
CHAPTER 3

METHODS TO IMPLEMENT TOTAL QUALITY MANAGEMENT IN SCHOOLS

3.1 INTRODUCTION

The aim of Chapter 3 is to explore methods for the implementation of TQM in schools (see 1.3). This aim is sub-divided into the following objectives:

- To identify and describe various systems or models for the management of quality;
- To identify and describe management strategies for the implementation of TQM in schools;
- To develop a theoretical management strategy for schools based on the literature, and
- To identify and analyse a few quality assurance systems to determine their relevance for the development of a management strategy for schools.

The research method was a study of the literature.

3.2 MODELS FOR THE MANAGEMENT OF QUALITY

TQM is both a philosophy of quality and a systematic approach to quality management (often incorporating the BS 5750 and ISO 9000 series of quality standards) (Hogan, 1994:3; Middlehurst & Gordon, 1995:273). The literature study reveals various quality systems that are relevant to the TQM philosophy. These systems are presented as quality models, each providing a philosophic framework for the design and development of TQM. The respective models highlight different elements of the quality philosophy.

3.2.1 The quality-marketing model

The quality-marketing model (Murgatroyd, 1991,1993) is based on a competitive philosophy, which sees individual schools competing against one another in an open market for learners and resources. Quality is sustained through each school

establishing a particular *niche* in its educational philosophy and policies. TQM is equated with the notion of customer-driven quality, although the complementary processes of contract conformance and quality assurance (equated with quality control) are perceived as being necessary, but of lesser importance to the quality process (Berry, 1997:61).

3.2.2 The quality-learning model

The quality-learning model concentrates on the relationship between the learner and the educator in the learning process. In this model, learners are encouraged to accept responsibility for the quality of their work, with the educator ensuring that the emotional, physical and psychological conditions for learning are in existence. Quality is equated with the continuous improvement of learning outcomes and the ability of learners to take responsibility for this improvement (Berry, 1997:61).

The next two models represent a new way of thinking about developing the work culture of schools (Acker-Hocevar, 1996:80-83).

3.2.3 The quality performance system model

According to the *Quality Performance System Model* (QPSM) there are nine dimensions of work in an educational organisation (see Table 3.1). The first dimension, quality work culture, provides the context for work in the organisation. Dimensions 3 to 8 are performance areas (see Table 3.1) and they make up the model's six rings. (see Fig. 3.1). The interconnected performance areas function interdependently to enhance the energy for work. Dimension 9 (customer success and satisfaction), the inner dimension of the model, is the result of all the work within the system. The second dimension, continual improvement, stimulates all the other performance areas in ongoing, system wide improvement.

This model claims that a quality work culture influences the system-wide response to customer needs and expectations and affects desired outcomes in the results area of customer success and satisfaction. Customer needs and expectations drive organisational development over time, affecting vision and organisational purpose. New customer requirements affect both the individual's and the organisation's capacity for increased adaptation and change. The school's ability

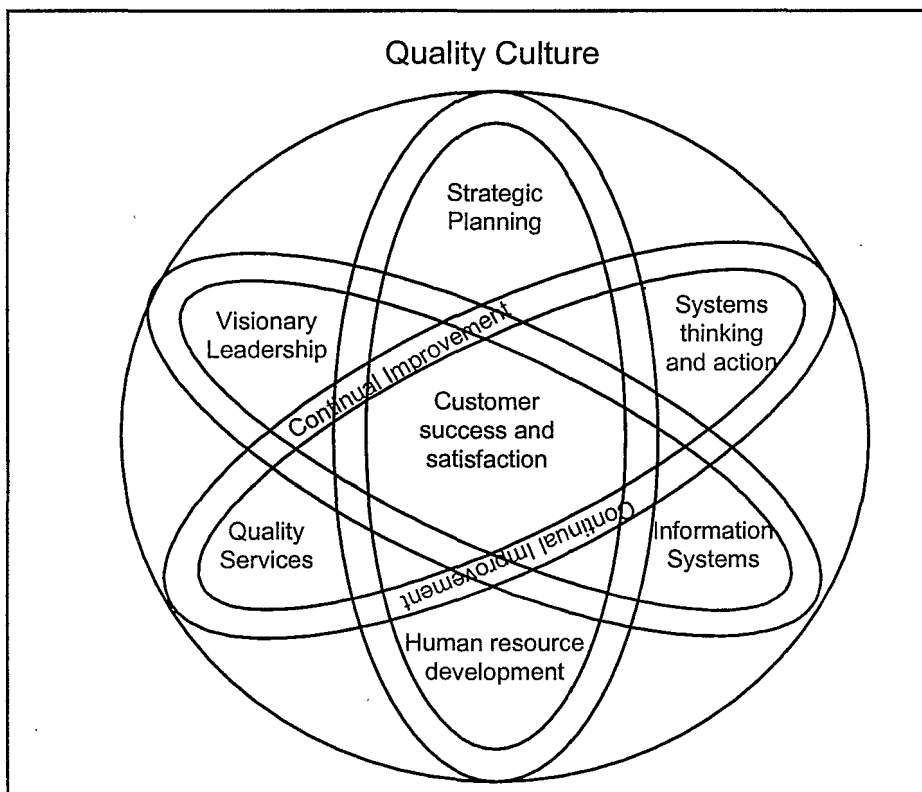
to respond to altered conditions and trends in the educational environment is, according to this model, essential to schooling success.

Table 3.1 Components of the Quality Performance System Model

(Acker-Hocevar, 1996:82)

<i>Parts</i>	<i>Dimensions</i>
Part I Umbrella:	1. Quality Work Culture
Part II Kaizen:	2. Continual improvement
Part III Performance Areas:	
Performance Area 1:	3. Visionary Leadership
Performance Area 2:	4. Strategic Planning
Performance Area 3:	5. Systems Thinking and Action
Performance Area 4:	6. Information Systems
Performance Area 5:	7. Human Resource Development
Performance Area 6:	8. Quality Services
Part IV Results Area:	9. Customer Success and Satisfaction

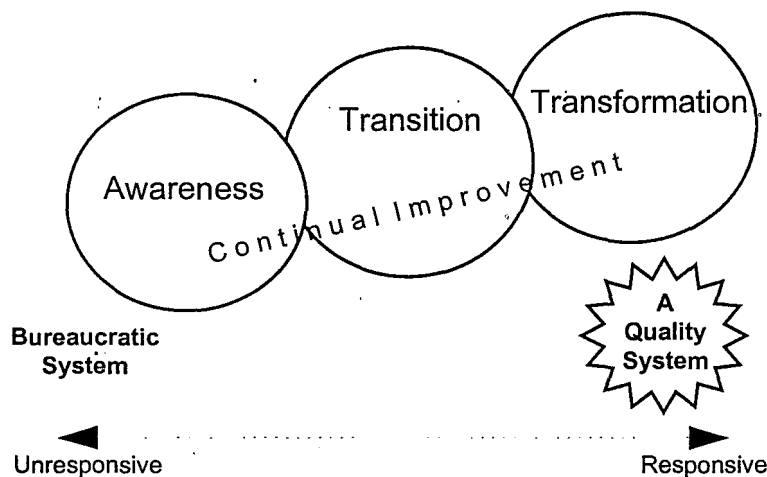
Figure 3.1 The Education Quality System (Acker-Hocevar, 1996:81)



3.2.4 The quality change process model

The *Quality Change Process Model* (QCPM) provides a theoretical framework for changing existing beliefs, attitudes, and behaviours. It also serves as a diagnostic tool for educators to use in assessing the work cultures in districts and schools to begin to align quality systems for schooling better. The QCPM helps schools strengthen the direction of the change process through the use of a diagnostic process for the planning and assessment of change over time (see Fig. 3.2).

Figure 3.2 Quality Change Process Model (Acer-Hocevar, 1996:82)



This model provides a conceptual perspective on the change process, which comprises different phases of development. The change process starts off within a bureaucratic system, develops through the phases of awareness, transition and transformation into a quality system. This model presumes that it is through continuous improvement that systems improve over time from a bureaucratic to a quality system.

The quality system found at the far end of the continuum in Figure 3.2 is fundamentally different from the bureaucratic system in its purpose and delivery of services. Its goal within the school environment is to identify specific learner needs rather than to fit learners into fixed programmes. The responsiveness of this system gives workers the freedom to continuously change programmes and services to enhance customer success and satisfaction. Workers in high involvement organisations are encouraged to function independently as professionals while working interdependently to achieve new purposes.

It is the notion of systems thinking of a quality system that encourages people within the organisation to assume new responsibilities for the overall success of services and results. Transforming structures, policies, and programmes from the control emphasis of the bureaucratic system to the responsive patterns found in quality systems requires attention to the development of a work culture over time.

3.2.5 The quality leadership model

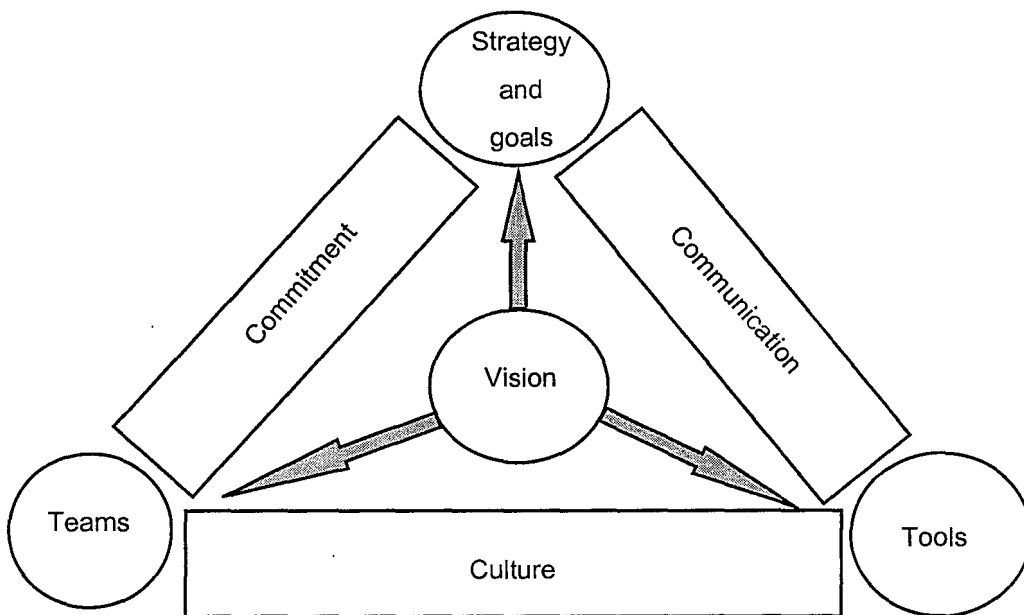
According to Murgatroyd and Morgan (1993:60,67), leadership is the essence of TQM. Leadership in the TQM context is visionary, meaning that it forms the basis for facilitating the work of others (empowerment) so that they can achieve challenging goals (performance) that meet or exceed the expectations of stakeholders (strategy). TQM leadership is associated with quality determinants such as vision, strategy, outrageous goals, teams, tools for daily management, culture, commitment and communication (cf. Fig. 3.3).

Leadership and quality are also explicitly linked within the quality standards (Quality Awards). Leadership is seen as necessary at strategic and operational levels in order to achieve collective commitment to the quality programme and to drive it forward. The European Quality Award concentrates on the following six aspects of leadership (Middlehurst & Gordon, 1995:277):

- Visible involvement of senior professionals and managers in leading quality management, for example, how to communicate with staff, act as role models, make themselves accessible and listen to staff and assist in training and developing of staff;
- Leadership towards a consistent Total Quality culture, for example, how professionals and managers are involved in assessing awareness of quality, and in reviewing progress in quality, including commitment to and achievement of quality in appraisal and promotion of staff at all levels;
- Recognition and appreciation of the efforts and successes of individuals and teams, for example, at local, divisional and organisational levels and of groups outside the organisation;

- Support of total quality by provision of appropriate resources and assistance;
- Leading involvement with stakeholders and clients, for example, how professionals and managers take positive steps to meet learners and other constituencies, establish and participate in partnership relations, and establish and participate in joint improvement teams, and
- Active promotion of quality and its management outside the organisation.

Figure 3.3 The TQM Model for School Leadership (Murgatroyd & Morgan, 1993:67)



Leadership is important in relation to quality because it offers a vision and idea of what is possible, a strategy for moving in this direction and a means of achieving individual and collective commitment to the goals of continuous improvement, which underpin quality.

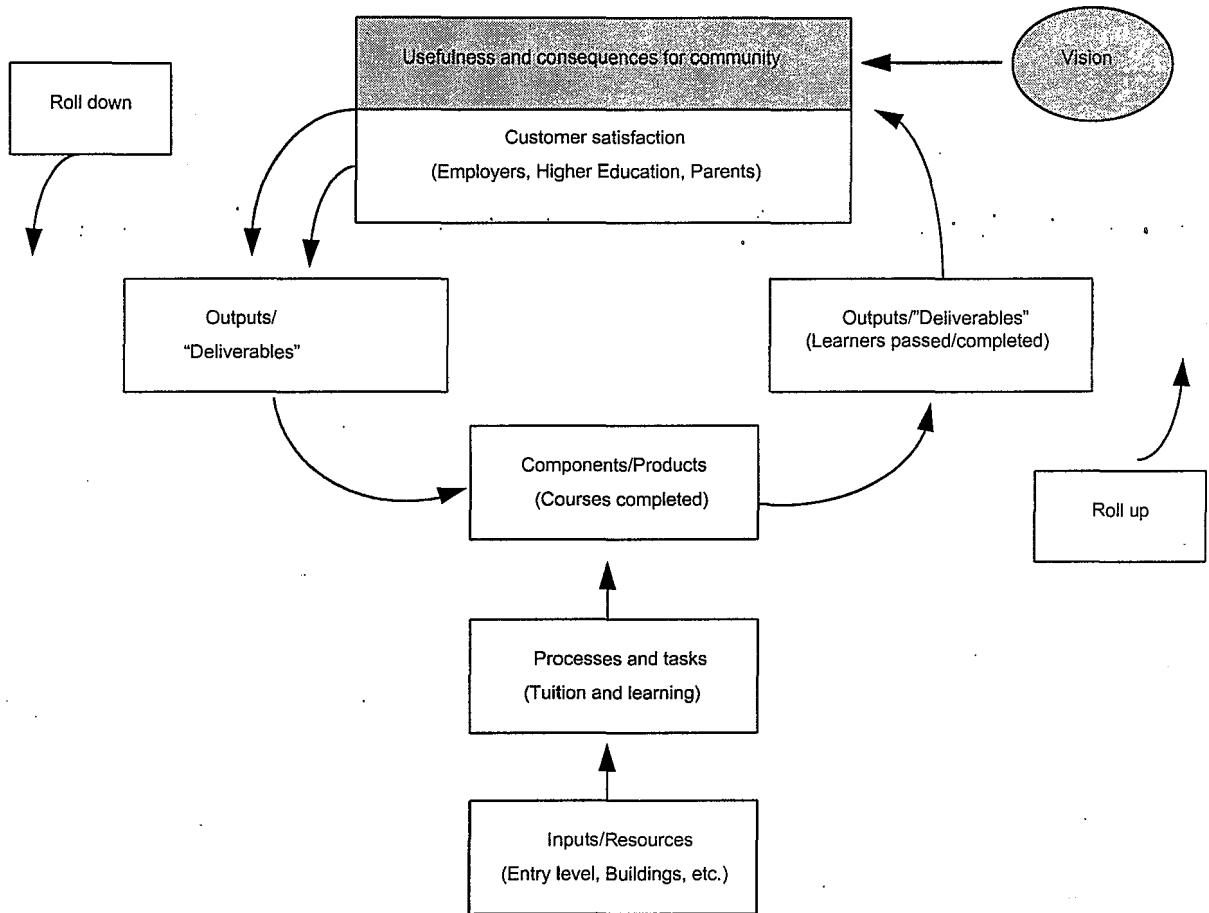
3.2.6 The TQM plus model

In the era of globalisation with its emphasis on productivity and competitiveness, it becomes vitally important to focus on what is good for society and the customer (mega level). This means that the focus of the organisation should be on doing things that are useful for the customers. It is accepted that people live in a shared world and that they are all better off when keeping an eye on the common good.

TQM Plus is a model that adds societal consequences and pay-offs to conventional quality processes. The model is congruent with Drucker's advice that doing what's right is more important than doing things right (Kaufman, 1994:176).

Figure 3.4 The TQM Plus Cycle

(Kaufman & Hirumi, 1992:34; Kaufman, 1994:179)



Therefore, there is no use for a school to focus on processes to improve attendance figures and pass rates, yet produce learners who are not equipped to take on the demands of the modern community. According to this model, it is not sufficient to merely satisfy the internal and external customers of the school. The school should rather identify the real needs of the community as a whole, for example, the quality of life, environmental issues, crime and matters related to health and welfare (see Fig. 3.4) (Kaufman & Hirumi, 1992:33).

3.2.7 Conclusion

The quality philosophy manifests itself in a range of quality systems or models. Each model focuses on particular elements or related processes that form part of the quality philosophy. The following strategic elements and processes, therefore, need to be considered when a TQM model for the improvement of schools is developed:

- The establishment of a particular niche, with the emphasis on customer satisfaction as part of a school's quality philosophy (Quality-marketing model);
- The learning process (relationship between learner and educator) is to be designed so that learners take responsibility for the quality of their work, while the educator serves as the facilitator of the process. In this process, the focus is on continual improvement of learning outcomes and on the ability of learners to take responsibility for this improvement (Quality-learning model);
- The development of a quality work culture within the school. This culture is created through the continual improvement of six key performance areas (leadership, strategic planning, systems thinking and action, information systems, human resource development and quality services) and the outcome is customer success and satisfaction (Quality performance system model);
- The change of existing beliefs, attitudes, and behaviours of all role players relates also to the creation of a quality work culture within the school. This strategy is designed to improve the individual performance of learners and to encourage everybody in the school to take responsibility for the overall success of services and results of the school as a whole. The main focus of this strategy is to continually improve the system (i.c school) from its current position to a quality system, which is responsive to the needs of its customers (Quality change process model);
- The crucial role of leadership as the basis for facilitating quality improvement processes within the school (Quality leadership model), and

- The real needs of the community as a whole have to be identified (not only that of internal and external customers) and the school should focus on doing things that are really useful for the customers. To establish those needs the school will have to understand the global world's demand for productivity, usefulness and competitiveness. This strategy implies that learners be equipped to take on the demands of modern society (TQM plus model).

Each of the respective management models described above portrays a unique view on how quality could possibly be managed within schools. The management of quality in schools needs to be supported by more specific theoretical strategies for the implementation of TQM.

3.3 THEORETICAL STRATEGIES FOR THE IMPLEMENTATION OF TQM IN SCHOOLS

The objective in this section is to develop a theoretical management strategy for the implementation of TQM in schools based on a literature study.

3.3.1 The importance of a strategic focus

Murgatroyd (1992:175) contends that schools cannot be successful at being all things to all people. They need to make a deliberate strategic choice as to their focus and then to pursue that focus relentlessly. This focus should, according to Murgatroyd (1991:9-10), be based upon Heskett's analysis (1986) of effective service organisations. According to this analysis a school should

- Define its core business in a way that fully reflects its abilities and values;
- Differentiate itself from other schools which parents can choose between;
- Maximise the fit between its own operations (infrastructure, human resource management, technology development, purchasing and capital strategy, logistics and marketing) and the needs of service buyers in the niche, and
- Educate potential clients of the school to see its services in exactly the way the school wishes to offer them.

Schools should, therefore, be unique in terms not just of their culture, but also in terms of their focus. They need to have a clear strategic vision and a clear operational and marketing strategy to make this vision a reality.

Murgatroyd (1991:9) regards niche thinking as central to school wide quality improvement strategies. According to this view, a school can only be dedicated to total quality service once it has decided on its vision in terms of its niche. What this calls for is clear thinking about generic strategy (the key and unvarying components of strategy over time). There are essentially four generic strategies, which can be pursued by a school:

- **Strategy 1:** The focus in this school is on the 'flow' of maximum volumes (get learners through the programme) at the shortest times at the lowest cost. Little is spent on staff development, quality assurance and marketing. The school provides a broad range of programmes, which are looked upon as equally valid;
- **Strategy 2:** This school will offer a broad base of specialised services at low cost, i.e. music, sports or science programmes. The school is still concerned with volumes and costs, but will also have a particular area of specialisation. In respect of this special focus area, the school will be more concerned with quality than with costs;
- **Strategy 3:** The school offers a broad range of quality programmes in terms of learner experiences and learner needs. Quality is the driving force of this school and costs are a secondary issue, though with a high regard for the effective use of resources. This school takes pride in having a reputation of an excellent school in all respects, and
- **Strategy 4:** The strategy of this school is also to offer a quality basic education programme, but to excel in a particular field. The management focus is on people and significant efforts are made to recruit the best available staff and to develop these staff. Learner recruitment is selective, so as to ensure quality outputs. The marketing and promotion of the school is focused upon its

distinctiveness rather than its all-round services. Stakeholders, learners and alumni are actively engaged in the planning, development and marketing of the school.

These generic strategies have the following implications for schools, as analysed by Murgatroyd (1991:11):

- It appears as if all strategies distinguish between a cost/volume focus and quality; but the real distinction is between a focus on cost/volume and a focus on people. Strategies 1 and 2 depend on cost control and volumes, while strategies 3 and 4 focus on people investments and facilitative management;
- The four strategies are distinctive in terms of managerial focus or *what* is being managed and *how* it is being managed;
- Organisational performance and evaluation: the instruments being developed to evaluate a strategy 4 school will not be appropriate to be used for schools pursuing one of the other strategies, and
- Empowerment and responsibility: the leadership and control in strategy 1 schools will be very centralised, while in strategy 4, schools leadership, responsibility and entrepreneurship are encouraged throughout the organisation.

It is evident that schools need to differentiate and, therefore, have to define their generic strategy. Murgatroyd (1991:11) lists several implications that flow from a failure to differentiate. Firstly, schools that fail to define their generic strategy are likely to make decisions that frequently contradict one another, make staff appointments which adversely affect performance, have a high staff turn-over due to low morale and lack of motivation, and be the subject of public scrutiny and comment. Secondly, schools will constantly under-perform given the available resources. Thirdly, schools pursuing more than one generic strategy are likely also to be under-performing.

The strategy a school decides upon will necessarily have certain structural implications for that school. A well-developed strategy is an important prerequisite for the implementation of TQM to schools. This doesn't mean that there is only one ideal set of fixed requirements that schools have to follow. It is, however, evident from the literature that certain key elements are eminent to such strategy (Murgatroyd, 1993:276-280).

3.3.2 Economic efficiency as basis for a management strategy

According to Weller and McElwee (1997:201,206), Porter's models of competition and drivers of cost, together with Deming's 14 Points provide the basis for a management strategy for school managers seeking quality improvements with maximum economic efficiency. The aim of this strategy is to address issues of satisfying customer needs and expectations and being cost-effective and cost-efficient. Weller and McElwee (1997:206) propose the restructuring of education in the USA and Britain on the basis of Porter's models as a means to promote educational excellence and meet the demands of the external environment.

3.3.2.1 Five Forces Model of Competition

Porter's *Five Forces Model of Competition* (1980) provides a structural analysis of the competitive environment in which an organisation operates. It also provides a method of examining the competitive economic factors in which an organisation functions in relation to the impacting, but fluctuating forces of the following factors (Weller & McElwee, 1997:206-208; Zairi, 2002):

- **Environment**

According to Porter (1980), the environment in which an organisation functions produces certain external pressures on the organisation to meet or conform to its needs or expectations. Schools operate in a social, political and economic environment, which is externally pressured by national and local demands. Governments put pressure on schools to reform in order to serve certain national needs and expectations.

- **The threat of entry**

The threat of entry depends on how strong the barriers of resistance and distrust against the quality philosophy are as a means of school restructuring. Schools that

do not have such barriers and adopt TQM as a restructuring model are more likely to become successful. Porter states that this situation creates market segmentation with pockets of quality and an uneven competition for valuable resources. This leads to greater differentiation in products (increased learner achievement). Chubb and Moe (Weller & McElwee, 1997:207) reinforce Porter's observation when they note the differences in community and parent support and the resources allocated to schools classified as "effective schools" or high achieving schools, as compared to those who lacked the effective schools criteria. The disparities between "have" and "have not" schools will therefore increase and become more evident as effective schools get access to more resources.

- **The power of buyers and suppliers**

Porter regards the educators as the buyers in the educational market place. They must be willing to embrace the quality principles and actively apply them to achieve quality outcomes. The top team and educators have to commit themselves to the quality philosophy to have any effect on producing quality results. In this model, the suppliers are parents, community members and the government, which provide the financial resources for the provisioning of education. If schools do not perform in accordance with the expectations of the suppliers, pressure might build up to withdraw or redirect funds in order to get value for their taxes.

Sallis (Weller & McElwee, 1997:207) perceives the learner as the customer. From this perspective, the learner receives the supplies from external sources and an educational programme from the buyers, which is the school's education team. Both suppliers and buyers are responsible to satisfy the learner's need for the knowledge and skills required for employment.

- **The threat of substitute products**

This force relates to alternative school choices for the key supplier or the parent. Parents, who are dissatisfied with public education or with a particular school, will be forced to send their children to schools of their choice, which might be either private or neighbouring schools. Competitive rivalry here is a major factor in

substitute choice. The choices are determined by product image, product loyalty, and perceived quality of the value the suppliers get for their money.

- **The extent of competitive rivalry**

The pressure of competitive rivalry can impact positively on schools to improve their product and retain their market share. Schools that are not effective may experience a decline in enrolment figures as a result of market forces. Porter cautions, however, that the force of competitive rivalry may come too late for many organisations to reform themselves. For a school to restructure itself is both costly and time consuming. A school can also reach a critical stage with a switch in customer loyalty when the time, effort, and expense to recapture the market share will be twice that of the initial effort to switch to quality production. Furthermore, customers quickly develop new loyalties, reinforced by the fact that the former organisation was not quick enough or did not care enough to respond to customer demands.

Schools that want to retain their market share and attract new customers must determine the needs and expectations of their customers and then meet these needs in a cost-effective manner. Porter warns that the switch to quality is costly in terms of both hidden costs and the costs of technology, time and personnel training.

3.3.2.2 Drivers of Cost Model

Porter elaborates on the cost aspect of quality in the *Drivers of Cost Model*. Although the need to provide quality educational outcomes with the least amount of capital expenditure is accepted, Porter warns that the switch to quality is not free of cost. The Drivers of Cost Model, therefore, focuses on the costs involved for an organisation to embrace quality. Porter identifies seven drivers of quality which have direct application for schools pursuing quality education (Weller & McElwee, 1997:208-211):

- **Experience curves**

Porter claims that costs decline as a result of experience. Experience comes from the knowledge and application of TQM principles such as meeting customer

needs, continuous improvement and training and retraining. TQM is data-based and maintains that quality comes from decisions based on data. The use of surveys will enable educators to meet the needs of parents and learners better by structuring their instruction around learner needs rather than the needs perceived by educators. The PDCA cycle is a key component of TQM which provides for continuous improvement. Educators use it to develop their lesson plans and for continuously experimenting with new ideas and programmes. Surveys, interviews, and informal discussions with educators provide specific data regarding their specific needs and form the basis of quality training programmes. All these and other actions that may be taken are based on data. A database of previous surveys could, therefore, provide valuable information for planning cost-effective programmes.

- **Economics of scale**

The introduction of new technology increases the economic scale line. New technology will increase the cost of operations, but cost-effectiveness also increases when technology is used in a cost-effective and efficient manner. According to Thomson, Wood and Honeyman (Weller & McElwee, 1997:209), the effective use of technology is a key component to quality improvement in classroom learning and administrative services. Educators, however, have to be trained in the effective use of technology. The equipment itself also has to be fit for the purpose it is needed (purchasing not to be based on price tag alone).

- **Learning**

Learning is more meaningful and lasting when learners become actively involved in the teaching/learning process. Learners take part of the responsibility for what and how they learn through cooperative learning, peer tutoring and group projects. Educators become resource persons and provide learners the necessary time and support to produce quality outcomes. This mode of teaching/learning promotes more effective and meaningful learning. Instruction becomes more cost-effective when instructional time is mainly spent on teaching the relevant and essential.

- **Interrelationships**

An organisation maintaining a good working relationship with its customers is likely to reduce wasted time and materials in trying to satisfy customers. Quality organisations continuously ask their customers for suggestions on improvement and, therefore, build a working partnership that fosters interdependency and customer loyalty. Schools also have to assess the needs and expectations of learners, parents and community members. Good working relationships can greatly increase financial support for the school, which is needed for the purchasing of resources to improve quality. The opposite is dissatisfaction and lack of support which can result in parents moving their children to other schools.

- **Integration**

It is suggested that educators should make use of existing expertise and resources within their school before turning to external sources for assistance. Schools can use their own educators and principals for staff training and development, instead of relying on costly external sources. The use of existing resources promotes cost-effectiveness.

- **Timing**

Time is a management control factor which is crucial to the success or failure of an organisation. Schools that want to implement quality principles should begin the process without delay. Time that is wasted on implementation results in the continuation of inefficiency and cost increases. On the other hand, it is important to realise that the quality process to produce results can take 3 to 5 years. Quality should, therefore, never be regarded as a quick fix that will have immediate results.

- **Location**

The geographic area in which an organisation is located dictates the social and economic variables that surround it. Schools in a wealthy area are more likely to receive financial and moral support to implement quality programmes.

Porter stresses the economic forces that influence the functioning of organisations (i.c schools). Schools need to take these forces into account when they develop a

strategy for the implementation of TQM. The environment in which schools operate is influenced by economic factors that impact on their effectiveness. Taking on the challenges of this competitive environment will enable schools to satisfy customer needs and become more cost-effective and cost efficient. The effectiveness of schools does not only depend on economic efficiency, but also on a well-structured implementation strategy.

Table 3.2 The educational quality model (Steyn, 1996:133)

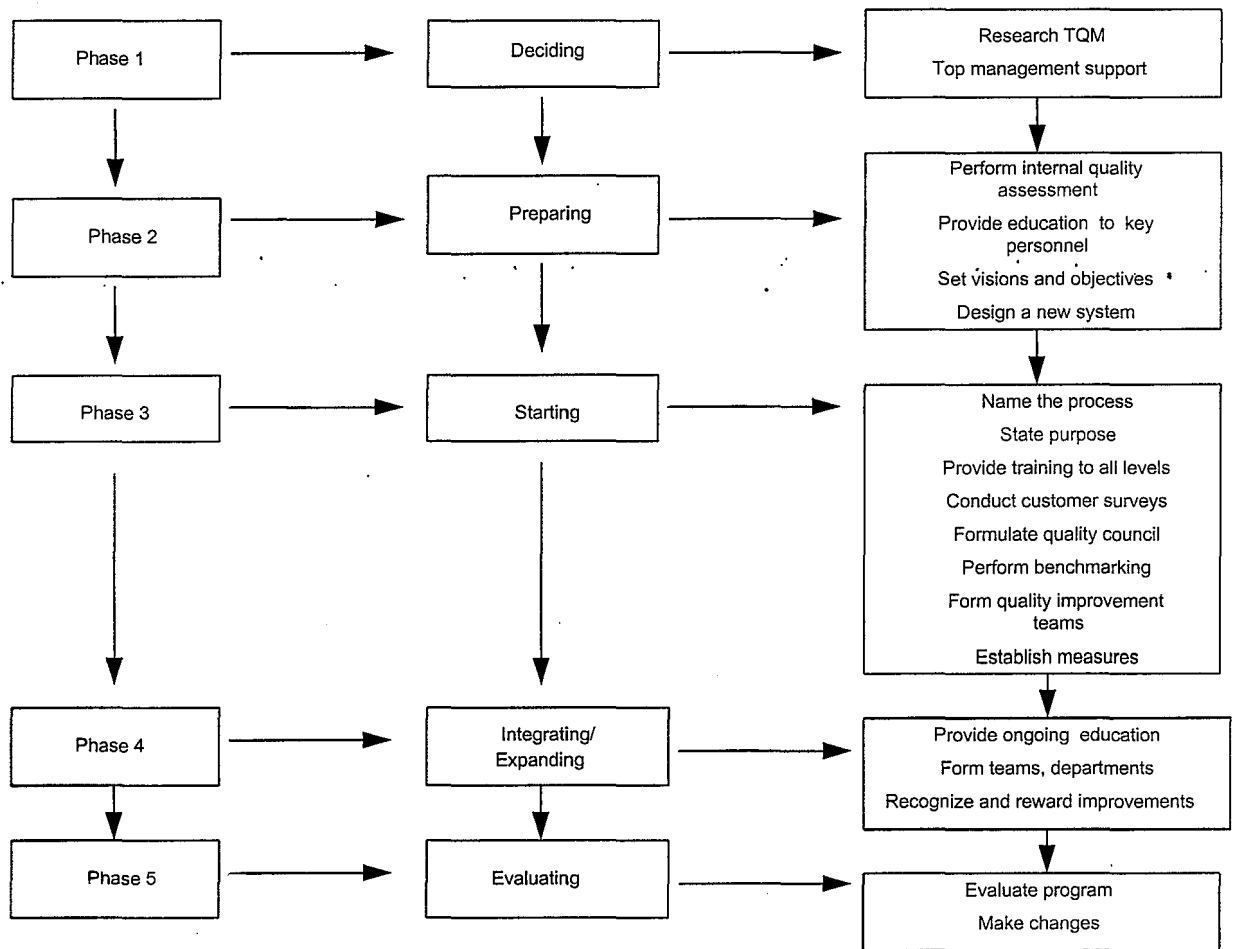
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Strategy	Quality leadership forum: Appraisal, apply quality principles	Site-based approach: Work teams, needs assessment	Classroom: Classroom environment, instructional processes, curriculum, support processes	Learners: Assist learners in applying quality principles for lifelong learning goals	Full implementation and sustaining of the quality model
Participants	Principal Deputy principal(s)	Principal Deputy principal(s) Team leaders: <ul style="list-style-type: none"> • Curriculum • Enhancement team • Instructional improvement team • Professional development team • Ad hoc teams 	Principal Deputy principal(s) Team leaders Team members Programme specialists	Councillors Learners	All

3.3.3 The phases of a theoretical management strategy for TQM in schools

Steyn (1996:132) states the importance of having a clear philosophy about quality to ensure a common understanding of the concept and the strategy for implementation. The implementation and sustaining of quality principles in schools encompasses five different phases (Steyn, 1996:132-134). The phases and the participants in each phase are depicted as an educational quality model in Table 3.2.

Motwani and Kumar (1997:133-135) suggest a similar strategy to educational institutions when implementing a TQM programme. This strategy also comprises five phases and is depicted in a conceptual TQM model for education (Fig. 3.5).

Figure 3.5 Conceptual TQM model for education (Motwani & Kumar, 1997:134)



The educational quality model (Steyn) and the conceptual TQM model for education (Motwani & Kumar) both suggest a five phases strategy that can be implemented sequentially, but also allows schools to undertake the tasks in different sequences (Murgatroyd, 1993:276-280; Steyn, 1996:132-134; Motwani & Kumar, 1997:133-135). A synthesis has been drawn from the educational quality model and the conceptual TQM model for education in an attempt to present a comprehensive strategy for the implementation of TQM to schools. This strategy encapsulates TQM elements identified in the literature and encompasses the following five distinctive phases (see 2.10; Table 3.3):

Table 3.3 A TQM implementation strategy for schools

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Top management commitment	Preparing for implementation	Launching of the process	Integrating and expanding	Evaluating
<i>School management team</i> Stage 1: Induction and training Stage 2: Apply TQM to the school Stage 3: Commitment	<i>Support to personnel</i> <ul style="list-style-type: none"> ▪ Needs assessment ▪ Quality specifications ▪ Bench-marking ▪ Strategic planning ▪ Vision and goals ▪ Form quality improvement teams ▪ Key implementers ▪ New system 	<i>Classroom activities</i> <ul style="list-style-type: none"> ▪ Name the process ▪ State purpose ▪ Provide ongoing training ▪ Conduct customer surveys ▪ Evaluate current process ▪ Formulate a quality council ▪ Establish measures and quality indicators 	<i>Learner activities</i> <ul style="list-style-type: none"> ▪ Ongoing education and training ▪ Skills development ▪ New teams, committees, departments ▪ Recognition and reward: quality improvement 	<i>All</i> <ul style="list-style-type: none"> ▪ Evaluate success or failure ▪ Self-appraisal ▪ Redesign and adjust

3.3.3.1 Phase 1: Top management commitment

The implementation of TQM in schools requires a substantive top team commitment. Murgatroyd (1993:276) regards top managers as those persons holding positions of responsibility in the school and to whom others look for guidance and leadership. The slightest digression or perception that lip service is being given to TQM will lead to rejection. Berry (1997:52) contends that there is emerging evidence to suggest that it is through example and commitment to quality of senior management that the whole organisation is able to adopt a quality ethos. It is, therefore, critical according to Murgatroyd (1993:276), that the top team understands what it is they get into, recognises the work it will create and commits to achieving its vision through TQM (Wiklund, 2002:419).

This phase, therefore, equips school leaders with the quality initiative. Participation in a quality leadership forum enables leaders to appraise their school and learn to apply quality principles for the purpose of continuously improving their school. Those who are in charge of the system are the only ones who can change that system (Steyn, 1996:132). Three stages can be identified in this phase (Murgatroyd, 1993:276-277):

- **Stage 1: Induction and training of a school's senior staff in TQM**

The school management team needs to understand the key ideas of TQM. This can be done by reading, discussion, site visits to schools, hospitals, businesses and other organisations which have adopted TQM. They should understand the leadership role they will be expected to play and the implications TQM has for thinking differently about processes and the roles of customers in the achievement of the vision and mission of the school.

During this phase, top managers will have to acquaint themselves with the requirements of implementing and maintaining TQM. Leadership, therefore, appears to be crucial for this process to be successful. People in general are not willing to change. Leaders will, therefore, have to manage people in a way that will ensure the successful implementation of TQM (Hixon & Lovelace, 1992:25; Carlson, 1994:16,18).

- **Stage 2: Application of TQM to the school**

TQM should not be regarded as a standard programme ready for implementation in any circumstances. The school management team, in fact, needs to link the key TQM elements to the experience they have of that particular school. They have to customise and refine the TQM principles to the school's own culture (Rappaport, 1993:17; Carlson, 1994:18). The management team will take a great deal of open discussion on the following:

- What does TQM mean for the way the management team works?
- What does TQM mean for the working relationships with staff, learners and other role players?

- What is it that TQM will need to bring about over the next three to five years for it to be successful?
- How does TQM need to be launched and what is the most likely reaction of staff colleagues?
- What are the barriers to effective TQM implementation in the school and how can the team systematically overcome these? and
- What will be the gains and positive outcomes for all the staff?

Kachar (1996:3-4) stresses that the successful implementation of TQM requires some specific planning, which should begin with a sincere appraisal of the organisational climate. The idea is to gain the support of everyone involved. If there are members who resist then it is probably not really the time to introduce TQM. On the other hand, if the general atmosphere is in line with TQM concept, philosophy and principles then the implementation process is likely to be successful. In addition, the staff, and in particular, the principal, must have a comprehensive working knowledge of the school. The principal must understand the real conditions of the staff in relation to the surroundings.

- **Stage 3: Commitment**

If the first two stages are passed and the team still wishes to proceed, individuals need to develop a self-contract about their role in the launch and follow-through of TQM. They should also share these contracts in the top team. The team also needs to define the behaviour they need to engage in collectively to demonstrate their commitment to all staff.

Ellis (Berry, 1997:52) argues that such management commitment is demonstrated by:

- Generating the quality policy through consultation;
- Publicising the quality policy;
- Allocating money and time to the quality process;

- Attending quality team meetings;
- Talking with staff both formally and informally about quality;
- Modelling the quality culture;
- Valuing and respecting people, and
- Insisting on clear quality requirements and documented procedures.

3.3.3.2 Phase 2: Prepare for implementation

Phase 2 focuses on a site-based approach to improving the quality of the organisational structure, the instructional programme, the personal/professional development programme and technological integration (Steyn, 1996:133). This is the preparatory phase during which the following matters are attended to (Herman & Herman, 1995:14-18; Motwani & Kumar, 1997:134):

- **Needs assessment:**

Perform an internal quality assessment to identify strengths and weaknesses of the school. A comprehensive needs assessment should also be conducted involving the different categories of customers. As part of this process, hard data (such as learner achievement scores) and soft data (such as opinion and/or attitude surveys) should be collected. The assessment should be directed to three levels of needs, mega needs (those which the school share with society), macro needs (those which involve the entire school district), and micro needs (those which involve the individual school).

- **Quality specifications**

The needs assessment has to be followed by a process of developing quality specifications for each service and product the school intends to deliver. Quality specifications should be set up for each grade level, school building, subject area and for each functional area (administration, instruction, finance and others). It is crucial that all employees be part of the development as well as the continuous updatment of quality specifications.

Quality specifications can also be obtained from a process called *benchmarking*. Benchmarking is a process used by decision-makers to identify the very best programmes, services or products that are delivered by other quality schools. These schools, with the permission of their leaders, are then studied in detail to determine the specific items and procedures they are utilising. The own school's performance is subsequently compared with that of the high performing schools.

The specifications serve as measures and indicators to measure the goals and objectives of the school in a valid manner.

- **Planning**

The next step is to put in place the school's strategic plan. This process involves defining the vision of what should be and what could be at some point in future. From this vision the goals and objectives of the school are developed. These goals and objectives determine *what* is to be accomplished over the predetermined time frame.

Once the strategic planning has been completed, then it must be determined *how* to put the plans into practice. During this tactical planning phase attention should be given to specifics and detailed plans and the deliverable means for quality services and products. The detailed plans include answers to questions such as: (1) why this action should be taken? (2) what activities and resources are to be included? (3) where the action programme will be initiated? (4) when the action programme will be initiated? (5) how the programme will be initiated? and (6) who will be responsible for each task and for seeing that each step of the action plan is implemented?

- **Identification and training of key personnel**

The identification of some key implementers is, according to Murgatroyd (1993:277), critical to both the successful launch of TQM and to the follow-through that the launch requires. These persons should be selected for their ability to work in teams, their openness to new ideas and their ability to use data and critical thinking. They need to be potential team leaders, facilitators and peer group educators. The positive support and skills of these persons are more important

than their formal status in the organisation. It is crucial that these people are trained in the knowledge and skills necessary to produce the required outcomes.

A TQM approach requires that the management of the school be based around work teams and not individual persons. The work teams have to address relevant issues and use their team time to address instructional programmes, communicate with learners and parents and to evaluate processes and progress (Steyn, 1996:133).

It is apparent that a new management system for the school has to be designed during this phase. The top team should, however, take care to ensure that the school's culture is suitable for TQM. Its culture has to agree with basic TQM values and visions.

3.3.3.3 Phase 3: Launch the process

Murgatroyd (1993:277) asserts that a successful launch of TQM in a school requires a great deal of realism and honesty. The top team and implementers have to outline what is likely to happen to the school under a given set of assumptions over a 4 to 5 year period. This allows exploring with the staff what will happen if they sustain doing things the way they have been done all the time. From there questions could be raised about how the school can sustain its work toward the achievement of a vision while, at the same time, securing process gains and improved achievements. TQM is, therefore, seen as a response to real issues. In addition to this the following aspects should be taken care of during this phase:

- **Name the process:**

The quality process should be recognisable through the name given to it. The name does need to reflect the actual strategy and circumstances of the school. Examples are 'Quality First', 'Q-Program', 'People First', 'Customer Service', 'Quality Program', and many other names.

- **State the purpose**

State the purpose of the programme through a new quality framework.

- **Provide ongoing training**

All levels of personnel should be involved in the quality process by providing them with ongoing training.

- **Conduct customer surveys**

Conduct internal and external customer surveys to evaluate the current process and make necessary adjustments. Rappaport (1993:17) mentions, for example, that a questionnaire was developed and completed by parents at an evening orientation for incoming learners and their parents and at the first meeting of the parents and educators (PTA) the year (at the George Westinghouse Vocational and Technical High School in New York). The involvement of the parents in the decision-making process led to the transformation of the PTA.

A similar example is that of a particular school district in the United States of America. At the beginning of the 1999/2000 school year, the educators asked the parents three questions respectively about the role of the child, the educator and the parent. These questions clarified customer expectations and allowed educators to track levels of customer satisfaction during the school year. The district has also surveyed all learners in grades 3 to 8 to measure their satisfaction with their school experience (Conyers, 2000:25).

- **Formulate a quality council**

Formulate a quality council or 'TQM Steering Committee' to oversee, monitor and regulate the quality process. The quality measures and indicators developed in Phase 2 need to be applied also in Phase 3 to measure the school's goals and objectives. The steering committee should consist of skilled people, including a coordinator. At Westinghouse High School this committee was formed by volunteers who had to address and monitor the school's quality efforts (Rappaport, 1993:17; Berry, 1997:52). Work teams can be set up either in Phase 2 or Phase 3.

- **Incorporate the classroom**

According to Steyn (1996:133), this phase incorporates the quality process into the classroom and focuses on continuous improvement across instructional dimensions such as classroom environment, instructional processes, curriculum

offerings and support processes (see Table 3.3). The responsibilities for the educator include the following: establishing a creative learning environment in which learners are successful; collaboration with parents and other staff about learners' needs; participation with colleagues in shared decision-making for the improvement of the school, and maintaining high expectations for learner performance.

3.3.3.4 Phase 4: Integrate and expand

- **Provide ongoing education and training**

The training of personnel involved in the quality improvement process is still regarded as a key element during this phase. Rappaport (1993:19) suggests that schools could approach public organisations to take open slots at upcoming training sessions. Such companies, willing to cooperate and give something back to the community, may even offer special training sessions to the school's personnel. Visits to schools and companies where quality management has already been implemented can lead to better understanding and the opportunity to share resources. Murgatroyd (1993:279) suggests that training programmes for personnel should be as inclusive as possible, including all role players.

Schools need to have staff and skills development programmes that are jointly developed by work teams and the school management team. This plan should focus on what it is that the staff need in terms of skills and ideas to achieve the school's vision over a 3 to 5 year period.

- **New teams and committees**

This phase should involve the forming of new committees, new teams, new departments or hiring new specialists to help the process as and when required.

- **Recognition and reward**

It is important for the top team to recognise and reward participants for successes to show that the ideas and work of teams are fully appreciated. Recognition can take different forms such as descriptions of success, small presentations, granting of extra leave and recognition at a full staff meeting or learner assembly, gifts and prizes.

management styles focus on consensus decision making by teams generating quality products and services in a timely and customer-driven manner (Demichiell & Ryba, 1997:261).

The people working in a team and the work team can be regarded as a key component and the building blocks for implementing TQM successfully and forms the primary focus for developmental activities within the school (Van Kradenburg, 1995:33; Murgatroyd, 1992:195). Van Kradenburg (1995:33) views a work team as a quality group of people utilised by organisations to organise and to get work done.

Teams can be characterised in terms of their operating functions, which are relevant to the quality improvement process. Dale (1998:23-24) identifies the following teams:

3.3.4.1 Project teams

When senior management identify major problems facing the organisation, key issues can be allocated amongst themselves for consideration as specific projects. The project owner then selects employees to constitute a team which will consider the improvement issue. The characteristics of such teams are:

- Objectives are defined by senior management;
- The team is led by management and it is temporary in nature;
- The project is significant and specific. It will have clear deliverables within a set time scale;
- The team is organised to ensure it employs the appropriate talents, skills, and functions which are suitable in resolution of the problem;
- The scope of activity tends to be cross-functional;
- Participation is not usually voluntary as a person is requested by senior management to join the team, and

- Team meetings tend to be of long rather than short duration and occur on a regular basis.

3.3.4.2 Quality circles

Quality circles (QC) originated within an industrial context in Japan. A quality circle is a voluntary group of between six and eight employees from the same work area. They usually meet during office hours for one hour every week or fortnight, under the leadership of their supervisor to solve problems relating to improving their work activities and environment.

3.3.4.3 Quality improvement teams

Teams of this type can comprise members of a single department, be cross-functional and include representatives of either or both customers and suppliers. The characteristics of quality improvement teams are more varied than any other type of team activity, but typically include the following:

- Membership can be voluntary or mandatory and can comprise line workers, staff or a mixture of both. Some teams involve a complete range of personnel from different levels in the organisational hierarchy;
- Projects can arise as a result of a variety of reasons such as a management initiative, a need to undertake some form of corrective action, a high incidence of defects, supplier/customer problems and an opportunity for improvement;
- The team is usually formed to meet a specific objective;
- The team leader will have been appointed by management and briefed regarding objectives and time-scales;
- Quality improvement teams are more permanent than project teams but less so than quality circles. In some cases, teams disband after project completion and in other situations they continue;
- Members are usually experienced personnel and well versed in problem solving skills and methods;

the sum of the parts. Teamwork provides a holistic view of the organisation and it provides a rational base for testing assumptions, ideas and for reviewing progress. Teams are the mechanism by which individual learning and personal mastery can be transferred to others. Crucial here is that teamwork tends to be able to recognise and use complexity in a way that many individuals are unable to (Murgatroyd, 1992:196). Through teamwork, cross-functional issues can also be examined more effectively than individuals acting on their own, for example, an issue about how best to provide pastoral care and counselling within a school that cuts across year groupings, discipline interests and specialist interests (Murgatroyd & Morgan, 1993:141-143).

The three types of teams are all important for management to consider in their endeavour to improve organisational quality. Quality improvement teams, however, are of particular importance for the application of TQM. This type of team is self-managed, which is a key element when quality is pursued.

3.3.4.4 Empowerment of quality improvement teams for school management

The empowerment of work teams goes hand in hand with the assignment of responsibilities to the team. This is a process of negotiation between top management and the team. Quality improvement teams are to be empowered progressively as they receive ownership of the work they are doing. This ownership progresses on a continuum from normal working activities up to high-level responsibilities. The responsibilities of the team on the lower level of the continuum are close to the activities educators normally do. On the other end of the scale, the quality improvement team appears, performing already 80% of all possible responsibilities. These high-level responsibilities include supervisory and group support functions, for example, the scheduling and assignment of work, the budget, performance appraisal, mentoring, discipline, supervision and control. As the quality improvement team develops and is empowered progressively, the responsibilities and the complexity thereof also increase.

It is, therefore, crucial for educators to develop the skills that are required for successful empowerment. This empowerment comprises involvement in the

processes of decision making and problem solving, the sharing of responsibilities and delegation of authority (Van Kradenburg, 1995:34).

3.3.4.5 Organisational restructuring and quality improvement teams

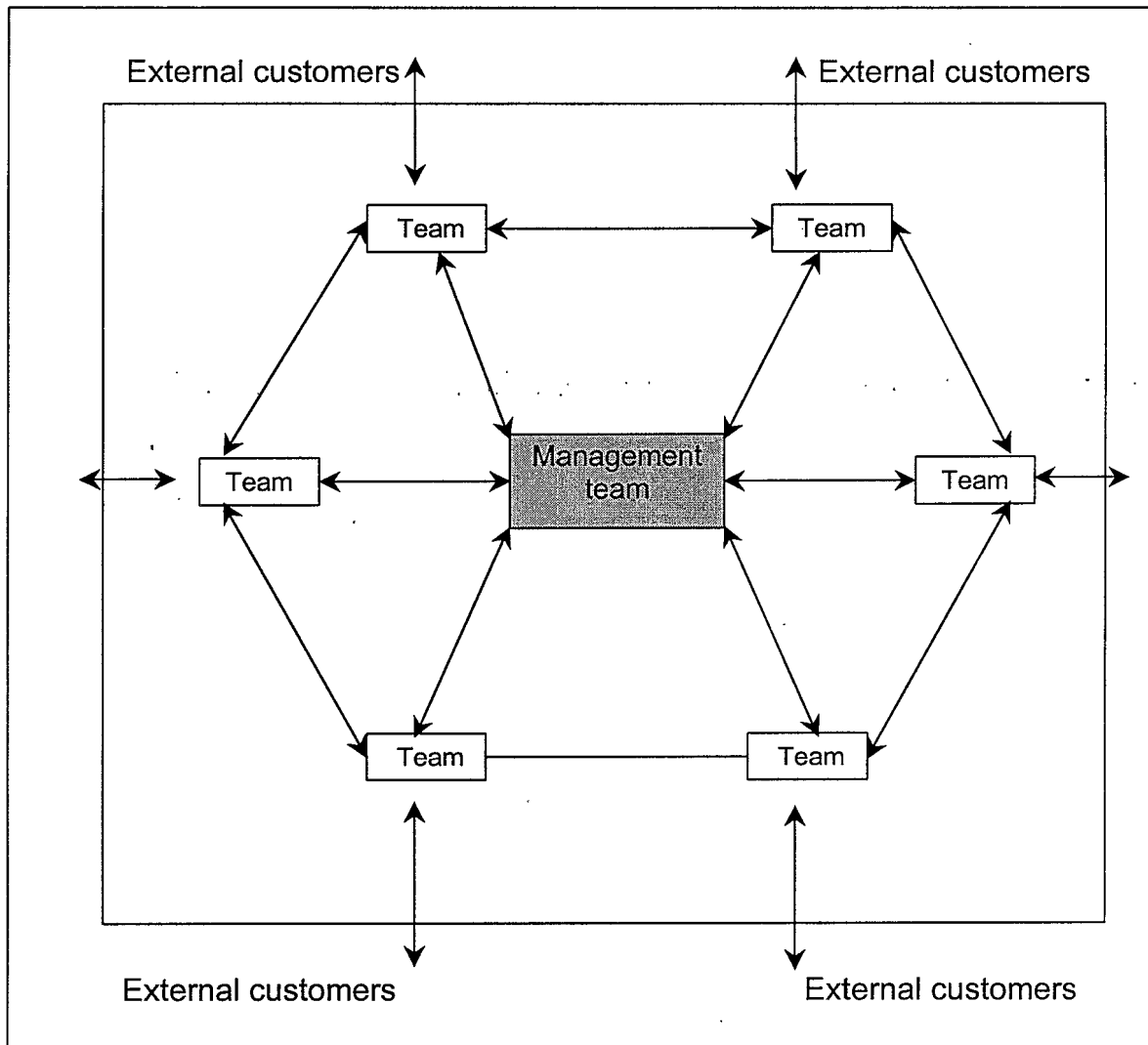
Van Kradenburg (1995:36) states that one of the most prominent features of TQM organisations is the reduction of hierarchical levels and the restructuring of the organisation into semi-autonomous or self-directed work teams. The reduced management levels enable organisations to devolve job-related decisions and responsibilities to lower levels. This conversion of an organisation from vertical beaurocratic stratification to a lateral structure represents a fundamental adjustment to organisational structure.

The structure West-Burnham (1992:92-93) suggests comprises autonomous teams, which are laterally interacting with customers (parents, learners), with each other and with the centre (management). Authority and responsibility are delegated to teams to carry out the tasks and assignments. The function of the centre (management) is to guide, to empower teams and to facilitate. Empowerment of quality improvement teams also encompasses the transition of the traditional management style of control to one of assistance and supportive supervision. The final responsibility and accountability, however, remains in the hands of the principal.

Figure 3.6 depicts a quality-based organisational structure. The design and composition of quality improvement teams depends on the school and the situation. It can be based among others on subject groupings, management skills or fields of expertise. The most prominent feature is that of teams to communicate laterally and of their closeness to internal and external customers (Van Kradenburg, 1995:36).

The quality improvement team can, therefore, be regarded as a meaningful alternative away from the autocratic 'top-down' management style towards smaller autonomous teams by which educators can manage themselves.

Figure 3.6 The self-managing/empowered organisational structure
 (West-Burnham, 1992:92)



3.3.5 Synthesis

The implementation of TQM in schools clearly depends on a well-developed strategy. Various generic strategies, each with its own particular focus, should be considered. Strategies 3 and 4 (see 3.3.1) are to the largest extent in alignment with the TQM philosophy. These strategies provide for a particular management focus on quality, which is related to an emphasis on people and their development (learners and staff), and in the case of strategy 4, the focus is also on distinctiveness rather than on all-round services. This focus is in contrast with strategies 1 and 2, which provide for a broad range of programmes or

Quality improvement teams are of key importance to a successful implementation strategy of TQM in schools. Teams need to be part and parcel of a strategy since they reflect particular fundamental TQM concepts such as decentralisation, flat organisational structures and the empowerment of personnel.

As part of the implementation strategy it is also necessary to employ systems and processes for the measuring and assuring of quality in schools.

3.4 QUALITY ASSURANCE SYSTEMS FOR THE IMPLEMENTATION OF TQM IN SCHOOLS

3.4.1 Quality assurance systems and processes

TQM is both a philosophy of quality and a systematic approach to quality management. It is based on the principles of problem prevention, commitment to and involvement in quality throughout the organisation and continuous improvement toward the goal of customer satisfaction.

Deming argued for bringing in the customer into the organisation and for creating closer links between worker and supplier in the interest of continuous improvement of quality. Juran contributed the notion of 'managerial breakthrough' or prevention of unsatisfactory quality by appropriate management systems and attitudes. Crosby stressed the importance of people and their attitudes in the achievement of quality and continuous improvement, adding that the only performance measurement is the cost of quality and the only performance standard is zero defect. When the various approaches to quality management are put together, there is a staged development from an emphasis on quality systems, toward a greater concentration on people and to a 'total' approach combining systems and people (Middlehurst & Gordon, 1995:273-274).

In recent years, attempts have been made to demonstrate the relationship between quality systems and business results. Examples of these approaches can be found in the European and British Quality Awards (established in 1992 and 1993 respectively) and the Malcolm Baldrige Award in the USA (established in 1988).

The quality systems or models (see 3.2) are instrumental to the setting of standards and can even be regarded as a vehicle for achieving them. There are different systems of quality assurance that are applied nationally and internationally. These include the

- International Organisation for Standardisation (ISO 9000);
- British Standards for Quality Systems (BS 5750);
- Investors in People (IIP) standard;
- European EN 29000 and EFQM models;
- Malcolm Baldrige Education Criteria for Performance Excellence in the USA, and the
- National policy on whole-school development in South Africa.

The following processes form an important basis for understanding those quality systems which are related to TQM (Doherty, 1994:11):

- *Quality assurance* is a prevention-based philosophy. It contains a future connotation and is about products working reliably in future and about service activities being dependable and consistent. Quality assurance has to give confidence that future activities will produce the desired end result (ISO 9000,1999:3; Fourie, 2000:153). This is a means of ensuring that errors, as far as possible, are designed out. In education it examines the aims, content, resourcing, levels and projected outcomes of modules, programmes and courses. Quality assurance is based on 'feedforward'.
- *Quality control* involves operational techniques and activities such as measuring, examining, testing, gauging one or more characteristics of an entity and comparing these with specified requirements in order to determine whether conformity is achieved for each characteristic (ISO 9000,1999:6). It can also be regarded as a means of gaining information so that errors can be corrected. In education, quality control requires feedback from staff, learners and even

external customers. It requires regular monitoring and review of modules, programmes and courses. Quality control is based on 'feedback'.

- *Quality audit* refers to the means by which the organisation checks that the procedures are really being implemented (Freeman, 1994:26). An audit checks that the system does what it says it is going to do and has written, documented evidence to prove it. Any documented process can be audited, whether educational or manufacturing. The quality management system can be audited internally and/or externally.
- *Quality assessment* is the judgement of performance against either internal or external criteria. In education assessment is a potential source of conflict, because quality criteria for education are so difficult to agree upon.

Doherty (1994:12) contends that the above quality processes are to be found in all quality systems in some shape or form.

In the next paragraph international, European, American and South African quality assurance systems are discussed.

3.4.2 The international organisation for quality assurance in schools (ISO 9000)

3.4.2.1 ISO 9000 in relation to TQM

The International Organisation for Standardisation (ISO) is a world-wide federation of national standards bodies. The ISO 9000 family of standards represents an international consensus on good management practice. These good practices have been taken into a set of standardised requirements for a quality management system. ISO 9000 was created in 1987 with the aim of developing a world-wide standard to help companies and other institutions measure and monitor their quality efforts (Zuckerman, 2000:12). The ISO 9000 comprises a set of standards for quality assurance. It is not in itself a standard, but a label for a series comprising several standards (Fourie, 2000:149).

ISO 9000 provides a framework for organisations to assess themselves and for employees to act as internal auditors. This is accomplished by the joint effort of

employees and management to develop a quality manual and corrective action procedures. Organisations can go further and subject themselves voluntarily to an external assessment in order to qualify for ISO 9000 certification.

In South Africa, the Council of the South African Bureau of Standards has accepted the ISO 9000 as the SABS ISO 9000. ISO 9000:2000 is the revised version and has also been accepted (SABS ISO 9000, 2000).

Although ISO 9000 has its origin in manufacturing settings, the standard also provides for service-orientated organisations that intend to upgrade their performance. The aim is to improve internal communication, increase monitoring of activities and adopt best practices from throughout the organisation (Zuckerman, 2000:12).

TQM and ISO 9000 are both quality management systems. Waks and Frank (1999) are of the opinion that TQM and ISO 9000 are interrelated. Doherty (1995:4) maintains that an essential element in the TQM methodology is the need to improve processes and due to the improvement of processes, quality will improve itself. It is essential to have a firm grasp on internal processes to ensure their effectiveness. This means that a process must have an owner: when process A finishes, process B begins. In this model, the process B team is the process A team's customer. Internal client chains are based on this idea. Doherty (1995:4) contends that educational organisations "are notoriously vague about who owns what and where authority and responsibility lie". ISO 9000 as a standard in quality assurance, is also aimed at processes and introduces quality control throughout the entire process, rather than applying it only to the final product (Waks & Frank, 1999).

According to Doherty (1995:5; 1997:245) it does not matter very much which system (TQM or ISO 9000) is adopted to introduce a quality culture. It is, however, important for institutions to start "doing quality" somewhere to change the culture. Therefore, ISO 9000 can either be seen as a basis on which to build TQM, or as an all-important process improvement from which registration to ISO 9000 will follow easily. It appears as if a decision on this should be based on the context of the organisation, since there are no rules. Doherty (1995:9) suggests that an

educational institution can even run both TQM philosophy and ISO 9000 in tandem.

3.4.2.2 The principles of ISO 9000

The quality management system of the revised ISO 9000:2000 series is based on eight quality management principles. Senior management may use these principles as a framework to guide their organisations toward improved performance. The principles are (SABS ISO, 2000):

- *Customer focus:* Organisations depend on their customers and, therefore, should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations;
- *Leadership:* Leaders establish unity of purpose and direction of the organisation. They should create and maintain the internal environment in which people can become fully involved in achieving the organisation's objectives;
- *Involvement of people:* People at all levels are the essence of an organisation and their full involvement enables their abilities to be used for the organisation's benefit;
- *Process approach:* A desired result is achieved more efficiently when activities and related resources are managed as a process;
- *System approach to manage:* Identifying, understanding and managing interrelated processes as a system contributes to the organisation's effectiveness and efficiency in achieving its objectives;
- *Continual improvement:* Continual improvement of the organisation's overall performance should be a permanent objective of the organisation;
- *Factual approach to decision making:* Effective decisions are based on the analysis of data and information, and

- *Mutually beneficial supplier relationships*: An organisation and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

The above principles are defined in the document ISO 9000:2000, *Quality management systems – Fundamentals and vocabulary*, and in ISO 9004:2000, *Quality management systems – Guidelines for performance improvement*. This document shows how, collectively, these principles can form the basis for performance improvement and organisational excellence. It states that many organisations will find it beneficial to set up quality management systems based on these principles (SABS ISO 9000, 2000).

3.4.2.3 Application of ISO 9000 to education

The application of ISO 9000 to schools is a fairly recent trend globally. Doherty (1995:5), however, states that there is no doubt that both TQM and ISO 9000 can be applied to educational organisations effectively. Zuckerman (2000:12) maintains that teaching professionals in the United States of America were initially wary of ISO 9000 in education because of their concern about the standardisation of the creative and empathic aspects of their work. Those concerns have been overcome, as educators see that ISO 9000 improves the operational structure and the day-to-day processes of their work. Educators realised that with less time lost on operational malfunctions, they have more time and energy for the creative and people aspects, which are more directly related to their professional focus.

Educational establishments in the United States of America, Canada, Singapore, the United Kingdom, Switzerland and Australia have already implemented ISO 9000.

The following are motivating factors for the implementation of ISO 9000 in some school districts in the USA are (Zuckerman, 2000:13-14):

- ISO 9000 was instituted to improve education, make it more efficient and improve the overall performance;

- Promote greater collaboration and partnership with business and industry to better prepare learners for the workplace. This includes dialogue about what skills are needed to meet the demands of the global economy;
- Provide a framework and structure to help improve customer service;
- Improve business processes through documentation to reduce the internal costs of doing business and communicating with customers, and
- Bring better management practices to schools.

The challenge for education is to translate the 20 key elements of ISO 9000, which were designed for industry, into educational terms. Those elements represent the requirements of the ISO 9000 series and they are the following (SABS ISO 9000, 1999:12):

- Management responsibility;
- Quality system;
- Contract review;
- Design control;
- Document and data control;
- Purchasing;
- Control of customer-supplied product;
- Product identification and traceability;
- Process control;
- Inspection and testing;
- Control of inspection, measuring and test equipment;
- Inspection and test status;

- Control of non-conforming product;
- Corrective and preventive action;
- Handling, storage, packaging, preservation and delivery;
- Control of quality records;
- Internal quality audits;
- Training;
- Servicing, and
- Statistical techniques.

The translation of ISO 9000 involves elements such as defining responsibility and authority within the school, the verification of resources and personnel information. A major challenge is to involve the full range of staff members in a meaningful way. Implementing ISO also involves a lot of staff training, setting up audit teams and getting documentation done. Besides documenting, other important aspects to address are creating flow charts, developing new procedures and a quality manual. This is a time-consuming process and can take one to two years to implement.

Districts/schools can register for one-time ISO 9000 certification, or can decide to face biannual surveillance audits to maintain their registration. In the United States of America the ISO 9000 registration cost for a school district amounts to at least \$15 000 in one-time registration fees and far more when employee time is considered. To maintain registration, districts can expect to pay \$10 000 in annual audit surveillance fees.

Doherty (1995:8) and Zuckerman (2000:16) report the following tangible benefits educational organisations/school districts experience from ISO 9000 registration:

- A much clearer grasp of roles, responsibilities and authority across the whole school;

- A much wider understanding of the school's aspirations and mission objectives;
- A much wider sense of "ownership" of quality across the whole institution;
- One quality management system for the whole institution;
- The improvement of work processes effects cost savings, for example, the ordering of text books;
- A much clearer articulation of the respective "rights" and "responsibilities" of learners and staff;
- Staff efforts are refocused on the core mission of teaching and learning;
- Much closer working relationship between academic and support staff;
- A much higher profile for in-house training for all personnel;
- The community are tracked in to serve as indicators of how well the district maintains quality;
- Constantly improving standards of module design, documentation and delivery;
- Internal audit as a means of internal benchmarking and spreading good practice;
- Communication is opened up due to the auditing and the methods available for taking corrective action, and
- Cumbersome and costly purchasing processes are improved and subsequently save money.

3.4.3 The European Quality Award Framework (EQF)

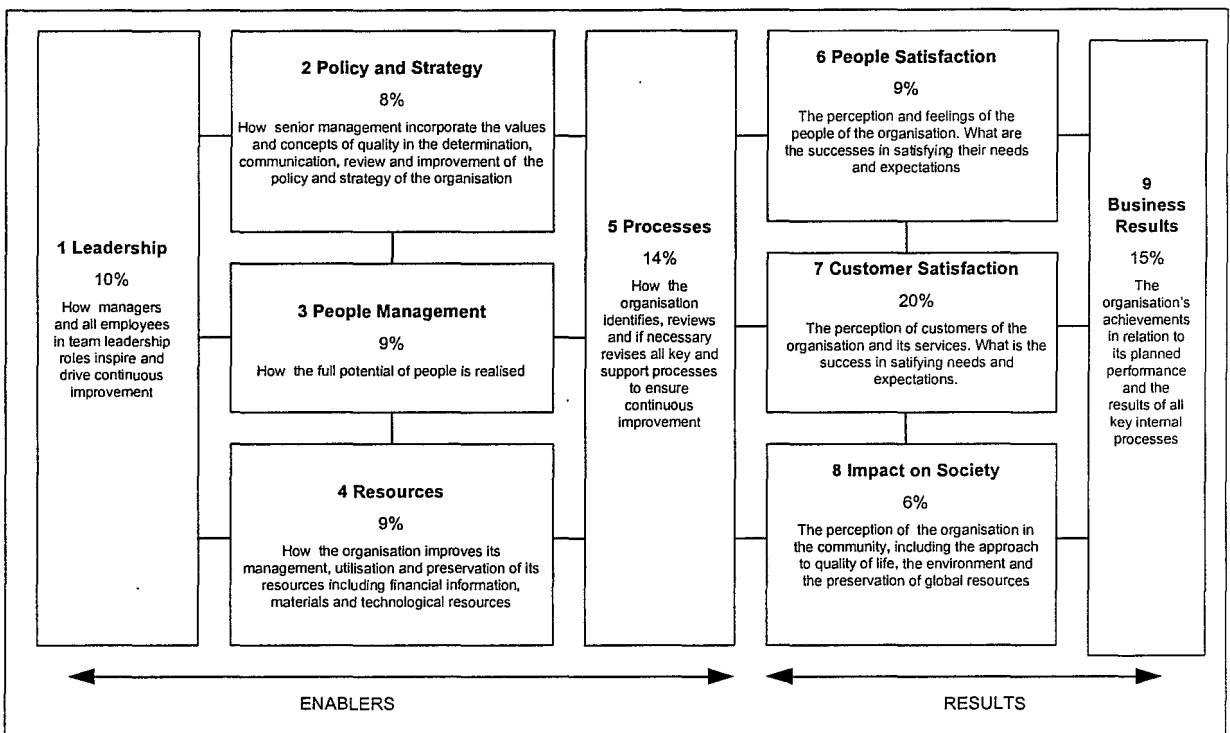
The EQF is based on a TQM approach and its strength lies in an emphasis on and rigorous self-appraisal process, which allows organisations to identify their strengths and weaknesses and the areas in which the improvements can be made. The self-appraisal process, which is the basis of the EQF, concentrates on 'enablers' and 'results' (see Fig. 3.7) (Middlehurst & Gordon, 1995:275).

Performance is judged through a form of “peer group” assessment in which enabling factors are judged on the basis of the combination of the degree of excellence of results and scope of results.

Figure 3.7 shows that process control accounts for only 14% of the whole, with much more emphasis placed on people in the organisation. Customer satisfaction weights as much as 20% of the total framework. Both institutional values and impact on society are important factors. The model, however, is not prescriptive. Doherty (1997:245) asserts that this emphasis is the reason why many educational organisations might find the EQF commendable.

It is generally considered that five or six years work within the organisation could be required to achieve the kind of scores which might be needed for an organisation to win the award (Doherty, 1997:246).

Figure 3.7 The European Quality Award Framework
(Middlehurst & Gordon, 1995:275; Doherty, 1997:245)



3.4.4 Quality assurance in USA schools (Malcolm Baldrige Program)

3.4.4.1 Quality assurance in context

Karathanos (1999:231) states that the concern in education in United States of America over the past two decades has revolved around the quality of education and the continuing escalation of educational costs, with no demonstrable improvement of results. There is a growing perception that education (including elementary and secondary education) is failing to keep pace with the standards of quality required to remain competitive in a global economy. This is in sharp contrast with the business sector where the trend is that organisations "are getting leaner, sharpening their focus, serving their customers and trying to adjust to the dictum of doing more with less and doing it better" (Seymore in Karathanos, 1999:232).

The need for quality improvement in USA schools is supported by the results of a survey conducted by the U.S. Census Bureau in which 3000 businesses participated (Karathanos, 1999:232). A summary of the results shows that

- An extraordinary gap exists between schools and the workplace;
- The objective of closer co-operation between the two is not being met;
- Employers tend to disregard recent graduates' grades and school evaluations;
- Employers tend to use consultants for internal training rather than educational institutions, and
- Businesses are getting away from hiring graduates right out of school for career track positions.

The business sector realised the need for an accreditation body already in the 1980s. In an effort to maintain the leadership of the USA in product and process quality, the Malcolm Baldrige National Quality Improvement Act (1987) was adopted. The Malcolm Baldrige National Quality Award was created in 1988 and is administered by the National Institute of Standards and Technology (NIST). This

Award generated a tremendous interest in the Baldrige business criteria as a guide to quality improvement efforts and to achieve organisational excellence in the business sector.

Business leaders in the states of Texas, North Carolina, Florida and elsewhere, first proposed using Baldrige criteria in the early 1990s to transform education. They were even willing to support comparable reform efforts for and with their education partners (Siegel, 2000(a)).

As a result of this interest in the Baldrige business criteria, the NIST responded by developing pilot criteria for education (1994-1995). The high level of interest for the Baldrige criteria in the education sector had culminated in the development and release of the *"1998 Education Criteria for Performance Excellence"*. The Baldrige Quality Award for education was implemented in 1999 (Karathanos, 1999:233). This Award is the end result of a process, which requires adherence to the Education Criteria, including the purposes, goals, core values and concepts.

3.4.4.2 Purposes and goals

The Educational Criteria are the basis for organisational self-assessments, for making Awards and for giving feedback to applicants. In addition, the Criteria have three important roles (NIST, 2001, 2002):

- To help improve organisational performance practices, capabilities, and results;
- To facilitate communication and sharing of best practices information among U.S organisations of all types, and
- To serve as a working tool for understanding and improving performance and for guiding the planning and opportunities for learning.

The Criteria (NIST, 2001, 2002) are designed to help organisations use an aligned approach to organisational performance management that results in

- Delivery of ever-improving value to learners and stakeholders, contributing to improved education quality;
- Improvement of overall organisational effectiveness and capabilities, and

- Organisational and personal learning.

3.4.4.3 Core values and concepts

The Criteria are built upon a set of interrelated core values and concepts. These values and concepts are embedded beliefs and behaviours found in high-performing organisations. They are the foundation for integrating key requirements within a results-oriented framework that creates a basis for action and feedback (NIST, 2001:1-5).

- **Visionary leadership**

Senior school leaders are expected to set directions and create a learner-focused, learning-orientated climate. They should have clear and visible values and should serve as role models through their ethical behaviour and their personal involvement in planning, communications, coaching, development of future leaders, review of organisational performance, and faculty and staff recognition. Reinforcing the learning environment might require building community support.

- **Learning-centred education**

The focus is on learning and the real needs of the learners in order to develop the full potential of all learners. Such needs derive from market and citizenship requirements. Schools need to fully understand these requirements and translate them into appropriate curricula and developmental experiences. The rapid changes in markets require of employees to become knowledge workers and problem solvers. Schools need to focus more on learners' active learning and on the development of problem solving skills.

Key characteristics of learning-centred education are:

- Setting high developmental expectations and standards for all learners;
- Understanding that learners may learn in different ways and at different rates, therefore schools need to maintain a constant search for alternative ways to enhance learning;
- Providing a primary emphasis on active learning;

- Using formative assessment to measure learning early in the learning process and to tailor learning experiences to individual needs;
- Using summative assessment to measure progress against external standards and norms;
- Assisting learners and families in using self-assessment, and
- Focusing on key transitions such as school-to-school and school-to-work.

- **Organisational and personal learning**

A well-executed approach to continuous improvement needs to be embedded in the school's operations. The approach should seek to engage learners as full participants in and contributors to improvement processes. Improvement requires a strong emphasis on effective design of educational programmes. The design should include clear learning objectives, taking into account the individual needs of learners. Staff members themselves should have opportunities for personal learning and practising new skills.

- **Valuing faculty, staff, and partners**

An organisation's success depends increasingly on the knowledge, skills, innovative creativity and motivation of its faculty, staff, and partners. Schools need to invest in their development through ongoing education, training and opportunities for continuing growth. Faculty development should focus on building not only discipline knowledge, but also knowledge of learner learning styles and of assessment methods.

- **Agility**

Agility is an increasingly important measure of the school's effectiveness. It requires a capacity for faster and more flexible response to the needs of the learners and stakeholders. All aspects of time performance are becoming increasingly important. Time improvements often drive simultaneous improvements in organisation, quality and cost.

- **Focus on the future**

Pursuit of educational excellence requires a strong future orientation and a willingness to make long-term commitments to learners and key stakeholders. A major longer-term investment associated with the school's improvement is the investment in creating and sustaining a mission-orientated assessment system focused on learning.

- **Managing for innovation**

Innovation means making meaningful change to improve a school's programmes, services and processes and to create new value for the school's stakeholders. Innovation should lead the school to new dimensions of performance and should become part of the culture and daily work of the school.

- **Management by fact**

An effective modern management system must be based on measurement, information, data and analysis. Measurements must derive from and support the school's mission and strategy. Therefore, strong focus should be placed on the design of the school's information system. A major consideration in performance improvement and change management involves the selection and use of performance measures and indicators. The measures or indicators should best represent the factors that lead to improved learner, operational and financial performance, through the analysis of the measures or indicators themselves may be evaluated and changed to better support the goals.

- **Public responsibility and citizenship**

The school's leaders should stress its responsibilities to the public and the need to practice good citizenship.

- **Focus on results and creating value**

A school's performance system should focus on results, particularly on those related to learner performance and to the effectiveness and efficiency of the use of resources. Results should be used to create and balance value for learners and key stakeholders.

- **Systems perspective**

A systems perspective for managing a school is needed to achieve performance excellence. This perspective means looking at the school as a whole and builds upon key educational requirements, including strategic objectives and action plans.

3.4.4.4 Key characteristics

The Education Criteria (NIST, 2001:7):

- Focus on organisational performance results;
- Are non-prescriptive and adaptable;
- Support a systems perspective to maintaining organisation-wide goal alignment, and
- Support goal-based diagnosis (assessment).

3.4.4.5 Integration of key education concepts

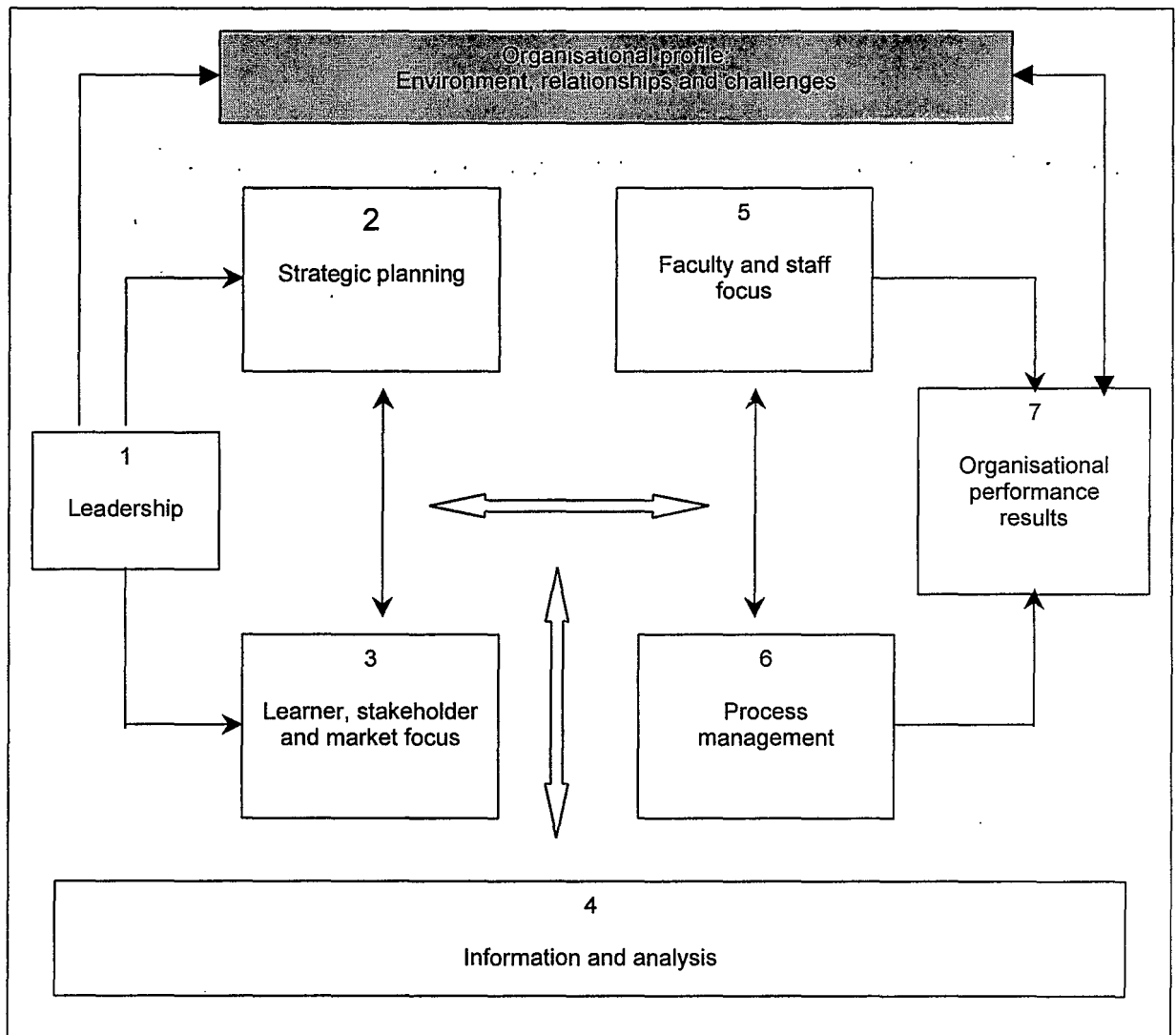
The Education Criteria also address and integrate several important educational concepts (Karathanos, 1999:234; NIST, 2001:8-9). These Criteria are to be interpreted in terms of specific school *missions* serving particular *stakeholders (customers)*, which include learners, parents and employers. The concept of *excellence* built into the Criteria is that of “value-added” demonstrated performance. This value-added performance is considered to be the central core of excellence that emphasises teaching and learning regardless of resources and/or incoming learner preparation/learner abilities. *Teaching and learning*, in fact, are the principal goals of education organisations and therefore primary emphasis is placed on them.

It is evident that the Education Criteria focus on results that are aligned with the mission and that collectively provide a comprehensive and balanced view of the school’s effectiveness in improving its performance. The Education Criteria, therefore, emphasise that a well-conceived and well-executed *assessment strategy* is central and crucial.

3.4.4.6 Framework of the education criteria for performance excellence

The core values and concepts and the educational concepts have been used to develop seven examination categories (NIST, 2001:5). Figure 3.8 contains the integration of and the dynamic relationships among the seven categories.

**Figure 3.8 Baldrige Education Criteria for Performance Excellence
Framework: A Systems Perspective (NIST, 2002:5)**



The seven categories are:

- Leadership;
- Strategic planning;

- Learner, stakeholder, and market focus;
- Information and analysis;
- Faculty and staff focus;
- Process management, and
- Organisational performance results.

According to Karathanos (1999:234), the development of the Baldrige Education Criteria represents highly significant progress in the education sector because they provide “a comprehensive and rigorous framework for pursuing educational excellence”.

The quest for improving public schools has moved almost every state in the USA to adopt learner performance standards. State policy makers are implementing assessments to track progress in meeting state standards and creating accountability measures that reward success and deal decisively with low performance. The impact of this approach is that learners unable to pass state proficiency tests may be denied a diploma. Principals and staff in schools designated as low performing may be reassigned or even dismissed. The implication is that educators are looking at the Baldrige Education Criteria as a proven long-term strategy and as an organisational assessment tool to improve learner and system performance (Siegel, 2000(a)).

Siegel (2000(a)) proposes a Baldrige-based accountability model to counteract the reinforcement of negative outcomes such as the threat of exposure and blame for not measuring up. It is suggested that this model can help states and communities reach consensus on education priorities, reinforce fact-based decision-making, and identify ongoing opportunities for classrooms, schools, and districts to implement improvements. Furthermore, the long-term use of Baldrige can build the organisational capacity of the education system, with business and community support, to sustain learner and system improvement over time.

3.4.4.7 The Baldrige in Education Initiative (BiE IN)

The National Alliance of Business and the American Productivity and Quality Center created the BiE IN in 1999 to capitalise on the growing interest among educators to use the Baldrige criteria to raise learner achievement. BiE IN's vision is to accelerate and scale up implementation of Baldrige criteria in schools nationwide in order to meet state performance standards and achieve excellence and equity in American public education. BiE IN intends to achieve that vision by implementing a three-fold strategy (Siegel, 2000(a); Siegel, 2000(b):24):

- Forge a national infrastructure of key business and education organisations to build awareness of and support for using Baldrige to increase learner and system performance;
- Accelerate state/community efforts to build and sustain capacity (through coaching, training, networking and dissemination of best practices) to improve learner and system performance, and
- Customise and provide information and technical support to all key stakeholders, including business partners, to enhance their success in using Baldrige as a model collaboratively.

This initiative is aimed at building a national infrastructure for educators who are interested in using Baldrige to raise learner achievement and, at the same time, having business partners who understand and support their efforts.

Finally, the quality assurance system for South African schools is discussed next.

3.4.5 Implementation of quality assurance in South African schools (whole-school evaluation)

3.4.5.1 National Policy on whole-school evaluation

In the South African context, the National Policy on Whole-School Evaluation (Department of Education, 2000(b)) has been designed to ensure that school evaluation is carried out according to an agreed national model. The Policy sets out the legal basis for school evaluation, its purposes, what is to be evaluated, who can carry out evaluations and how the evaluation process should be

administered and funded. It also provides guidance on how evaluation should be conducted.

The Policy is aimed at improving the overall quality of education in South African schools. Whole-school evaluation is meant to be supportive and developmental rather than punitive and judgmental. However, it will have to ensure that national and local policies are complied with. Its main purpose is to facilitate improvement of school performance through approaches of partnerships, collaboration, mentoring and guidance. The Policy also provides the means by which schools can carry out self-evaluation in order to enter into a fruitful dialogue with supervisors and support services.

Whole-school evaluation is regarded as the first step in the process of school improvement and quality enhancement. This is to be achieved through a partnership between trained and accredited supervisors, school and support services at one level, and national and provincial governments at another.

The Policy on Whole-School Evaluation forms part of the transformation of education in South Africa. One of its intentions is to develop a world-class education system suitable to meet the challenges of the 21st century. The background of setting this goal is founded in policies and legislation since 1995:

- The right of all to quality education is emphasised in the *Education White Paper*, 1995;
- The *National Education Policy Act* (No. 27 of 1996) mandates the Minister to direct that standards of education provision, delivery and performance are monitored;
- The *Assessment Policy* (1998) provides for the conducting of systemic evaluation at the key transitional stages, viz. Grade 3, 6 and 9. The main objective is to assess the effectiveness of the entire system and the extent to which the vision and goals of the education system are being achieved;

- The *Further Education and Training (FET) Act* (No. 98 of 1998) makes it obligatory for the Director-General to assess and report on the quality of education provided in the FET band, and
- The *South African Qualifications Authority (SAQA) Act* (1995) requires that Education and Training Quality Assurance bodies be established for the purpose of monitoring and auditing achievements in terms of national standards and qualifications.

An important shift in terminology is that from 'inspection' to 'whole-school evaluation'. Whole-school evaluation provides for self-evaluation (by the school) as well as external evaluation (by supervisory units). It also provides for schools to receive advice and support in their continual efforts to improve their effectiveness. This evaluation, however, does not intend to interfere with existing agreements on evaluation and assessment. Its purpose is to evaluate the effectiveness with which such initiatives are implemented and provide information aimed at strengthening their contributions to educational improvements.

3.4.5.2 Aims of whole-school evaluation

The principal aims of the Policy are to (Department of Education, 2000(b):5):

- Moderate externally, on a sampling basis, the results of self-evaluation carried out by schools;
- Evaluate the effectiveness of a school in terms of the national goals, using national criteria;
- Increase the level of accountability within the education system;
- Strengthen the support given to schools by district professional services;
- Provide feedback to all stakeholders as a means of achieving continuous school improvement;
- Identify aspects of excellence within the system which will serve as models of good practice, and

- Identify the aspects of effective schools and improve the general understanding of what factors create effective schools.

3.4.5.3 Whole-school evaluation and quality assurance

Whole-school evaluation is perceived as the cornerstone of the quality assurance system in schools. It enables a school and external supervisors to provide an account of the school's current performance and to show to what extent it meets national goals and needs of the public and communities. This approach provides the opportunity for acknowledging the achievements of a school on occasions through commendations and for identifying areas that need attention. Whole-school evaluation implies the need for all schools to look continually for ways of improving and the commitment of Government to provide development programmes designed to support their efforts (Department of Education, 2000 (b):5).

The National Policy on Whole-School Evaluation intends to achieve effective quality assurance through schools having well-developed internal self-evaluation processes, credible external evaluations and well-structured support services.

3.4.5.4 Principles of whole-school evaluation

The Policy is based on the following principles (Department of Education, 2000(b):6-7):

- It is stated that the core function of schools is to improve the educational achievements of all learners. Whole-school evaluation, therefore, is designed to enable those in schools, supervisors and support services to identify to what extent the school is adding value to learners' prior knowledge, understanding and skills;
- All members of a school community have responsibility for the quality of their own performance. Whole-school evaluation intends to enable the contribution made by staff, learners, and other stakeholders to improve their own and the school's performance, to be properly recognised;
- All evaluation activities must be characterised by openness and collaboration. The criteria to be used in evaluating schools, therefore, must be made public;

- Good quality whole-school evaluation must be standardised and consistent. The guidelines, criteria and instruments must ensure consistency over periods of time and across settings;
- The evaluation of qualitative and quantitative data is essential when deciding how well a school is performing. For this reason, whole-school evaluation is concerned with the range of inputs, processes and outcomes. These include the provision of resources, human and physical, the quality of leadership and management, learning and teaching and the standards achieved by learners;
- Staff development and training is critical to school improvement. A measure used by the whole-school evaluation in judging a school's performance is the amount of quality of in-service training undertaken by staff and its impact on learning and standards of achievement, and
- Schools are inevitably at different stages of development. Many factors contribute to this. A basic principle of this policy is to seek to understand why schools are where they are and to use the particular circumstances of the school as the main starting point of the evaluation. The policy recognises that schools in disadvantaged areas, for example, must not be disadvantaged in terms of the whole-school evaluation.

3.4.5.5 Areas for evaluation in schools

The following are the key areas of evaluation (Department of Education, 2000(b):9):

- Basic functionality of the school;
- Leadership, management and communication;
- Governance and relationships;
- Quality of teaching and educator development;
- Curriculum provision and resources;
- Learner achievement;

- School safety, security and discipline;
- School infrastructure, and
- Parents and community.

3.4.5.6 Use of indicators

The evaluation is based on indicators covering inputs, processes and outputs (Department of Education, 2000(b):9-10):

- The input indicators include the main characteristics of each grade of learners, the school's infrastructure, funding and professional support staff;
- Process indicators show how well the school seeks to achieve its goals. These include the effectiveness with which schools try to ensure effective governance, leadership and management, safety and security measures, and the quality of teaching, and
- Output indicators include achievements in academic standards, standards of behaviour and rates of punctuality and attendance.

3.4.5.7 Strategies to improve schools

The National Policy on Whole-School Evaluation provides for the following improvement strategies (Department of Education, 2000(b):21)

- In case of individual schools, the professional support service must link the senior management team, the staff and the school governing body (SGB) in order to support the implementation of the quality improvement strategies recommended by the supervisors and identified in the school's improvement plan;
- The professional support service must support schools through helping them produce a coherent, overall plan of action to address the improvement needs articulated by both school self-evaluation and the external evaluation reports of the supervisors;

- The support service is responsible for retrieving key information from the reports of different schools in a district in order to plan the support and professional development required. This should lead to the provision of an integrated training programme that can be delivered in cooperation with other schools and other role players, such as Teacher Centres, Colleges of Education, Technikons, Universities, Teacher Unions and non-governmental organisations (NGO's), and
- School evaluation reports and improvement plans should naturally lead to district, provincial and national improvement plans which address areas needing improvements within specified time frames. These form the basis for future reviews and serve as an important tool for self-evaluation at all levels within the province and the country.

3.4.6 Conclusion

The exponents of quality management, such as Deming, Crosby, Ishikawa and Juran all have slightly different approaches and/or emphasise different aspects of quality improvement. Doherty (1997:243) regards TQM as a carpetbag term for more than one approach. In order to compare the different quality systems, the twelve basic elements in quality systems are indicated, of which the first six elements are regarded as the key characteristics in all TQM approaches (see Table 3.4). Those six elements encapsulate the philosophy of continuous improvement through a trusted, well-motivated and co-operative workforce. All the people know where the enterprise is going, what they are supposed to be doing and are individually and in groups responsible for the excellence of their own work and contributions to improvement. These are the success criteria for the development of what is referred to in the literature as the "quality culture".

The second six elements are associated with inspection to verify the quality of a product in a manner that is transparent to and believable by the consumer. Doherty (1997:243) asserts that educators who find TQM quite attractive due to the first six elements, however, are not in favour of the second six, "since they are intended to put the searchlight into the darkest areas of their secret gardens".

Doherty (1997:243) states that, at first sight, ISO 9000 and EQF are the most "robust" methodologies. The Baldrige Criteria, in fact, can as well be grouped together with ISO 9000 and EQF. TQM, in contrast to the above quality assurance systems, looks like a "soft option". The difference between TQM and other quality assurance systems indeed lies within the field of evaluation/auditing/assessment. TQM provides for *internal* evaluation and *self-assessment* only, while other quality assurance systems rely on both internal and external auditing/evaluation.

Table 3.4 Aspects of various quality systems (Doherty, 1997:243)

	TQM	ISO 9000	IIP*	Baldrige	EQF
1. Continuous improvement	*	*		*	*
2. Delight the customer	*	*		*	*
3. People involvement	*	*	*	*	*
4. Process control	*	*		*	*
5. Effective systems	*	*	*	*	*
6. Flat organisation	*				*
7. Internal audit		*		*	*
8. External audit		*		*	*
9. Internal evaluation	*	*	*	*	*
10. External evaluation			*		*
11. Self-assessment	*		*		*
12. Compliance		*	*	*	*

* The IIP was not discussed but is displayed in this Table, whilst WSE as quality system is not displayed. This display is due to the fact that the contents as they are were taken from the original source.

It is taken for granted in successful TQM organisations that internal processes are effectively audited and evaluated on a regular basis. It seems inevitable for a TQM organisation to have some form of quality evaluation or audit in place to ensure that system failures are revealed and error correction takes place. Doherty (1997:244) confirms what has already been stated, in that having a full grasp on processes is the key to rapid error correction and effective quality management.

Schools that intend to implement TQM may, therefore, perhaps experience a dilemma in differentiating between TQM and other quality assurance systems. According to Doherty (1997:245) and Waks and Frank (1999), TQM and quality assurance systems such as ISO 9000 are in fact interrelated. All systems share at least five of the six elements that are regarded as key characteristics of TQM. Many organisations have even used ISO 9000 as a stepping-stone to the development of TQM.

The suggestion of TQM and ISO 9000 (and maybe other quality assurance systems) being regarded as interrelated is supported by Sun (1999:201, 207, 208), referring to an international survey of 600 companies from 20 countries. It was found that the implementation of ISO 9000 is not always in parallel with the implementation of TQM. The findings suggest that implementing ISO 9000 alone does not contribute much to quality improvement, while the combination of TQM and ISO 9000 contributes the most. A comparison of TQM and ISO 9000 shows that TQM as a whole is more beneficial than ISO 9000. Based on this survey, Sun (1999:207, 210-213) suggests a Neo-TQM paradigm, which is characterised by a combination of the two approaches.

It is evident that many educationists are uncomfortable with any form of external scrutiny. The impression exists that a standard such as ISO 9000 is some form of "watchdog" concerned merely with compliance. Doherty (1997:246) regards this as a serious misunderstanding of how ISO 9000 works. An ISO 9000 registered organisation has complete autonomy in setting its own service standards at a level, which will satisfy its customers and in devising a system which will provide documented evidence of both the maintenance and enhancement of those standards over time. It must comply with its own standards, therefore, external

audit is not inspection. External audits are conducted by regulatory bodies (not a centralised body that lays down specifications) to ensure that what has been promised by a provider is what is delivered (Peters, 1999:87).

In South Africa, the National Policy on Whole-School Evaluation (Department of Education, 2000(b)) is a national initiative by the Department of Education to set up a quality assurance system for schools. The Policy places a strong emphasis on key TQM elements, such as continuous improvement, the involvement of people, process control and effective systems. It is not explicit regarding customer satisfaction, although this element may be implicit within the system, given that the system requires of schools to show to what extent they meet the needs of the public and communities (Department of Education, 2000(b):5). The Policy also does not comply with the TQM requirement of flat organisational structures, but neither does ISO 9000 or the Baldrige Criteria.

Whole-school evaluation moves away from an 'inspection' approach to a system in which quality education is assured through both self-assessment and external evaluation. Self-assessment is a typical TQM approach to quality assurance, while external evaluation is more related to other rigorous quality assurance systems. External evaluation is being conducted by measuring a school's performance against an agreed set of national criteria. The aim with external evaluation is not to be used as a coercive measure, but rather to facilitate school improvement through supportive and developmental activities.

The Policy on Whole-School Evaluation is, therefore, a practical example of how TQM and a quality assurance system such as whole-school evaluation can be implemented together. In that sense the Policy seems to be consistent with global developments, given its intent to develop a world-class education system in South Africa.

3.5 SUMMARY

The focus of this chapter was on a review of the literature to identify systems and processes relevant to the implementation of TQM to schools. A survey was conducted to establish the quality elements that are eminent within a number of quality systems (models). Following that, a strategy was developed for

implementing TQM to schools. This strategy emphasises several strategic factors such as the importance of a strategic focus, the economic basis of a management strategy, five phases of implementation and the role of quality improvement teams.

In this chapter a review on systems for quality assurance was also dealt with. Those systems have been chosen to provide an international, European, American and a South African perspective. The systems were described in terms of their characteristics, purposes and goals, principles, areas of examination and applicability to education. In the end, the different systems were compared to determine to what extent they are related to TQM. It may be concluded that most quality systems are indeed interrelated with TQM and that any system could be employed to pursue quality management.

The focus was finally placed on the quality assurance system within the South African educational context. Whole-school evaluation as an instrument for school improvement was investigated and measured against the key TQM elements. It is evident that whole-school evaluation is a major national initiative that intends to be an important instrument in improving quality management and the effectiveness of schools.

TQM elements identified in Chapter 3 and applicable to schools are the following:

- Leadership;
- Top team commitment;
- Strategic focus and niche thinking;
- Customer focus;
- Agility;
- Involvement of people;
- Learning-centred education;
- Organisational and personal learning;
- Process and systems approach;
- Continual improvement;
- Factual approach to decision making;
- Quality work culture;

- Empowerment of educators and learners;
- Quality learning at less costs;
- Quality improvement teams;
- Measurement;
- External audits;
- Internal evaluation/self-assessment, and
- Focus on results.

The above elements have been identified from the literature. These elements, together with those identified in Chapter 2 (see 2.10), will be encapsulated in a management strategy for schools (see Chapter 7).

In Chapter 4 an analysis will be given of case study schools in continuation of the literature review.