
CHAPTER 8

SUMMARY, FINDINGS AND RECOMMENDATIONS

8.1 INTRODUCTION

The aim of this chapter is to:

- Summarise the key aspects of the research (see 8.2);
- Make findings in respect of the research aims (see 8.3), and
- Make recommendations which are based on the research aims (see 8.4).

A few closing remarks follow at the end of the chapter.

8.2 SUMMARY

In *Chapter 1*, an outline is given of the rationale of this study. It is stated that the management of all secondary schools is not optimal, which in turn impacts on the effectiveness of the operational activities (teaching and learning) at these schools. The focus of this study is, therefore, on the need to develop a management strategy to improve the effectiveness of secondary schools through the application of TQM, which requires a fundamental change in management style and the organisational culture in schools. This strategy is envisaged to provide a framework for organisational change and development of secondary schools. In this chapter, a description is given of the research problem, the research aims are defined and the research methods are explained.

Chapter 2 focuses on the characteristics of TQM as a management theory and on the relevance and applicability thereof to the field of educational management. The concept TQM is first analysed and defined (see 2.2), followed by an analysis of the management philosophies of scientific (traditional) management and the quality movement, (see 2.3) and a description of the TQM philosophy (see 2.4). In the second part of the chapter the focus is on TQM as a distinct approach to management and its application to educational organisations (see 2.5, 2.6). An overview is given of Deming's Fourteen Points and the application thereof to

schools, (see 2.7) and also a description of four fundamental features of TQM within a schools context (see 2.8). In the final instance, the application of TQM as a management theory within schools is evaluated (see 2.9).

The focus in *Chapter 3* is on methods to implement TQM in schools. First is a description of various theoretical models, which serve as framework for the systematic management of quality in educational organisations (see 3.2). A second focus is on the development of a strategy for the implementation of TQM in schools. The focus is on different strategies that were analysed and, in the synthesis a strategy, comprising five distinctive phases, was developed (see 3.3). A description is also given on the central role of quality improvement teams as part of an implementation strategy (see 3.3.4). The last part of the chapter focuses on quality assurance systems, i.c. ISO 9000, the EQF, the Baldrige Program and whole school evaluation (see 3.4). The various systems were analysed in an effort to indicate their relation to TQM and to determine what strategies they provide to improve the effectiveness of schools (see 3.4.6).

In *Chapter 4*, a number of individual schools identified in the literature were studied, where quality management processes were incorporated into their existing cultures. These cases were taken from the United States of America, Alaska, the United Kingdom and the Republic of South Africa. Each case was analysed in respect of the general background, goals and objectives, leading quality principles, strategies and outcomes or results of TQM programmes.

In *Chapter 5*, an overview was given of the research design, which is composed of a quantitative and a qualitative phase of research. In the planning for the quantitative research, the aims and construction of the questionnaire were investigated. This was followed by a description of a pilot study to finalise the questionnaire and an explanation of the study population and sample, statistical analysis, administrative procedures and data analysis. The qualitative research was described in terms of the aims of the study, the collection of data via focus group and individual interviews and the data analysis.

In *Chapter 6*, the quantitative data was analysed and ranked in descending order according to the mean scores of all items. The data was interpreted to determine to what extent effective schools display the characteristics of TQM. The qualitative research data was analysed to determine what strategies senior school leaders employ that are based on TQM assumptions. These strategies were interpreted within the framework of the Baldrige education criteria, serving as guidelines for the development of a management strategy for schools.

In *Chapter 7*, the information gathered from the literature review, the quantitative and qualitative data were used to develop a management strategy for the implementation of TQM in schools. The management strategy consists of five phases and each phase is described in terms of its strategic activities, the participants, the strategies or guidelines and the key aspects in respect of TQM.

The next section contains findings to indicate how the research aims were achieved.

8.3 FINDINGS

8.3.1 Findings in respect of research aim 1

The first research aim schools (see 1.3; Chapter 2) was to determine the characteristics of TQM in. The following was found from the literature review:

- TQM is a holistic and totally integrated approach to management, incorporating the whole organisation and the minds and talents of all people at all levels and activities into the quality process. This approach aims at the development of an organisational culture that creates an environment that is conducive to the management of quality (see 2.2.2.1; 2.2.2.6);
- TQM as a management philosophy is characterised by the participation of people in groups or teams, empowerment of people who know the details of how the work is accomplished, creative problem-solving by people who are responsible for the work and recognition to people for participating in the process of quality improvement (see 2.5);

- TQM is applicable to education since the evidence from the literature is unanimous about those TQM elements that are suitable for implementing in schools (see 2.6);
- As service organisations, schools are well positioned to build an effective chain of customers and to fulfil their needs. This is done by providing educational services, by transforming curricula and organisational and management processes in a way that serves the customer interests (see 2.6);
- The customer-supplier relationships within the school and between the school and its consumer and provider stakeholders are the basis for all activities. Work within the school has to be analysed as a series of transactions between suppliers and customers. Each transaction produces an output designed to meet customer needs. These transactions become situational when it is realised that everyone is both a customer and a supplier (see 2.8.1);
- The simplification of school structures focuses on empowering the people closest to the client (educators) to make decisions about how best to improve teaching and learning and to ensure that the resources of the school are used fully to meet the needs of the learners as the school's primary customers (see 2.6; 2.8.1);
- School managers need to ensure that everybody constantly looks for ways to improve quality. This requires a cyclical process by which processes and procedures are continuously measured and refined in order to become more effective (see 2.8.2).
- The focus on processes and systems implies improving the quality of the processes (teaching and learning) that influence the quality of the end product (achievements in examinations). This focus aims at the optimisation of each individual's potential. The optimisation of the school is promoted by treating the school system as a whole enterprise rather than as separate entities (see 2.8.3), and

- The principles of TQM should not be applied mechanistically to schools, but be customised and tailored for application in an educational milieu with its people-focus (see 2.7; 2.9).

8.3.2 Findings in respect of research aim 2

The second research aim (see 1.3; Chapter 3) was to identify methods to implement TQM in schools and the following findings are made from literature:

- TQM is a comprehensive philosophy and manifests itself in a range of quality models containing various elements and related processes that form part of the quality philosophy (see 3.2; 3.2.7);
- School leaders have to make a strategic choice as to the focus, vision and niche of the school (see 3.3.1);
- The cost drivers for quality improvements have to be taken into consideration to ensure a management strategy with maximum economic efficiency and effectiveness (see 3.3.2);
- A TQM implementation strategy for schools encompasses basically a process of five distinctive phases (see 3.3.3);
- Quality improvement teams give expression to the notion that flat organisational structures are essential for the decentralisation of management functions and the empowerment of personnel (see 3.3.4);
- TQM shares basic elements with quality assurance systems (viz. ISO 9000, the Baldrige Education Program, the EQF). These commonalities are continuous improvement, customer satisfaction, people involvement, process control and effective systems. (see Table 3.4), and
- TQM differs from quality assurance systems in respect of elements related to inspection. Internal evaluation and self-assessment are the only forms of evaluation that are shared between TQM and other quality assurance systems (see 3.4; 3.4.6; Table 3.4).

8.3.3 Findings in respect of research aim 3

The third research aim (see 1.3; Chapter 4) was to analyse case study schools from the literature and the following findings are made:

- The case study schools represent a diverse group of schools in terms of factors like school type, cultural background and particular circumstances;
- All schools embarked on TQM to improve their efficiency and effectiveness. The impetus for change emerged from within the schools;
- The change process started at the top and was driven by senior school managers;
- The implementation strategies differed vastly from school to school depending on the schools' particular needs and circumstances, but displayed certain commonalities and were guided by some TQM principles;
- The application of TQM created a new culture and way of thinking about quality in schools, as well as tangible results. Some quality improvements were already visible soon after introduction, but a cycle of at least three years was needed for the impact to work through to the schools;
- The implementation of TQM resulted in a changed organisational structure, which is characterised by the decentralisation of decision-making powers and the empowerment of staff, and
- The ultimate aim of the application of TQM is the optimisation of the school as a system to ensure improved teaching and learning and to optimise learner potential.

8.3.4 Findings in respect of research aim 4

In respect of research aim 4 (see 1.3; Chapter 6) - to determine *to what extent* effective schools make use of TQM and whether the management strategies employed in schools are based on TQM assumptions and could characterise them as effective in terms of TQM - the following findings are made:

- There is a correlation between a high pass rate in grade 12, an effective school and some aspects of TQM (see 5.2.5; 6.4.1; 6.5.1; 6.6.1; 6.7.1; 6.8.1; 6.9.1);
- The respondents apply all items related to TQM in schools in a moderate to full extent (mean scores vary from 2,7 – 3,80) (see Tables 6.2; 6.4; 6.6; 6.8; 6.10; 6.12);
- Only four items have mean scores of less than 3,00 out of 4,00, which is still a high rating and means that these elements of TQM are applied to a moderate extent only (see Table 6.6; Table 6.10). From the analysis of these items, it appears that the respondents deviate from some TQM elements to a very small extent;
- Most of the respondents apply some elements of TQM without necessarily being familiar with TQM as a management philosophy. It was found in the qualitative phase of the research that only one (1) principal was particularly familiar with TQM (see 6.6.2);
- The Baldrige Education Program can be employed as an instrument of self-assessment to assure quality in schools (see 3.4.4; 3.4.6; 5.2.2; 5.3.2.4);
- Schools use a variety of strategies that correspond with some basic TQM elements (see 6.4.2; 6.5.2; 6.6.2; 6.7.2; 6.8.2; 6.9.2);
- A diverse range of action steps is implemented in schools according to each school's particular situation (see 6.4.2; 6.5.2; 6.6.2; 6.7.2; 6.8.2; 6.9.2);
- The views of principals, educators, learners and parents per school correspond to some extent in respect of their common understanding of what is needed to ensure quality and effectiveness (see Tables 6.3; 6.5; 6.7; 6.11; 6.13);
- The respondents regard the use of some aspects of TQM as imperative to improve the effectiveness of schools, and
- The qualitative research supports the quantitative research in terms of those TQM elements that schools regard as crucial for effectiveness.

8.3.5 Findings in respect of research aim 5

In respect of research aim 5 (see 1.3; Chapter 7) - to develop a management strategy for the improvement of the effectiveness of secondary schools through the implementation of TQM - the following findings are made:

- Phase 1 equips senior school leaders to take the quality initiative, prepare them to understand the quality philosophy and requires that they commit themselves and set an example for the whole school to adopt a quality ethos (see 3.3.3.1; 7.4.1);
- Phase 2 prepares all participants on the implementation process with particular reference to the improvement of the organisational structure, the instructional programme and personal and professional development (see 3.3.3.2; 7.4.2);
- Phase 3 comprises the actual launch of the implementation process. This phase starts off with a sincere projection of the change process over a particular period and the implementation of incremental and small-scale changes. The change process forms a cycle through which the effects of the change are continuously studied and improved (see 3.3.3.3; 7.4.3);
- Phase 4 allows for the integration and expansion of current processes with a particular focus on skills development and recognition, learner and community involvement (see 3.3.3.4; 7.4.4), and
- Phase 5 comprises regular reviews of the TQM programme and self-evaluation. This phase enables all participants to ensure that they are still aligned and committed to the overall objectives of the school and to refocus and, if needed, even redesign processes and structures (see 3.3.3.5; 7.4.5).

8.4 RECOMMENDATIONS

8.4.1 Recommendation 1

A training programme for principals and other school leaders should be developed to introduce them to the philosophy and core elements of TQM. A developmental programme to guide schools with the implementation of TQM should support this training programme.

Motivation

TQM represents a fundamental change in thinking about the management of schools. TQM requires of school leaders to ask the right questions that are aimed at essential changes to improve the quality of education (see 2.10). Principals and other school leaders need to be inducted and trained to commit themselves to developing an implementation strategy for TQM (see 7.4.1).

8.4.2 Recommendation 2

Schools need to be empowered progressively to take ownership for the work they are doing. This ownership should progress on a continuum from normal working activities up to high-level responsibilities (viz. Art. 21 status).

Motivation

The application of TQM in practice requires a major effort and openness for innovative and fresh thinking about current management problems in schools (see 2.10). The empowerment of schools requires that they are involved in the processes of problem solving, the sharing of responsibilities and delegation of authority (see 3.3.3.4).

8.4.3 Recommendation 3

Whole School Evaluation (WSE) as a quality assurance system and TQM need to be combined and implemented together.

Motivation

The majority of quality assurance systems and TQM are interrelated and contribute optimally to quality improvement and school effectiveness when implemented in combination (see 3.4.6). WSE may be regarded as an instrument for the setting of standards in schools, while TQM may serve as a vehicle for achieving those standards. TQM is, in particular, a systematic and developmental approach to the management of quality (see 3.4.1). The customer focus of TQM can supplement WSE to meet the educational needs of the public and communities (which is consistent with the principles of the *Batho Pele* project for transforming public service delivery).

8.4.4 Recommendation 4

The management systems of schools need to be changed to provide for a flat organisational structure (as opposed to a hierarchical structure) and for functional teams.

Motivation

The inversion of traditional hierarchical management structures and the empowerment of staff through functional teams are the most common structural signs of TQM in progress (see 4.7).

8.4.5 Recommendation 5

The regional heads of the Department of Education should start implementing TQM as a management strategy in a cluster of schools at regional, district or circuit level.

Motivation

Schools that are collaborating in a cluster share a common quality language and similar quality concepts. At the level of a cluster (region, district or circuit), schools are well positioned to form inter-organisational networks with business and non-governmental organisations for mutual benefit. This would enable the school system to restructure in order to meet emerging global economic and societal demands.

The cluster approach to the implementation of TQM will allow schools to collaborate and to share limited resources (see 4.2).

Finally, the conclusion that one arrives at is that TQM has direct relevance for the education establishment in South Africa. It offers the theory and the practical tools for it to be applied in schools. TQM is suitable for the improvement of processes and systems related to the management of schools, but also for the improvement of teaching and learning. The strong process-orientation of TQM, however, is not to be seen as a goal in itself, but rather provides the means for the continual improvement of educational outcomes.

TQM also provides the instruments for internal quality assurance in schools in the form of internal evaluation and self-assessment.

The instruments for quality improvement that TQM provide were found appropriate to improve the effectiveness of schools.

The application of TQM in schools should go together with a critical analysis of the paradigm and its customisation to the specific school culture. It became evident from the theoretical study that TQM is indeed a useful concept for application in schools. The empirical study (quantitative and qualitative) supports this notion to the effect that it was found that the principals of effective schools do apply elements of TQM, though some of them are not particularly familiar with the paradigm.

8.5 CLOSING REMARKS

In Chapter 1, the dire need for organisational renewal and change to optimise the effectiveness of South African schools was articulated. In the subsequent chapters, it became clear that the management of schools needs to and can be transformed through the application of TQM as a total systems approach. All aspects of the school are likely to benefit from the culture, processes and structures that are created as a result of the implementation of TQM. Schools will subsequently be enabled to address deep-seated educational problems more effectively so that learners are adequately equipped for the challenges of the 21st century.