ontleding en –interpretasie is ook deur die navorser onderneem.

Uit die bevindings blyk dit dat die veranderings wat sedert 1994 ingestel is, inderdaad ‘n aantal voortdurende verbeterings teweegbring. Die volgende is die belangrikste bevindings:

- ◆ Skole wat die AKB-benadering volg, lewer kwaliteitsonderwys en is doeltreffende of kwaliteitskole.
- ◆ Onderwysveranderinge in Suid-Afrika is daarop gemik om prestasie voortdurend te verbeter.
- ◆ Die aanvaarding van ‘n AKB-strategie sal skole transformeer in kwaliteitskole wat kwaliteitsonderwys aanbied.
- ◆ Daar is skole wat besig is om in kwaliteitskole te ontwikkel.

Die bevindings van die empiriese studie word in Hoofstuk 4 weergegee. ‘n Algehele kwaliteitsbestuursmodel is in Hoofstuk 5 ontwikkel. Hierdie model is daarop gemik om skole te help om tekortkominge en ondoeltreffendheid te oorkom deur algehele kwaliteitsbestuur as hul daaglikse *modus operandi* te aanvaar.

## SLEUTELWOORDE

Algehele Kwaliteitsbestuur (AKB)

Skoolbestuurspan

Onderwysveranderinge (Onderwysverbetering)

Verbruiker (Kliënt)

Voortdurende verbetering

Kwaliteitsversekering

Kwaliteitsgereedskap en -tegnieke

Algehele kwaliteit

Skoolverbetering

Kwaliteit gurus/kenners

## TABLE OF CONTENTS

Acknowledgements .....	iv
Summary.....	v
Opsomming .....	vii
List of figures.....	xxii
List of tables .....	xxiii
List of annexures .....	xxv

## CHAPTER 1

### INTRODUCTORY ORIENTATION

1.1	Introduction.....	1
1.2	Problem statement .....	3
1.2.1	Main problem(s) .....	4
1.2.2	Sub-problem(s) .....	4
1.3	Aims of the research project.....	4
1.4	Hypothesis formulation .....	5
1.5	Research methods .....	5
1.5.1	Literature review.....	6
1.5.2	Empirical study.....	6
1.5.2.1	The questionnaire.....	7
1.5.2.2	The interview .....	7
1.6	Elucidation of concepts.....	8
1.6.1	Quality .....	8
1.6.2	Total quality (TQ).....	9
1.6.3	Total quality management (TQM).....	10
1.6.4	Management .....	10
1.6.5	Holistic quality management .....	11
1.6.6	Quality systems.....	11
1.6.7	Quality control .....	11
1.6.8	Quality assurance.....	12
1.6.9	Quality gurus .....	12
1.6.10	Quality tools and techniques.....	13
1.6.11	Customer.....	13
1.6.12	Supplier.....	13
1.6.13	Product/Service.....	14
1.6.14	School manager .....	14
1.6.15	School management team.....	14
1.6.16	Quality education.....	14
1.6.17	Public school.....	15
1.6.18	Right sizing.....	15
1.7	Research programme .....	16

1.8	Discussion of research programme.....	17
1.8.1	Chapter 1.....	17
1.8.2	Chapter 2.....	17
1.8.3	Chapter 3.....	17
1.8.4	Chapter 4.....	17
1.8.5	Chapter 5.....	17
1.8.6	Chapter 6.....	17
1.9	Summary.....	18

## CHAPTER 2

### **TOTAL QUALITY MANAGEMENT AND ITS IMPLEMENTATION IN SCHOOLS**

2.1	Introduction.....	19
2.2	The nature and importance of TQM .....	21
2.2.1	The nature of TQM.....	21
2.2.2	The importance of total quality management (TQM).....	25
2.2.3	TQM in a classroom setting.....	28
2.3	Conceptual delineation of quality and TQM .....	28
2.3.1	Quality .....	29
2.3.2	Total Quality Management .....	30
2.4	Why holistic (total) quality management?.....	31
2.5	Historical background of TQM .....	32
2.5.1	Edward Deming .....	33
2.5.2	Joseph Juran.....	34
2.5.3	Phillip Crosby .....	35
2.5.4	Kaoru Ishikawa.....	36
2.5.5	Armand Feigenbaum .....	38
2.6	Research done abroad (USA and Britain) on TQM in schools .....	41
2.7	Research done in South Africa on total quality management.....	50
2.8	The pillars of total quality management .....	53
2.8.1	Customer focus .....	55
2.8.2	Total involvement/respect for people/leadership.....	56
2.8.3	Continuous improvement.....	56
2.8.4	Managing with facts/measurements .....	58
2.8.5	Strategy management.....	59
2.8.5.1	Leadership.....	59
2.8.5.2	Vision and mission .....	61
2.8.5.2.1	Creating a vision .....	61
2.8.5.2.2	Identifying the mission .....	62
2.8.5.2.3	Establishing goals and objectives .....	63
2.9	The importance of teams in TQM .....	64
2.9.1	The key differences between groups and teams .....	66
2.9.2	The stages of team formation.....	67

2.9.2.1	Forming.....	67
2.9.2.2	Storming .....	68
2.9.2.3	Norming.....	68
2.9.2.4	Performing .....	68
2.9.3	Types of teams.....	68
2.9.3.1	The lead team or quality council .....	68
2.9.3.2	The functional team .....	69
2.9.3.3	The cross-functional team.....	69
2.9.3.4	The task team.....	69
2.9.4	Team development.....	69
2.9.4.1	First step: Create a vision statement .....	70
2.9.4.2	Second step: Define the purpose.....	70
2.9.4.3	Third step: Define the principles and values .....	70
2.9.4.4	Fourth step: Develop a unit mission .....	70
2.10	Daily management tools and techniques for effective total quality management .	72
2.10.1	Total quality management tools and techniques.....	73
2.10.1.1	Benchmarking.....	74
2.10.1.2	Brainstorming .....	74
2.10.1.3	Cause and effect diagram/Fishbone or Ishikawa diagram.....	76
2.10.1.4	Force field analysis .....	79
2.10.1.5	Pareto charts.....	80
2.10.1.6	Check sheets .....	81
2.10.1.7	Five ‘hows’ and five ‘whys’ .....	82
2.10.1.8	Histograms .....	84
2.11	Guidelines for the implementation of total quality management in schools .....	85
2.11.1	Why TQM-implementation sometimes fails .....	85
2.11.2	Guidelines for effective development of TQM .....	86
2.11.2.1	Guideline 1: Management commitment .....	86
2.11.2.2	Guideline 2: Planning the programme .....	88
2.11.2.3	Guideline 3: Training.....	89
2.11.2.4	Guideline 4: Choose good quality techniques .....	91
2.11.2.5	Guideline 5: Positive launch.....	91
2.11.2.6	Guideline 6: Monitor the process not the product .....	91
2.11.2.7	Guideline 7: Install and institutionalise .....	92

2.11.2.8	Guideline 8: Refocus and re-invigorate/review/evaluate .....	92
2.12	Summary and conclusion.....	94

3.1	Change in the South African education system .....	97
3.2.1	Change in the South African education system .....	99
3.2.2	Assessing the change and its impact .....	102
3.2.3	Identifying barriers to the change process .....	103
3.3	Constitution of South Africa and its implications for education .....	106
3.4	Resistance and the legacy of apartheid .....	107
3.5	New political order .....	109
3.6	Impact of globalisation on education .....	109
3.7.1	Initial phase/initial stage .....	110
3.7.2	Impactive stage .....	110
3.7.3	Ramsey's proposed stages of organisational change .....	111
3.7.4	Stages of phases in change .....	111
3.7.5	The shock stage .....	112
3.7.6	The withdrawal stage .....	112
3.7.7	Acknowledgement stage .....	113
3.7.8	Adaptation stage .....	113
3.7.9	Managing the phases/stages of change .....	113
3.7.10	Managing the shock stage .....	115
3.7.11	Managing the withdrawal stage .....	115
3.7.12	Managing the acknowledgement stage .....	116
3.7.13	Managing the adaptation stage .....	116
3.8	The impact of change on organisations .....	117
3.8.1	Losses .....	117
3.8.2	Anxiety .....	117
3.8.3	Struggle .....	117
3.9	Resistance to change .....	119
3.9.1	Syntactic and behavioural resistance .....	119
3.9.2	Positive resistance .....	120
3.9.3	Negative resistance .....	121

## CHAPTER 3

### CHANGE AND MANAGEMENT OF CHANGE IN SCHOOL MANAGEMENT

3.1	Introduction.....	96
3.2	What is change?.....	97
3.2.1	Change in the South African education system.....	99
3.3	Assumptions underlying changes .....	102
3.4	Assumptions underlying the change process.....	102
3.5	The sources of change .....	106
3.5.1	Legislation and the legacy of apartheid .....	107
3.5.2	New political order .....	109
3.6	Types of changes .....	109
3.6.1	Adaptive change .....	110
3.6.2	Innovative change.....	110
3.6.3	Radically innovative change.....	111
3.7	Stages or phases in changing .....	111
3.7.1	The shock stage.....	112
3.7.2	The withdrawal stage.....	112
3.7.3	Acknowledgement stage.....	113
3.7.4	Adaptation stage .....	113
3.7.5	Managing the phases/stages of change .....	115
3.7.5.1	Managing the shock stage.....	115
3.7.5.2	Managing the withdrawal stage .....	115
3.7.5.3	Managing the acknowledgement stage .....	116
3.7.5.4	Managing the adaptation stage .....	116
3.8	The impact of change on organisations .....	117
3.8.1	Loss.....	117
3.8.2	Anxiety .....	117
3.8.3	Struggle.....	117
3.9	Resistance to change.....	119
3.9.1	Systematic and behavioural resistance .....	119
3.9.2	Positive resistance.....	120
3.9.3	Negative resistance .....	121

3.9.4	Management of resistance to change .....	122
3.10	Management of change.....	124
3.10.1	Managing educational change .....	127
3.10.2	Top-management commitment to change and its management .....	128
3.10.3	Guidelines for managing change .....	129
3.10.3.1	Effective communication.....	129
3.10.3.2	Involve people and encourage participation .....	130
3.10.3.3	Allow people to say goodbye .....	130
3.10.3.4	Provide training in new values and behaviours .....	130
3.10.3.5	Get emotionally tuned in .....	131
3.10.3.6	Provide feedback .....	131
3.10.3.7	Establish a reward system.....	131
3.10.3.8	Develop new group norms and a new mission statement.....	131
3.10.4	Challenges facing managers of change.....	132
3.10.4.1	Changing the shape of organisations (schools) .....	132
3.10.4.2	Changes in the mission or reason to be .....	133
3.10.4.3	Changes in ways of doing business .....	133
3.10.4.4	Changes in ownership.....	134
3.10.4.5	Downsizing .....	134
3.10.4.6	Changes and culture.....	135
3.11	The development of a policy and legislative framework for change and quality education.....	136
3.11.1	The Constitution .....	136
3.11.2	White Paper on Education and Training (15 March 1995).....	137
3.11.3	The procedure manual for the implementation of matters emanating from Resolution No 3 of 1996.....	139
3.11.4	South African Schools Act 1996 (Act No 84 of 1996) 15 November 1996.....	139
3.11.4.1	Learners .....	140
3.11.4.2	Public schools .....	140
3.11.4.3	Funding of public schools.....	140
3.11.4.4	Independent schools.....	140
3.11.4.5	Transitional provisions .....	140
3.11.5	Curriculum 2005 (24 March 1997).....	141

3.11.6	Implications for change .....	146
3.11.7	Change and the establishment of total quality management .....	147
3.12	Conclusion .....	148

3.12.1	Introduction .....	149
3.12.2	Methodology .....	150
3.12.3	Theoretical framework .....	151
3.12.4	Research design .....	152
3.12.5	Population .....	153
3.12.6	Target population .....	153
3.12.7	Sample .....	153
3.12.8	Procedures for distribution and collection of questionnaires .....	159
3.12.9	Questionnaire construction .....	159
3.12.10	Coding and scoring .....	160
3.12.11	Limitations of this research project .....	161
3.12.12	Presentation and interpretation of the results .....	161
3.12.13	Introduction .....	161
3.12.14	Analysis of data .....	161
3.12.15	Biographical data .....	161
3.12.16	Statements based on whether schools managers possess the required skills to manage and cope with change .....	165
3.12.17	Preliminary findings .....	168
3.12.18	Follow-up structured interview probe .....	172
3.12.19	Value of this study's contribution in the field of educational leadership and management .....	200
3.12.20	Summary .....	212

## CHAPTER 4

### RESEARCH DESIGN AND METHODOLOGY

4.1	Introduction.....	150
4.2	Purpose of the study.....	150
4.3	Perspectives on qualitative and quantitative research .....	151
4.4	Research methods .....	153
4.4.1	The literature review method .....	154
4.4.2	The empirical study method.....	155
4.4.2.1	The questionnaire.....	155
4.4.2.2	Interviews .....	157
4.5	Research population.....	157
4.5.1	Population .....	158
4.5.2	Target population.....	158
4.6	Sample .....	158
4.7	Procedures for distribution and collection of questionnaires .....	159
4.8	Questionnaire construction .....	159
4.9	Coding and scoring .....	160
4.10	Limitations of this research project .....	160
4.11	Presentation and interpretation of the results.....	161
4.11.1	Introduction .....	161
4.11.2	Analysis of data .....	161
4.11.2.1	Biographical data.....	161
4.11.2.4	Statements based on whether school managers possess managerial skills to manage and cope with change .....	185
4.11.3	Preliminary findings .....	195
4.11.4	Follow-up structured interview probe .....	197
4.11.5	Value of thesis as contributory in the field of educational leadership and management.....	200
4.11.6	Summary.....	202

## CHAPTER 5

### A SUGGESTED MODEL FOR THE IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN SCHOOLS

5.1	Introduction.....	203
5.2	Factors necessitating the development of an implementation model .....	203
5.2.1	Legislation related to policy passed since 1994 .....	203
5.2.1.1	The White Paper on Education and Training (15 March 1995) .....	204
5.2.1.2	The South African Schools Act (Act 84 of 1996) .....	204
5.2.2	Current situation: 1997 – onwards.....	204
5.2.2.1	The grade 12-examination results.....	204
5.2.2.2	“Call to Action”: Mobilising citizens to build a South African Education and Training System for the 21 <sup>st</sup> century.....	205
5.2.2.3	Implementation plan for Tirisano .....	205
5.2.2.4	Corporate plan .....	205
5.3	Total quality management implementation in schools .....	207
5.4	A model for TQM-implementation .....	208
5.4.1	Introduction.....	208
5.4.2	Requirements for a model.....	209
5.4.3	The TQM-implementation model.....	210
5.4.3.1	Quality work .....	212
5.4.3.2	School climate/attitude .....	212
5.4.3.3	Parents and community perceptions .....	213
5.4.3.4	Whole School Development Team.....	213
5.4.3.5	Focus on change .....	213
5.4.3.6	Vision and mission statements.....	214
5.4.3.7	School management team commitment.....	214
5.4.3.8	Planning .....	215
5.4.3.9	Quality team.....	215
5.4.3.10	Design of training .....	216
5.4.3.11	Implementation timetable .....	216
5.4.3.12	Implementation .....	216
5.4.3.13	Briefing .....	217
5.4.3.14	Training.....	217

5.4.3.15	Improvement process.....	217
5.4.3.16	Evaluation .....	218
5.5	Tools that help in identifying and solving problems .....	218
5.6	Why this model has been recommended .....	219
5.7	Evaluation of the model.....	219
5.8	Conclusion .....	219

## BIBLIOGRAPHY

## CHAPTER 6

### FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1	Introduction.....	221
6.2	An overview of the investigation.....	221
6.3	Findings of the research study .....	222
6.4	Limitations of this research project .....	227
6.5	Solutions of the problems and attainment of aims.....	227
6.6	Conclusions.....	228
6.7	Recommendations.....	229
6.8	Recommendations for further research.....	231
6.9	Summary .....	231
	<b>BIBLIOGRAPHY.....</b>	<b>233</b>

## LIST OF FIGURES

Figure 1.1	Meaning of quality .....	8
Figure 1.7	Research programme.....	16
Figure 2.1	Flight path to quality .....	24
Figure 2.2	Examples of scatter diagrams.....	46
Figure 2.3	Sample run chart – Progressive upward movement .....	47
Figure 2.4	Sample run chart – Progressive downward movement .....	47
Figure 2.5	Example of histogram .....	48
Figure 2.6	Total quality school model.....	54
Figure 2.7	PDCA cycle by Fortuna .....	58
Figure 2.8	Components of effective team work .....	72
Figure 2.9	Cause-effect diagram.....	78
Figure 2.10	School staff meetings in our system.....	81
Figure 2.11	Histogram – Achieving zero discipline problems .....	84
Figure 3.1	The change process .....	103
Figure 3.2	The change process (Fullan) .....	105
Figure 3.3	Types of changes .....	110
Figure 3.4	A balanced curriculum .....	143
Figure 5.1	Benefits of a total quality programme.....	208
Figure 5.2	A Model for TQM implementation.....	211

## LIST OF TABLES

Table 2.1	Summary of contributions of gurus.....	40
Table 2.2	Management vs leadership .....	60
Table 2.3	Groups vs teams .....	66
Table 2.4	Example of a force-field analysis.....	79
Table 2.5	Check sheet – Parental complaints.....	82
Table 2.6	Quality vs ordinary institution.....	93
Table 3.1	Present standards .....	144
Table 3.2	Old vs new education curriculum.....	145
Table 4.1	Responses .....	161
Table 4.2	Age of respondents.....	162
Table 4.3	Respondents by districts.....	163
Table 4.4	Respondents by circuits: Mutale .....	164
Table 4.5	Respondents by circuits: Vuwani .....	165
Table 4.6	Respondents by circuits: Thohoyandou .....	165
Table 4.7	Respondents by circuits: Malamulele .....	166
Table 4.8	Respondents by circuits: Soutpansberg.....	166
Table 4.9	Respondents by circuits: Sekgosese .....	167
Table 4.10	Vuwani (circuits).....	167
Table 4.11	Sekgosese (circuits).....	167
Table 4.12	Malamulele.....	168
Table 4.13	Soutpansberg .....	168
Table 4.14	Position held.....	168
Table 4.15	Type of School .....	169
Table 4.16	1998 – 2001 Northern Region grade 12 examination results.....	172
Table 4.17	Parental involvement.....	175
Table 4.18	Monitoring of learner progress.....	176
Table 4.19	Emphasis on teaching and learning.....	176
Table 4.20	Teacher's commitment to teaching .....	177
Table 4.21	Learner's commitment to attendance .....	177
Table 4.22	Commitment to continuous improvement.....	178
Table 4.23	Attendance and punctuality by educators.....	178

Table 4.24	Attendance and punctuality by learners .....	178
Table 4.25	Learner discipline.....	180
Table 4.26	Recognition of learner achievement.....	181
Table 4.27	Human relationships.....	181
Table 4.28	Sharing responsibilities .....	182
Table 4.29	Provision of facilities .....	183
Table 4.30	Supply of water, electricity and school materials .....	183
Table 4.31	Principal's dedication and loyalty .....	184
Table 4.32	Managing school management teams .....	185
Table 4.33	Skills for managing change .....	185
Table 4.34	Skills in conflict management .....	186
Table 4.35	Skills in financial management .....	186
Table 4.36	Strategic planning and educational change .....	187
Table 4.37	Skills in organising and planning .....	187
Table 4.38	Skills in interpersonal relations .....	188
Table 4.39	Communication skills.....	188
Table 4.40	Negotiation skills.....	189
Table 4.41	Decision-making skills.....	189
Table 4.42	Professional Development skills .....	190
Table 4.43	White Paper on Education and Training .....	191
Table 4.44	National Education Policy Act.....	191
Table 4.45	South African Schools Act (SASA) .....	191
Table 4.46	Understanding SASA .....	192
Table 4.47	Guidelines for governing bodies .....	192
Table 4.48	Following policy documents .....	193
Table 4.49	Possession of SASA .....	193
Table 4.50	Implementation of the contents of SASA .....	194
Table 4.52	Schools run according to SASA.....	195
Table 4.53	The relationship between principles of TQM, change and research .....	201

## LIST OF ANNEXURES

Annexure 1	Questionnaire on TQM and change .....	251
Annexure 2	Follow-up structured interview probe on TQM and change.....	258
Annexure 3	Application to conduct research in the Northern Region of the Northern Province Department of Education .....	261
Annexure 4	Permission to conduct research in the Northern Region .....	263
Annexure 5	Request to school management teams and educators.....	265