



CHAPTER 3

CHAPTER 3

HISTORICAL OVERVIEW OF QUALITY, NOTIONS AND STANDARDS, AND THE PRINCIPLES OF TQM IN HIGHER EDUCATION

3.1 INTRODUCTION

Quality is at the top of the agendas of educational policy makers, and improving quality is probably the most important task facing [higher] educational institutions today (Sallis, 1997: 1). This chapter seeks to examine what the origins of quality are, and why it has emerged and remained a dominant theme in management thinking since the 1940's (Beckford, 1998: 3). The philosophy of quality management that so ably assisted the Japanese and the American companies to compete globally embodies principles that could be translated and applied to improve educational institutions and the system of education delivery (Holt, 1993: 22; Blankstein, 1996: 65; Weller & McElwee, 1997: 201).

Although predominantly commercial, initial quality approaches manifested themselves in health care applications as well (Whittington & Ellis, 1993: 58), and fairly recently in higher education settings around the world (Green, 1995: 4-5).

The purpose of this Chapter is to illustrate how the influence of the so-called quality 'gurus' or the quality movement has impacted on contemporary thinking in higher education settings. The selection of these quality experts is informed by their contribution in the principles that are currently used in management thinking in relation to customer satisfaction in institutions of higher learning.

Furthermore, it seeks to discuss the notions of quality and standards as defined by higher education experts elsewhere in the world (Harvey & Knight, 1996: viii), and the principles of Total Quality Management (TQM) in higher education. The rationale for this approach is to establish how we can adapt some of the best practices in the South African higher education system to inform the road ahead to quality promotion, management and quality assurance in institutional governance.

In relation to a theoretical response to the research question, this chapter seeks to demonstrate that governance at institutional level is intertwined with management thinking in so far as the assurance of quality is concerned. The notions or conceptions of quality identified by Harvey & Knight (1996) are broad enough to encompass the academic focus on QA. This study brings about an innovative approach by examining the influence these structures are making at governance level, and whether the impact would be sustainable in the reconfigured South African higher education landscape that is characterised by unevenness.

3.2 HISTORICAL OVERVIEW OF QUALITY

During the post World War II years consumer demand grew to such an extent that the manufacturing focus in the Western World was on productivity. Effectively, growing markets were starved of products and with increasing economic prosperity, everything that could be produced could be sold. Simply, with unfulfilled demand, organisations were under no pressure to focus on the quality of the product, and perhaps perceived that they had already achieved the ultimate standards. Coupled to this, consumer expectations of product longevity and reliability were relatively low compared with today as was the technology of both the products and the manufacturing process. (Beckford, 1998:3-4).

In common with the developments in technology in the post-war era, have been massive developments in our understanding of human-kind. Through the works of management writers and practitioners we have become aware of many alternative ways of designing and managing jobs and organisations. Managers and academics have collectively failed to embrace the many possibilities that these developments in thinking, make available to us. Academics at universities and colleges continue to teach classical methods because either it is all they know or because they reject the “new” ideas. (Beckford, 1998:6-7).

Those involved in higher education believe that quality is already being practiced. Within higher education a tradition prevails that colleges and universities are the preservers, transmitters, and generators of knowledge and that, except for a few established professions such as law, medicine, the clergy, and more recently the arts and sciences, higher education should not directly relate to the world of business and provide employers with employees (Beckford, 1998: 7). However, Kraak (2000: 152-153) admonishes that “the role of the traditionalist collegiate can easily constrain the growth of Mode 2 trans-disciplinary knowledge”. Many members of the academy -- perhaps most members -- still hold this view.

This view, however, conflicts with the opinions held by some involved in higher education. At the most basic level, there is disagreement over the priorities assigned by the academy to the traditional triad of teaching, research, and service. The Chancellor of the Ohio Board of Regents in the early 1990s, Elaine Hairston summarized the situation as, *“We are buying instruction and higher education is research”*. The general public also seems to have greater expectations for the job-related value of higher education than is recognised by the traditional view (Lewis and Smith, 1994: 2). Similarly, Seymour (1993: 25) commented on the relationship between products of colleges and universities and the expectations of employers that:

The disconnect is real between what our colleges and universities produce in terms of learning and outcomes in their graduates and what industry requires. And the longer we refuse to address that gap, like the budget deficit, the more drag it will be on our economy and global competitiveness.

Apart from the economic and social quality imperative, the environment plays a vital role in the quality movement. Clearly, with the exception of fictional characters such as Superman, it is too much to expect any one individual or organisation to 'save the world'. Each individual or organisation can however be expected to make a contribution to this at the appropriate level – that is, their own level and the ones above and below. The levels could be thought of as the individual, the organisation, the stakeholders, the local community, the national community and the international community. The role that is played by institutional stakeholders towards quality improvement and quality is crucial in so far as customer satisfaction is enhanced (Barry, 1991: 5; Lewis, 1993: 95; Weller & McElwee, 1997: 209).

The individual has a responsibility to him or herself and the employers to minimise use and waste of resources in the completion of his or her duties, that is, freedom from deficiencies according to Juran (1999a: 2.2). This must be supported by the institution that creates conditions, which enable the individual's work to be carried out with minimum waste. This principle holds true in higher education governance structures as it does to ensuring that the management of the institution has the additional responsibility to consider the total effectiveness of the institution in terms of its use of all resources and the environmental implications of their actions (Beckford, 1998:8; Oakland & Oakland, 1998: 188).

From these different perspectives, brief arguments could be developed that the idea of quality can be pursued in every aspect of every organisation. In the context of this study, it is placed within the governance framework for the entire

institution. Lewis (1993: 20) and Lo & Seally (1996: 21) believe that "quality improvement will only be successful when all people across vertical and horizontal levels are involved in making it happen". Full stakeholder participation and empowerment are therefore an integral part of the quality process and require the commitment of everyone in the institution to meet the needs of the customers collaboratively (Fields, 1993: 13; Dessler, 1999: 58; Steyn, 2001: 20). According to Johnson (1993: 27), commitment does not just occur, it is built in. Ingredients to improve performance include participative leadership, shared decision making and vision, empowerment, gaining staff's trust, continued training and the development of a recognition and reward system (Guimaraes, 1996: 20). This view is further explored in Chapter 6 (Section B (2j) and Section C 9.15 of the questionnaire responses).

The contemporary quality movement has been dominated by writers whose philosophies, methods and tools have survived and proven useful in practice. They are collectively known as "the Quality Gurus" (cf. 3.6). For purposes of clarification brief reference is made to the works of Philip Crosby, W. Edwards Deming, Armand V Feigenbaum, Joseph M Juran and others, and how their contribution is linked to the institutional governance and quality management and planning, and further how their ideas continue to inform best practice in industry and higher education alike.

3.2.1 PHILLIP B CROSBY

Crosby's definition of quality suggests that when he talks about a quality product or service he is referring to one which meets the requirements of the customer or user. This means in turn that those requirements must be defined, in advance, and that '**measures must be taken continually to determine conformance**' (Flood, 1993:22). The requirements may, of course include both quantitative and qualitative aspects, although he targets mainly the quantitative, that is "Zero Defects". The first fundamental belief then is that quality is an essentially

measurable aspect of a product or service, and that quality is achieved when expectations or requirements are met.

Crosby's second absolute is that **'There is no such thing as a quality problem'**. It can be suggested that his meaning here is that poor management creates the quality problems, they do not create themselves or exist as separate entities from the management process (Crosby, 1984: 3). In other words, the product and its quality do not exist in a vacuum, they are a result of the management process, and if that is a quality process then a quality product will emerge. In a nutshell, the second belief is that management must lead the workers towards a quality outcome (Beckford, 1998:52). This view is held by entrepreneurial- expanding and traditional- elite HEIs (Chapter 7 section 7.2.3) that management, on behalf of governing councils, is central to the strategic planning processes toward the enhancement of quality systems.

Third, **'It is always cheaper to do it right first time'**. Here Crosby is making clear his belief that inspection is a cost and that quality needs to be designed into a product, not that flaws should be inspected out. He takes his belief in the potential to achieve quality, that is, conformance to requirements, by developing a quality process and product from the outset with no expectation of failure. Prevention of error is better than rectification (Crosby, 1996: 18).

Fourth, **'the only performance measurement is the cost of quality'**. Crosby (1996: 18) clearly believes that the cost of quality is always a measurable item, for example, rework, warranty costs, rejects, and that this is the only basis on which to measure performance. It is as suggested by Logothetis (1992:85), the 'price of non conformance'. Finally, **'the only performance standard is zero defects'**. The idea here is that perfection is the standard to aim for through continuous improvement, and underpinning that, zero defects is an achievable and measurable objective. Quality is considered by Crosby as an inherent characteristic of the product, not an added extra.

Crosby's principal method is his fourteen step programme for quality improvement which is illustrated with other experts (see Table 3.5) at the end of this chapter. It is essentially very straightforward and relies on a combination of both quantitative and qualitative aspects, a technique that concurs with the methodology employed in this study (cf, chapter 5).

Crosby's "Quality Vaccine" (Logothetis, 1992: 82-83; Crosby, 1984: 6) is an essential part of his process. It is based on three principal ingredients:

- Integrity;
- Dedication to communication and customer satisfaction;
- Company wide policies and operations which support the quality thrust.

Logothetis (1992: 83) proposes a triangle (figure 3.1) of interaction between these three ingredients which must be supported by Crosby's belief in how the vaccine is administered. This again has three strands:

- *Determination* – awareness that management must lead;
- *Education* – for management and staff;
- *Implementation* – creating an organisational environment where achievement of quality is regarded as the norm, not the exception.

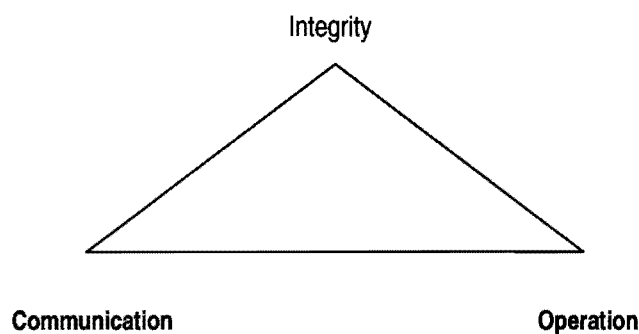


Figure 3.1 Triangle of interactions (Logothetis, 1992: 83).

This industrial/commercial model could provide the framework for higher education institutions to realise the inter-connectedness of stakeholders towards the quality goals. Although it cannot be applied step-by-step in higher education

governance, it emphasises the improvement dimension and how it can minimise quality costs if things are done right the first time.

3.2.2 W. EDWARDS DEMING

Deming's initial approach, largely rejected by American industry at the outset, was based on his background in statistical methods. His quantitative method provided a "systematic, rigorous approach to quality" (Bendell, 1989:4). His first belief is that there are "common" and "special" causes of quality problems. "Special" causes are seen as those relating to particular operators or machines and requiring attention to the individual cause. "Common" causes are those which arise from the operation of the system itself and are a management responsibility. He further believes in the use of Statistical Process Control (SPC) charts as the key method for identifying special and common causes and assisting diagnosis of quality problems.

Deming's second belief is that of a qualitative approach to identifying problems. It is suggested by Bendell (1989:4) that this statistically based approach brought its own problems. He reports lack of technical standards and limitations of data, and perhaps more importantly *"human difficulties in the form of employee resistance and management's lack of understanding as to their roles in quality improvement"* particularly in the American applications. Bendell considers that perhaps too much emphasis was being given towards the statistical aspects.

Notwithstanding these problems, Deming became a national hero in Japan and his methods were widely taken up. In 1951 the "Deming Prize" for contributions to quality and dependability was launched, and in 1960 he was awarded the "Second Order of the Sacred Treasure", Japan's premier Imperial Honour.

A third strand to Deming's work was the formulation of his systematic approach to problem solving. This has become known as the Deming, Shewhart or PDCA

cycle – Plan, Do, Check, Action, illustrated in figure 3.2 below. This cycle is iterative, once it has been systematically completed it recommences without ceasing. This is in agreement with Crosby’s admonition, already considered, to “*Do it all over again.*” The approach is seen as re-emphasizing the responsibility of management to be actively involved in the organisation’s quality programme, while Logothetis (1992:55) considers that it provides the basis for a “self-sustaining quality programme”. Deming has also developed concepts of management that have a strong emphasis on employees (Downey, Frase & Peters, 1994: 12). These are reflected in his famous “Fourteen Points of Management” that is illustrated with other quality gurus below.

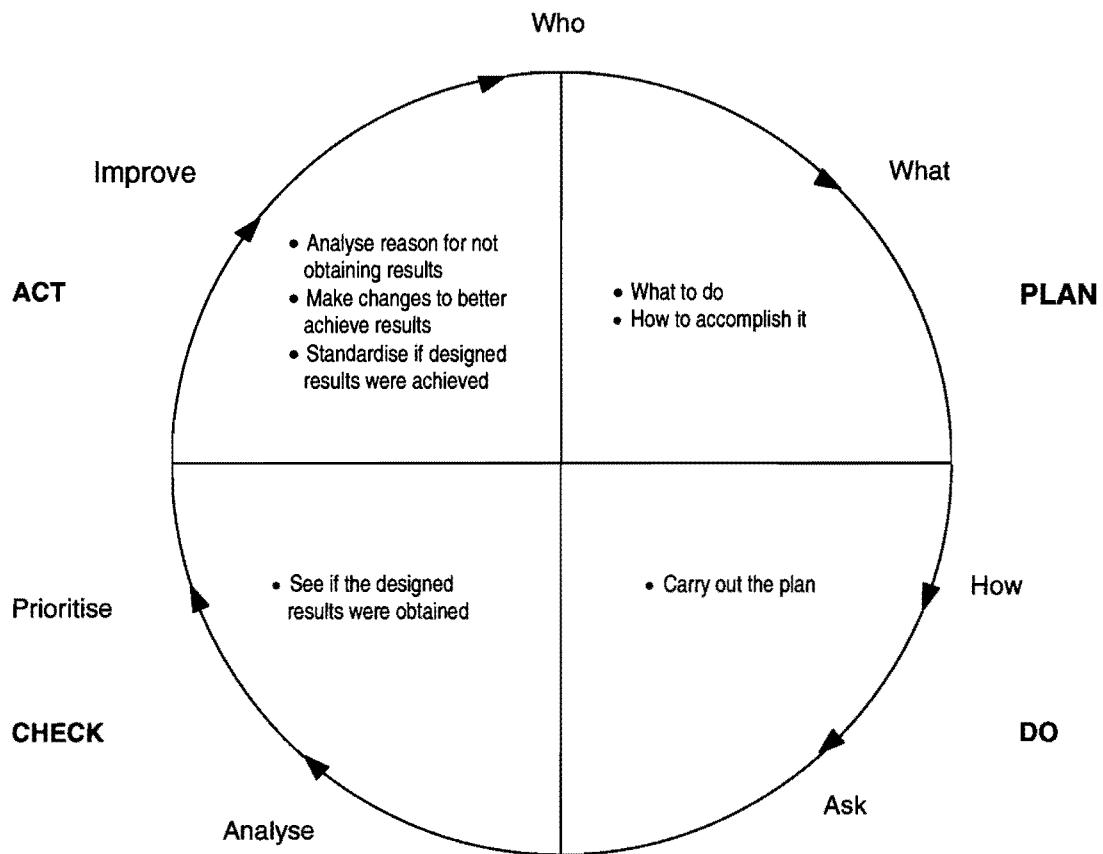


Figure 3.2: Customer feedback process.

Shewart perceived improvement as a continuous cyclical effort based on the PDCA model (Fields, 1993:31, Beckford, 1998:67; Mears, 1995: 229).

Two further beliefs can be derived here. The first, is in a systematic, methodical approach contrasting sharply with the *ad hoc* and random behaviour of many quality initiatives. The second is in the need for continuous quality improvement action. This contrasts sharply with the overtones in Crosby's approach, which suggest a discrete set of activities.

Deming's later work focused on Western, and particularly American management. Here Deming (1986:97-148) elaborated seven fundamental beliefs (the "Seven Deadly Sins") – about bad management practices which he considered must be eliminated before western styles of management could be transformed to support the implementation of a successful quality initiative.

3.2.3 ARMAND V. FEIGENBAUM

Feigenbaum's philosophy is clearly founded in his early idea of the 'total' approach, reflecting a systemic attitude of mind. He saw it as fundamental to quality improvement that all functions in an organisation should be involved in the quality process, and that it should be built into the product. He defines quality as 'best for the customer use and selling price' and quality control as:

an effective method for coordinating the quality maintenance and quality improvement efforts of the various groups in an organisation so as to enable production at the most economical levels which allow for full customer satisfaction (Beckford, 1998:87).

Feigenbaum appears to be suggesting that many quality problems can be eradicated from both the products and the manufacturing process by paying attention to the quality issue from the conception of the idea, right through to

delivery of the first and subsequent items. He assumes that the world is composed of systems; he works with the interrelationships that he perceives to exist between all aspects within the organisation, and importantly, in its environment. His systemic view further contends that the human relationships are a basic issue in quality achievement, which concurs with the developments in management thinking. Bendell (1989:15) states that Feigenbaum presented a case for a 'systematic, or total approach to quality,' and it is argued by Bank (1992:xv) that he was the first to do so. Logothetis (1992:94) suggests that to Feigenbaum, "quality, is simply a way of managing a business organisation", while Gilbert (1992:22) concurs with that and adds that Feigenbaum sees "quality improvement as the single most important force leading to organisational success and growth".

3.2.4 JOSEPH M. JURAN

Juran's philosophy is perhaps best summed up in the saying cited by Logothetis (1992:62) *'quality does not happen by accident, it has to be planned'*. This is reflected in his structured approach to company-wide quality planning, an aspect already met in the work of other quality gurus such as Ishikawa and Feigenbaum. He is considered by Logothetis (1992: 62) and Bendell (1989:8) to emphasize management's responsibility for quality with Bendell (1992:10) quoting him saying that 'management controllable defects account for over 80% of the total quality problems'. The emphasis of his work is on planning, organisational issues, management's responsibility for quality and the need to set goals and targets for improvement (Bendell, 1989:8). Juran's message is similar to that of Deming in that they feel top management must lead their organisations (Downey, *et. al*, 1994: 14).

Juran defines quality as 'fitness for use or purpose' (Bank, 1992:71). Bank suggests that this is a more useful definition than 'conformance to specification', since a dangerous product could conform to all specifications but still be unfit for

use, as it may be compared with Crosby's definition. The final important strand in Juran's thinking is in his trilogy of: Quality Planning, Quality Control and Quality Improvement.

While Juran's 'quality trilogy' of Planning, Control and Improvement offers the guidelines to his approach, his overarching methodology for achieving quality is the 'quality planning road map' (Bendell 1989:9). Recognizing both external and internal customers, the 'road map' (figure 3.3) offers a nine-step guide.

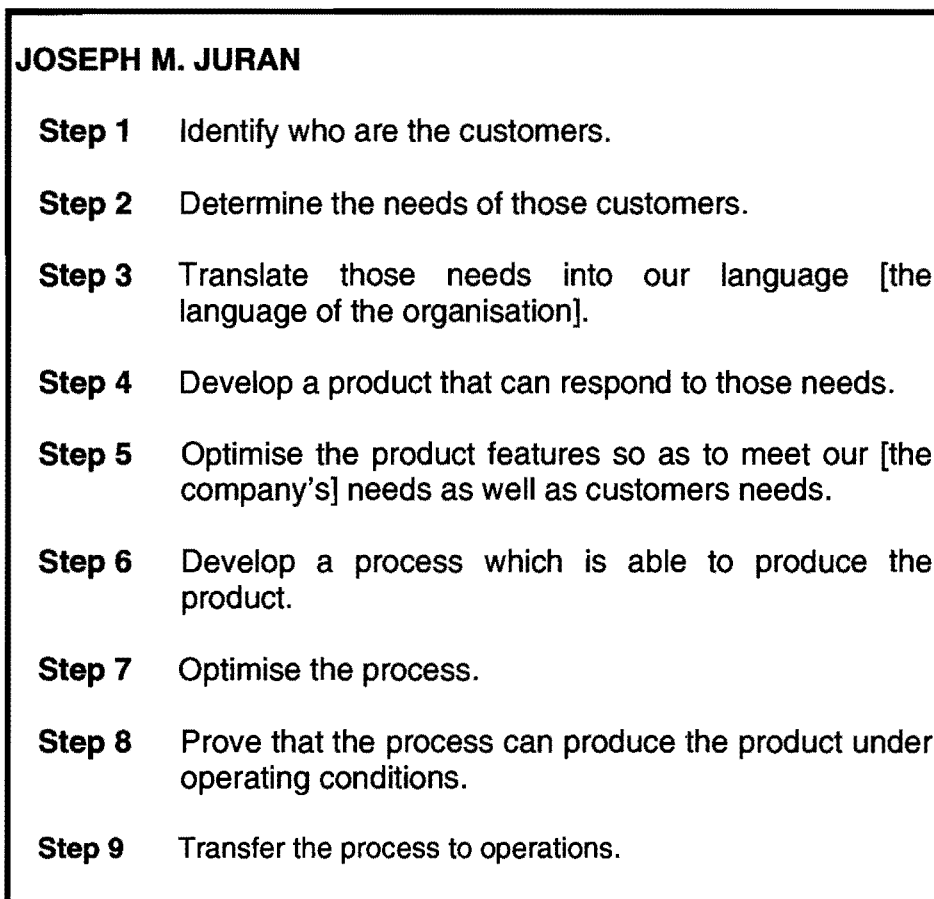


Figure 3.3 The quality planning road map: Joseph M. Juran (Beckford, 1998:115).

Juran shows awareness of the phenomenon of resistance to change, which is so common in organisations. According to Fullan (2001:31) "understanding the change process is less about innovation and more about innovativeness". It is less about strategy and more about strategising. And it is rocket science, not least because we are inundated with complex, unclear, and often contradictory advice (Micklethwait & Wooldridge (1996); Argyris (2000) and Mintzberg, Ahlstrand & Lampel (1998) in Fullan (2001:31-33). This phenomenon has manifested itself in higher education institutions globally, and more importantly, in South Africa during and beyond the period of apartheid higher education. The nature of government regulation ranged from weak state supervision in the case of historically white institutions, to a more authoritarian state control for historically black institutions (NCHE, 1996: 42). Logothetis (1992:75) reports Juran's belief that 'resistance to a technological change is due to social and cultural factors'. Juran proposes two principal methods for dealing with this. First, he considers that all those affected by the change should be 'allowed to participate', second, that 'adequate time should be allowed for the change to be accepted'. These approaches are seen as providing an opportunity for evaluation and experimentation, promoting ownership of the changes and helping to overcome resistance.

The perspectives enunciated by these quality experts fit into the higher education transformation agenda in that the governance structures [and institutional management] have the responsibility to initiate and enhance quality assurance mechanisms. The role that these structures play is in a context of internal and external forces that at times manifest themselves as impediments or innovations that can be explored to the benefit of institutions of higher learning. The transformed governance structures can take cue from these extensive steps and stages suggested with the purpose of quality improvement in councils, senate and the institutional forums as far as possible.

3.3. THE NOTION OF QUALITY IN HIGHER EDUCATION

Throughout the world, the quality of higher education is being assessed. This involves operationalising the notion of quality in some way, which in turn, requires a clear statement about the concept of quality that is being measured. "It appears that far too often, quality assessment and assurance processes have started by determining how quality is to be assessed or reviewed rather than by asking what is it that is to be assessed" (Harvey & Knight, 1996: 1). *What do we mean by quality?* This question can be asked anywhere, and one would get a variety of responses. Ask it in an academic institution and it could take up to 18 months to get an answer one could live with.

It is worthwhile to have a clear understanding of the quality concept as demonstrated in Chapter 1 (section 1.3). Juran (1999a: 2.1; 2.2) and Goetsch & Davis, (1995: 3) provide two definitions of quality:

"Quality" means those features of products and services which must meet or exceed customer needs and thereby provide satisfaction. The second definition is "quality" means freedom of deficiencies.

In 1991 Wolverhampton University in the United Kingdom embarked on a journey that had no ultimate destination-- travelling towards total quality management (TQM) or continuous quality improvement where you never reach the position where you can say, 'That is it! This is quality! We have arrived!' Susan Storey as cited by Ellis (1993:37). In this long and arduous journey, Wolverhampton University decided to apply BS 5750, the British Standards Institution's Quality Assurance Standard, to all its operations and to register to Part 1 of the standard during 1993.

The scope of the university's application for registration was all activities concerned with the delivery of the product, defined as learning experiences, and

delivered through courses, research and consultancy. The great quality debate at Wolverhampton attempted to reflect on where they came from, where they are going to, what quality means to them, what management means, and what 'total' in this context would mean. The South African HEIs responses to this issue concur with this question in Chapter 7, section 7.4. The debates yielded the following definition of a quality service:

- fitted to purpose;
- satisfactory to the client;
- of a quality grade equivalent to other suppliers. (Ellis, 1993: 38- 41)

The different conceptualisations of quality in higher education were identified by Harvey and Green (1993), and further refined by Harvey and Knight (1996) in an endeavour to demonstrate why quality is regarded as a core value in higher education. The notions of quality can thus be grouped into five discrete but interrelated ways of thinking, namely, *quality as exceptional/excellence; quality as perfection/consistency; quality as fitness for purpose; quality as value for money; quality as transformation.*

These notions are discussed below, and will be taken further in Chapter 7, relying heavily on the published work of Harvey and Knight (1996). The reason for this reliance is the extensive and widely used piece of work that is dominating the discussions in South African higher education debates currently. More importantly, it is with the view to explore the quality dimensions in higher education, and how the institutional governance structures could be advised to adopt the most appropriate of these in order to influence the QA mechanisms in this country. It is worth pointing out that the focus on teaching, learning and research has given impetus to the focus of this study which is management and policy driven, other than primarily focusing on the learner experiences, who form part of the total picture.

3.3.1 QUALITY AS EXCEPTIONAL OR EXCELLENCE

According to Harvey & Knight (1996: 1 -2)

"The exceptional view sees quality as something special. There are three variations on this: first, the traditional notion of quality as distinctive; second, a view of quality as exceeding very high standards (or excellence); and third, a weaker notion of exceptional quality, as passing a set of required (minimum) standards".

"The traditional concept of quality implies exclusivity" (p.2), in the sense that assumptions are made about the supposed 'high quality' or 'high class' programme or institution without offering benchmarks against which to measure quality. This notion is often held implicitly by academics and policy- makers in debates about quality in higher education. This view hold true in the South African setting in that certain institutions, as had been alluded to in the introductory Chapter are perceived as 'exclusive' [or perhaps advantaged], whereas others are not. The fact of the matter is that these types of institutions influence policy- makers in the manner that Harvey & Knight contend. The slight twist in South Africa is that it is not implicitly held, but is glaring and almost palpable. The Shape and Size Task team of the Council on Higher Education (2000: 25) summed up the scenario as follows

"... there is a perception that institutions [of higher learning] have in various ways remained largely unchanged from the apartheid past. There is also concern about the quality of the outputs of institutions. Numerous inefficiencies plague the system. Various institutions evince governance and financial problems, inadequate financial systems, the unwarranted duplication of programmes and the lack of optimal use of infrastructure and human resources".

Excellence is often used interchangeably with quality or high standards that are not easily attainable. It is elitist in as much as it sees quality as only possibly attainable in limited circumstances. This notion in education circles tends to focus on input and output. An institution that takes the best students, provides them with the best resources, both human and physical, by its nature excels. The notion of 'centres of excellence' in higher education is frequently based on this notion of quality. Similarly, it is evident from the foregoing paragraphs that the governance and quality interface can no longer be ignored. HEIs that have the best governance structures have a fair chance of excelling in their mandate, and their institutions could be classified as 'quality institutions' in the words of Harvey and Knight.

The final notion of quality as exceptional dilutes the notion of excellence. A 'quality' product in this sense is one that has passed a set of quality checks, which are based on attainable criteria that are designed to reject 'defective' items. The 'pass mark' for coursework and examinations is an everyday example of standards checking in higher education. 'Quality' is thus attributed to all those items that fulfil the minimum standards set by the manufacturer or monitoring body. This assertion attests to the fact that the industrial / commercial thinking propagated by the 'Quality Gurus' has equally influenced the approaches in higher education.

The advantage of setting a threshold is that it is objective, certifiable and uniform across the higher education system. The disadvantage is that it is a static notion: it cannot be easily adapted to changing circumstances except through cumbersome political processes. Therefore, standards almost always lag behind. This implies that the threshold conception of quality does not stimulate units to adapt to new opportunities, incorporate new insights with respect to education. In most European higher education systems, a variant is used that can be called minimum standards. In another view, the Dutch higher education contends that

"These minimum standards are often defined concisely: all that is needed is a broad definition of the desired knowledge, skills and attitudes of graduates. They ensure a certain minimum quality and a certain minimum comparability of units or programs across the higher education system" (Hogeschool Leiden, 1998: 11).

3.3.2 QUALITY AS PERFECTION OR CONSISTENCY

Lee Harvey contends that this notion sees quality as a consistent or flawless outcome. In a sense it "democratises" the notion of quality. "If consistency can be achieved, then quality can be attained by all" (Strydom, Lategan & Muller, 1996: 206). The ideal to focus on process and a set of specifications with the aim to meet it perfectly, is encapsulated by two interrelated dictums: *zero defects* and *getting things right first time*.

The 'zero defects' approach redefines quality as conformance to specification rather than exceeding high standards. In this approach there is a distinction between quality and standards. "Quality is that which conforms to a particular specification. The product or service is judged by its consistency or, in some cases, by its reliability" (Carter, 1978, Garvin, 1988) as cited by Harvey and Knight (1996: 4). Excellence thus becomes 'perfection' as measured by the absence of defects. According to Harvey and Knight, zero defects are not just about conforming to specification, it embodies a philosophy of prevention rather than inspection. The focus is on ensuring that, at each stage, faults do not occur, rather than relying on final inspection to identify defects. This notion also emphasises the quality culture of ensuring that things are 'done right first time', and if they are not, then the process that has led to the unsatisfactory output is analysed so that corrections can be made.

This approach is derived from Crosby (cf. 3.2.1), and is developed for the higher education setting by Harvey and Knight. The fit into this study comes about as a

result of the need to improve the South African higher education system, starting with governance, then moving on to other levels such as management and other forums or campus formations. The goal of this approach then becomes good quality outcomes with less (or minimised) inefficiencies in the institution. This responds to the research question in that the institutional governance structures could strive towards 'zero defects' and 'doing things right first time thereby influencing the quality assurance mechanisms in their institutions with a view to long term impact in the system.

3.3.3 QUALITY AS 'FITNESS FOR PURPOSE'

This approach argues that quality only has a meaning in relation to the 'purpose' of the product or service. It is quite remote from the idea of quality as something special, distinctive, elitist, conferring status, or difficult to attain. If something does the job for which it is designed, then it is a quality product or service. Every product or service has the potential to fit its purpose and thus be a quality product or service. Fitness for purpose has emerged as the fashionable way to harness the drive for perfection. Although straightforward in conception, 'fitness for purpose' may be deceptive (Moodie, 1986b: 1-8) especially when issues of '*whose purpose*' and '*how fitness is assessed*' are raised (Harvey & Knight, 1996: 5).

Quality as fitting-the-customer-specification requires that the outcome of a process match the specified requirements. This requires, first of all, that customer requirements are precisely identified and second, that the outcome conforms to those requirements. This conception is also developmental as it organises that purposes may change over time thus requiring constant re-evaluation of the appropriateness of the specification. One of the most important insights from the quality literature is that an operational definition of quality must always be specific: quality of something for a specific purpose. There is no such thing as 'general quality'.

In terms of higher education, this view implies that, for instance, a study programme may be good at preparing researchers but not professionals to work in practice, or visa-versa. This view implies a conception of quality that focuses on customer needs (largely known as stakeholders in the South African context) – however it may be difficult to define ‘customers’ in higher education. Students, employers, parents, the academic community, donor agencies, government and society in general, are all customers. A major weakness of this conception is that it seems to imply that ‘all systems go’ in higher education as long as one can formulate a purpose for it. Accordingly, a ‘fitness for purpose’ notion needs to be complemented with a notion of the ‘fitness of purpose’ for higher education. "In this respect, an evaluation can discuss (and challenge) the comprehensiveness and relevance of purposes in order to ensure improvements" (Hogeschool Leiden, 1988:11). Sallis and Hingley (1992:3) warn that "educational institutions need to be careful that they base their quality standards upon an analysis of customer wants and needs and not just upon their own definitions as this may bring about the undesired effect".

"An alternative view of fitness for purpose avoids the issue of determining who are the higher education's customers by returning the emphasis to the institution. In this case, quality is defined in terms of the institution fulfilling its own stated objectives or 'mission'" (Green, 1993). Quality becomes fitness for, and performance in, the market as defined by the institution. This view of quality underpins the approach of "the British government that (post-1992) seeks to ensure that the new funding arrangements for teaching should safeguard the best of the distinctive missions of individual institutions" (Harvey and Knight, 1996: 6).

Institution-wide consultations often result in mission statements being formulated and constructed to fit the short-, medium-, and long-term objectives of the institution. This approach is often referred to as 'fitness for purpose', whereas the

notion of 'fitness of purpose' interrogates the appropriateness and suitability of the set objectives or mission statements for a particular context.

The society or relevant stakeholders may legitimately ask whether such purposes fit the needs of the day. The systemic and institutional transformation process in the South African higher education system is a case in point. So much is happening to the extent that all institutions of higher learning are re-positioning themselves to be in line with the post-apartheid quality assurance imperatives and to be in keeping with the principles of the White Paper on higher education. In conclusion, the conception of quality as fitness for purpose conforms to the following principles:

- quality in higher education needs to be defined in light of specific purposes;
- these purposes must be suited to the higher education system;
- different categories of 'customers' (or stakeholders) hold legitimately different opinions, e.g. academic excellence, institutional effectiveness, etc.;
- as the primary users of higher education, students are an important category of the 'customer' constituency with varied needs with the advent of mass higher education;
- and for these reasons, "purposes" are best defined at the level of individual higher education institutions, faculties or study programmes, taking into account the national context.

The 'fitness for purpose' approach to quality assurance is predominantly functional because it relates quality to the purpose of the product or service, and the extent to which this purpose is met. This point is further explored as part of the questionnaire in Chapter 6 and the institutional interviews in Chapter 7 in order to elicit the responses as to how their mission statements support the quality assurance imperatives.

3.3.4 QUALITY AS VALUE FOR MONEY

Pressure has been mounting since the mid-1980s on higher education institutions in Europe, Australia, the United States and elsewhere to demonstrate their efficiency and effectiveness by 'doing more with less'. This notion of quality is considered as populist, and is equated with value for money. In Britain this populist view has linked the quality of education to value for money through the demand for efficiency and effectiveness. Quality, in this context is seen in terms of return on investment. "If the same outcome can be achieved at a lower cost, or a better outcome can be achieved at the same cost, then the 'customer has a quality product or service" (Strydom, et. al, 1997: 206). Furthermore, 'in countries such as Australia, Britain and Denmark the link between quality and value for money has been overtly and controversially expressed in the methodologies adopted for funding teaching which reward quality and penalise unsatisfactory provision" (Harvey and Knight, 1996: 7).

Harvey and Knight further argue that value for money is increasingly seen as a market view of quality linked to accountability. The use of performance indicators, customer charters and league tables are an attempt to operationalise and legitimate this notion of quality by creating a pseudo-market designed to effect change through competition. In Australia, for example, publication linked to league tables is seen as a major incentive to universities. "When we started out, money was the big incentive. But after the first report, some institutions would have been happy to give the money up if they could have got into group one" (Wilson, in Maslen, 1995: 8).

A funding link is seen as necessary if External Quality Monitoring (EQM) is to have any direct impact on the quality of provision, since funding is the single motivating factor to which institutions will respond. On a negative note, according to Filteau (1993: 14)

"the so-called 'accountability-led' view of quality improvement is dependent on the effectiveness of a funding sanction. Without a funding link, evaluations are seen to have no 'teeth'. The link tends to reward excellence and makes no attempt to redirect the resources to enhance inadequate provision".

The issue of funding has become equally important in the South African context with the Department of Education critically looking at the size and shape of the higher education system which is largely informed by the economic imperatives more than anything else. This argument takes us back to the problem statement: "How do transformed institutional structures influence the quality assurance mechanisms" in a way to sensitise the South African higher education system to the considerations of 'value for money' as a quality perspective? It still remains a bigger challenge to convince some HEIs that have been disadvantaged [and are characterised as uncertain-unstable] to speak of economic considerations above the philosophical and sociological considerations in South Africa.

3.3.5 QUALITY AS TRANSFORMATION

Quality as transformation is a classic notion that sees it in terms of change from one state to another. It is firmly rooted in the notion of 'qualitative change'. In the education sense, transformation refers to the enhancement and empowerment of students or the development of new knowledge. A first-year medical student, for example, enters the programme on medical training with no knowledge, or extremely limited knowledge on the human anatomy and why it is necessary to know it in order to make sense of how the training programme fits into eventually becoming a medical doctor.

The extent and intensity of the training programme, including learner-participation brings about a significant change or transformation to the individual who initially entered the programme with little knowledge or none, and at the end of the sixth

year of training is able to be a well educated person who is able to diagnose patients and even perform surgical procedures on them.

This notion can be equally applied to new councillors, senators or even members of the institutional forums who do not understand their new roles in these structures towards quality enhancement. The tensions that are prevailing as indicated in Chapter 6 and lack of understanding of different roles of councillors (in Chapter 7) bear testimony to how the notion of quality as transformation is relevant for this category of stakeholders. This can further apply in different degrees to the different types of HEIs.

Since education is a participative process, students are not regarded as products, customers, consumers or clients – they are participants who need to be enhanced and empowered. A quality education is one that effects changes in the participants and, thereby enhances them. According to Astin (1991) as cited by Harvey and Knight (1996: 8) value added is a ‘measure’ of quality in terms of the extent to which the educational experience enhances the knowledge, abilities, and skills of students. A high-quality institution would be the one that greatly enhances its students through a variety of learning experiences.

Another element of transformative quality is empowerment of the student. This involves students taking ownership of the learning processes through, amongst others, self-confidence, self-awareness and so on. Harvey and Burrows (1992) contend that students can be empowered via, *student’s evaluation* – that is, giving students the opportunity to comment on the education they are receiving. This model has been working successfully in the United States for decades.

A further view on the notion of quality as transformation asserts that

“The second form of empowerment is to *guarantee them minimum standards of provision* and give them the responsibility for monitoring it, for

example through student charters. Third, give them *more control over their own learning*, and finally, to develop their critical thinking skills by questioning orthodox methods and learning to justify their opinions. In short, an approach that encourages critical ability treats students as intellectual performers rather than as compliant audience. It transforms teaching and learning into an active process of coming to understand. It enables students to easily go beyond the narrow confines of the 'safe' knowledge base of their academic discipline to applying themselves to whatever they encounter in the post-education world. This requires that students are treated as intellectual performers and that any system of assessment is clear, public, and an integral part of the learning process, not an 'add-on'" (Paskow, 1990: 4; Harvey & Knight, 1996: 8- 10).

It is worth noting that students who undergo this process of transformation become better prepared for the world of work, and become better contributors in a learning organisation. According to Longworth & Davies (1996: 76) and Senge (1994:xv-xx) the prominent feature of a learning organisation is that it integrates work and learning and inspires its people to seek quality, excellence and continuous improvement in both. Similarly, Harvey and Knight (1996: 107), also assert that the product of such transformation should be:

someone who is able to deploy a variety of frameworks and to stand outside them; to have a commitment to continued learning and reflection; to be able to do this with high degree of autonomy; and who has integrated this with a set of developed values relating to the self as a learner and as a doer.

3.4 STANDARDS AND THEIR RELATIONSHIP WITH QUALITY

Quality issues in higher education are also closely related to issues of standards. It is indeed evident in debates about the nature and functioning of higher education that there is considerable overlap between the concepts of 'quality' and 'standards'. However, quality and standards are not the same. There is a subtle difference between these two concepts. It is not possible to attain a high quality product without high standards; this is essentially so because the concept of standards is intricately linked to the concept of quality. According to Harvey in Strydom et al (1996: 207) "standards" are specified and usually measurable outcome indicators which are used for comparative purposes.

The Pocket Oxford dictionary's (1996: 890) definition of standards is:

an object, quality, or measure of serving as a basis, example, or principle to which others conform or should conform or by which others are judged . . . a level of excellence required or specified.

The Merriam-Webster Thesaurus (1989: 538) defines standards as a "*means of determining what a thing should be . . . benchmark, criterion, gauge, measure, touchstone, yardstick*". From these definitions it can be deduced that standards refer to the degree of excellence required for particular purposes, a measure of what is adequate, a socially and practically desired level of performance. Brennan, De Vries and Williams (1997: 7- 9) pertinently admonish that "as far as "quality" and "standards" are concerned, usage permits no single definition. Many have been attempted before, and many more will come to inform the robust debates about quality and standards". To illustrate the controversy further, the student who is looking for intellectual stimulation and excitement may have a quite different view about quality from the student who is anxious to obtain a qualification without undue exertion.

Similarly, one university leader, in an attempt to answer the question "How might we assess the 'quality' of the whole institution?" might wish to emphasise research productivity; another might look to the scores achieved in the assessment of teaching quality; yet another might refer to the culture of the institution, the quality of the relationships existing between institutional members, both staff and students. It stands to reason, therefore, that quality in higher education is a multi-dimensional concept and any attempt to legislate a single definition seems bound to end in failure.

The same argument holds true regarding 'standards'. Although the term has had a longer and more accepted usage in higher education -- referring primarily to levels of academic achievement -- to such usage must now be added the applications of standards terminology from the manufacturing and service industry. "As with quality, the dispute over terminology concerning standards is also a dispute about values, and the power of one interest group to impose its values on others" (Brennan *et. al*, 1997: 9).

In education, standards relate to three areas of activity, namely:

- academic standards;
- standards of competence;
- service standards.

3.4.1 ACADEMIC STANDARDS

Academic standards measure ability to meet specified level of academic attainment. In relation to teaching and learning this refers to the ability of students to fulfil the requirements of the programme of study, through whatever mode of assessment is required. This usually requires demonstration of knowledge and understanding. Implicitly, other skills are assessed, such as communication skills. Sometimes 'higher level' skills, such as analysis, comprehension, interpretation, synthesis and critique are explicitly assessed.

For research, academic standards are less precise and usually imply the ability to undertake effective scholarship or produce new knowledge, which is assessed via peer recognition (Harvey, 1996:207). In research, most academics are able to identify their peers because it 'has high status and is public in its nature, in its legitimation and in its production' (Barnett, 1996: 152). Brennan, El-Khawas and Shah (1994: 22) hold the same view that:

Peer judgements possess a moral authority based on the shared membership, knowledge and values of the peer community. These are most clearly seen in subject-based groupings of peers, which claim exclusive possession of specialist knowledge and competence. Members share a common educational background and professional situation, which is the basis of, shared interests between reviewers and reviewed.

Silver and Williams (1996: 45) contend that "academic standards, in today's higher education system, must vary. The variation should occur between programmes of study within subjects because of differences in educational purposes and subject breadth, between similar programmes of study across institutions because of diversity of mission, and between subjects *per se*, because of custom, practice and tradition". What they suggested is that external examiners would need to 'operate at the intersection of the national academic policies, the academic standards of their subject area, albeit loosely defined, and the academic standards defined by the receiving institution and the programme of study. Brennan, *et al.* (1997: 115) on the other hand agree that "academic standards can focus on the different stages of the educational process and the relationships between those stages such as inputs, processes and outputs". Educational inputs would normally refer to entry characteristics of students as well as the quality of the teaching they receive.

Educational process standards might relate to student's learning experiences and progress made on the content and organisation of the curriculum. Finally, the educational output standards will be defined by the inputs and processes, and determined by the knowledge, skills and/or understanding acquired by the students. Alongside the debate about the effectiveness of the current external quality assurance arrangements, Brennan (1997: 114) notes that

"the debate about academic standards cannot be divorced from the broader debates about the roles and responsibilities in quality assurance of institutions, the HEQC and the funding council and, more generally, about the respective responsibilities of the state and of higher education".

3.4.2 STANDARDS OF COMPETENCE

Standards of competence measure specified levels of ability on a range of competencies. Competencies may include general transferable skills required by employers and skills required for induction into a profession. Standards of competence are more often assessed in terms of threshold minimums than degrees of excellence. Obtaining a professional qualification, for example, involves conforming to minimum standards of practitioner competence. Standards of competence may be stated or inferred as part of the taught course objectives. They may be an implicit part of the expectations of competencies to be achieved by research students. Standards of competence begin to overlap with academic standards, when high-level skills and abilities are explicitly identified as intrinsic to competence, as in professional education, where, for example, reflection and critique may be an element in the attainment of an award (Harvey and Knight, 1996: 16).

The relationship between academic standards and standards of competence is not clear-cut and, to some extent, is a pragmatic distinction. For some definitions of quality, such as the "exceptional" approach, the distinction between academic

standard and standard of competence is more pronounced than, for example, in the "transformative" approach. (Table 3.1 gives an overview of this) Harvey, in Strydom, *et. al*, (1996: 208).

3.4.3 SERVICE STANDARDS

Service standards are measures devised to assess identified elements of the service or facilities provided. Such standards may include turnaround times for assessing student work; maximum class sizes; frequency of personal tutorials; availability of information on complaints procedures; time-lag on introducing recommended reading into libraries; and so on. Benchmarks are often specified in 'contracts' such as student charters. They tend to be quantifiable and restricted to measurable items, including the presence or absence of an element of service or a facility. *Post hoc* measurement of customer opinions (satisfaction) is used as indicators of service provision. Thus, service standards in higher education parallel consumer standards (Harvey in Strydom, *et al.*, 1996: 208).

3.4.4 INTERRELATIONSHIP BETWEEN QUALITY AND STANDARDS

The interrelationship between quality and standards depends on the approach to quality and the particular notion of standard. With five “definitions” of quality and three “definitions” of standards there are fifteen interrelationships. (see Table 3.1 below)

Table 3.1

Standards Definitions	Academic standards	Standards of competence	Service standards
	<p>The demonstrated ability to meet specified level of academic attainment. For pedagogy, the ability of students to be able to do those things designated as appropriate at a given level of education. Usually, the measured competence of an individual in attaining specified (or implied) course aims and objectives, operationalised via performance on assessed pieces of work. For research, the ability to undertake effective scholarship or produce new knowledge, which is assessed via peer recognition.</p>	<p>Demonstration that a specified level of ability on a range of competencies has been achieved. Competency may include general transferable skills required by employers; academic (“higher level”) skills implicit or explicit in the attainment of degree status or in a post-graduation academic apprenticeship; particular abilities congruent with induction into a profession.</p>	<p>Are measures devised to assess identified elements of the service provided against specified benchmarks? Elements assessed include activities of service providers and facilities within which the service takes place. Benchmarks specified in ‘contracts’ such as student charters tend to be quantified and restricted to measurable items. Post hoc measurement of customer opinions (satisfaction) is used as indicators of service provision. Thus, service standards in higher education parallel consumer standards.</p>

Quality	Definition			
Exceptional	A traditional concept linked to the idea of 'excellence', usually operationalised as exceptionally high standards of academic achievement. Quality is achieved if the standards are surpassed	Emphasis on summative assessment of knowledge and, implicitly, some 'higher-level' skills. Implicit normative gold-standard. Comparative evaluation of research output. Elitism: the presupposition of a need to maintain pockets of high quality and standards in a mass education system.	Linked to professional competence: emphasis mainly on traditional demarcation between knowledge and (professional) skills.	Input-driven assumptions of resource-linked service/facilities. Good facilities, well-qualified staff, etc. 'guarantee' service standards. Reluctance to expose professional (teaching) competence to scrutiny.
Perfection Or Consistency	Focuses on process and sets specifications that it aims to meet. Quality in this sense is summed up by the interrelated ideas of zero defects and getting things right first time.	Meaningless, except for an idealistic notion that peer scrutiny of standards or quality will be undertaken in a consistent manner.	Expectation of a minimum prescribed level of professional competence. Problem in assessing for 'zero defects'	Primary relevance in ensuring service-standards based quality – mainly in relation to administrative processes (accuracy and reliability of record keeping, timetables, coursework arrangements, etc.)
Fitness for purpose	Judges quality in terms of the extent to which a product or service meets its stated purpose. The purpose may be customer defined to meet requirements or (in education) institution defined to reflect institutional mission (or course objectives).	Theoretically, standards should relate to the defined objectives that relate to the purpose of the course (or institution). Summative assessment should be criteria referenced, although as purposes often include a comparative element (e.g., in mission statement) these are mediated by norm-referenced criteria.	Explicit specification of skills and abilities related to objectives. Evidence required to at least identify threshold standards. Professional competence primarily assessed in terms of threshold minimums against professional body requirements for practice.	The purpose involves the provision of a service. Thus, process is assessed in terms of (minimum) standards for the purpose – usually in terms of teaching competence, the link between teaching and research, student support (academic and non-academic) and so on.

<p>Value for money</p>	<p>Assess quality in terms of return on investment or expenditure. At the heart of the value-for-money approach in education is the notion of accountability. Public services, including education, are expected to be accountable to the funders. Increasingly, students are also considering their own investment in higher education in value-for-money terms.</p>	<p>Maintenance or improvement of academic outcomes (graduate standards and research output) for the same (or declining) unit of resource. That is, ensure greater efficiency. Similarly, improve the process-experience of students. Concern that efficiency gains work in the opposite direction to quality improvement. Provide students with an academic experience (qualification, training, personal development) to warrant the investment.</p>	<p>Maintain or improve output of generally 'employable' graduates for the same unit of resource. Similarly, ensure a continual or increasing supply of recruits to post-graduation professional bodies. Provide students with an educational experience that increase competence, in relation to career advancement, which ensures a return on investment</p>	<p>Customer satisfaction analyses (student, employers, and funding bodies) to assess process and outcomes. Students and other stakeholders are seen as 'paying customers'. Customer charters specify minimum levels of service (and facilities) that students (parents, employers) can expect</p>
<p>Transformation</p>	<p>Sees quality as a process of change, which in higher education adds value to students through their learning experience. Education is not a service for a customer but an ongoing process of transformation of the participant. This leads to two notions of transformative quality in education: Enhancing the consumer and empowering the consumer</p>	<p>Assessment of students in terms of the standard of acquisition of transformative knowledge and skills (analysis, critique, synthesis, innovation) against explicit objectives. Focus on adding value rather than gold standards. As transformation involves empowerment, formative as well as summative assessment is required. Transformative research standards are assessed in terms of impact in relation to objectives.</p>	<p>Provide students with enhanced skills and abilities that empower them to continue learning and to engage effectively with the complexities of the 'outside' world. Assessment of students in terms of the acquisition of transformative skills (analysis, critique, synthesis, innovation) and the transformative impact they have post-graduation.</p>	<p>Emphasis on specification and assessment of standards of service and facilities that enable the process of student learning and the acquisition of transformative abilities.</p>

The distinction outlined in Table 3.1 above is indeed crucial in higher education. The attainment of [minimum] academic standards, demonstrating a set of competencies and fulfilling measured service standards cannot be over-emphasised. In the same vein, the interrelationship between quality and standards as outlined is largely connected to the academic senate as a structure primarily in charge of the core business of higher education.

Reference to the research question in this study, singles out senate among other structures of governance as fundamentally responsible for academic quality and standards. The question then becomes, 'what role does the transformed senate play in influencing quality assurance mechanisms?'. Although the current senates have been transformed in size and outlook, they are still dominant bodies charged with the task of ensuring that teaching, research and public/community service, continue to distinguish the academia from the rest of the stakeholders in an institution of higher learning.

Structurally, senate has a positive influence, although, as the findings in Chapter 7 will indicate, there is a minority of respondents who felt that their senate was not fulfilling its mandate of maintaining academic quality. This view can, however, not be ignored, but should be addressed more explicitly by the affected institutions.

Finally, the conceptions of quality discussed in this section identifies students/learners, academics, parents, government, tax payers amongst others, as customers or stakeholders involved in quality assurance. In other words, they all have a role to play towards quality improvement and accountability. Quality therefore becomes 'everybody's business' -- whether it is the academic senate or the governing council, or even perhaps the institutional forum, it is crucial that good governance should be evident in South African higher education.

The following section discusses the concepts of Total Quality Management (TQM) and Conformance to Specifications in an attempt to show that higher education institutions in their totality require both these dimensions. This

theoretical framework is probed further in a section of the questionnaire in Chapter 6, and will further elucidate institutional perceptions on the principles of TQM in higher education.

3.5 TOTAL QUALITY MANAGEMENT (TQM) IN HIGHER EDUCATION

Over the past two decades two broad models of quality management and assurance have become dominant in quality circles, though it should be recognised that there are variations and adaptations of both models. These are the 'total quality management' (TQM) model and the various 'conformance to specifications' models such as the British Standards Institute System (BS5750) or the ISO range of systems. The higher education environment is continuously confronted by the challenges of threats and opportunities; and higher education institutions defining their worlds in terms of threats have a tendency of engaging in defensive actions, focusing largely on the preservation of the past (Keller, 1992: 48; Jalinec, Foster & Sauser, 1995: 107).

In contrast, institutions defining their worlds in terms of opportunities tend to focus on the future, carrying forward the best of the past and bringing the two together in innovative activities (Seymour, 1992: 24, 42-43). The principles and practices associated with total quality provide a framework consistent with the best existing practices in higher education, but one that allows a positive response to conditions in the environment, viewing them as opportunities, not as threats (Lewis and Smith, 1994: 6).

The starting point of TQM is quite different from the structural and instrumentalist approaches. TQM sees the objective of quality management and quality assurance as part of the process of managing a changing organisation, culture and environment and using change management to align the mission, culture and working conditions of an organisation in pursuit of

continued quality improvement (SABS, 1992:7). TQM thus views all the quality management processes as being specifically designed to constantly challenge an organisation's current practices and performance and thus to improve its inputs and outputs. Part of this objective, for example, entails assessing where and when internal obstacles occur, as it will be evidenced from the last part of the questionnaire responses in Chapter 6.

An essential element of the TQM model is that it is highly 'people-orientated', interactive and participative in outlook. It assumes that a quality culture is an integral and necessary part of an organisation, and that all line functions within an organisation are quality interfaces. This approach further assumes that all members of an organisation are responsible for quality assurance (maintenance and improvement) and thus that quality is not a centralised activity, but devolved to various functional and organisational levels.

According to Roberts (1995: 507- 508), "for implementation of total quality in an organisation, it is usually recommended that there be strong leadership from the top".

The idea is that the CEO (or other very senior managers) grasps the essentials of total quality; sees the desirability of applying them; has the technical knowledge and leadership skills needed to guide the deployment of total quality throughout the organisation; spends a substantial fraction of his or her time on total quality implementation. . . . a few of the applications of total quality to higher education start at or near the top, but many were initiated by that small scattering of faculty and staff quality champions who seem to be found on almost all campuses. The latter applications are referred to as 'grassroots' total quality by Roberts (1995: 507), and he argues that the top-down total quality is valuable when complemented by the grassroots total quality.

The need for such a complement is suggested by the fact that the leading total quality Japanese companies actively encourage and support top-down quality by two types of grassroots efforts, namely:

- quality control circles, or local teams, dedicated to quality improvement and the improvement of the working environment;
- massive suggestion systems, in which large numbers of employee suggestions are implemented each year (Roberts, 1995: 508).

3.5.1 THE PRINCIPLES OF TQM

The House of Quality framework is depicted by a simplistic approach to building a house. As with any house, the model and plans must first be drawn, usually with some outside help. Once the design has been approved, construction can begin. It usually begins with the mission, vision, values, and objectives, which form the cornerstones upon which to build for the future. The pillars representing the principles must be carefully constructed, well-positioned, and thoroughly understood, because the success of the total quality system is in the balance (Lewis and Smith, 1994: 38).

First, the creation of an appropriate climate within an organisation, particularly with regard to establishing a quality culture and empowering all members to participate in, and take responsibility for quality improvement. An aspect of this climate is the creation of a 'dissatisfied state', i.e., a state in which critical questions are constantly being asked about current inputs, processes, performance and outcomes. Likewise, this entails establishing a "constant, self-conscious process of research, analysis and measurement of needs, requirements and expectations, of feedback, of measurement of results, in order to improve what is done and how it is done" (SABS, 1994: 7).

Second, a customer orientation whereby customer requirements are agreed to, and customers are an integral part of delivery. Regular progress evaluations are carried out in all functions "against identified and where possible quantified [customer] needs, interests, requirements and expectations" (SABS, 1994: 8). The scheduling and timing of these evaluations need to also coincide with processes rather than be tail-end improvements and evaluations. In TQM the customer is both an internal and

external stakeholder and target group, and is the focus of all levels of an organisation's hierarchy.

The third principle is management by research, data and fact. This principle stresses the importance of objective information from which an organisation can generate an assessment. Emphasis is placed on statistical and quantitative research techniques to generate information. Surveys are also a common feature of TQM, but are used in the context of assisting fact-finding. Data generated is then analysed and translated into action plans, indicators, or objectives for improvement. These plans are then compared with previous plans, and improvement is quantified. What is useful about this research technique is that over time patterns do and can emerge that can be useful tools for measuring and predicting improvements. Managing with facts is important because people collect and use facts, providing a common framework for communication in order to understand what is being done and what needs to be done. Thus, not only does it provide a solid base of objective data upon which reliable decisions can be made, but it also contributes to empowerment of and respect for the people within the organisation (Lewis and Smith, 1994: 99).

Fourth, having a people-based and participative management philosophy which stresses 'joint problem- solving, looking for improvement opportunities and teamwork. In essence, according to the SAQA discussion group (25 May 2000) "it must give all stakeholders a role in and a sense of ownership over the quality management process". This entails developing a participatory and inclusive management style and procedures as well as inculcating democratic quality culture and practices.

Fifthly, continuous quality improvement is the ongoing objective of TQM and stresses that an institution must remain cognisant of its purpose to strive for improvement. This allows an organisation to allocate and direct resources to the plans, deeds, checks and actions. "The process for continuous improvement, first advanced many years ago by Shewhart (1931) and implemented by Deming, as discussed earlier in this chapter, is *Plan, Do,*

Check, and Act (PDCA)", a never-ending cycle of improvement that occurs in all phases of the organisation (e.g. admissions, registrations, student affairs, academic programming, maintenance, etc.) (Lewis and Smith, 1994: 95). "This principle is also applicable to internal and external processes and operations, to outcomes and products, and to administration and support as well as to technical or professional functions" (SAQA, 1999: 9).

3.5.2 THE HOUSE OF QUALITY

The metaphor used here to present the basic concepts and principles of total quality is the House of Quality as depicted in Figure 3.4 below. As in a properly constructed house, the major components are (1) the *roof*, or superstructure, consisting of the social, technical, and management systems; (2) the *four pillars* of customer satisfaction, continuous improvement, speaking with facts, and respect for people; (3) the *foundation* of four managerial levels; --- strategy, process, project, and task management; and (4) the *four cornerstones* of mission, vision, values, and goals and objectives (Lewis and Smith, 1994: 83). Total quality efforts frequently fail, according to Deming as cited by Tribus (1992: IV, 20), as a result of the management inability to carry out their responsibilities. They do not organise the importance of systems thinking, and do not have a well-defined purpose and process to follow. He continued to suggest the following ten management guidelines as part of the implementation process:

- (i) Recognise quality improvement as a system.
- (ii) Define it so others can organise it, too.
- (iii) Analyse its behaviour.
- (iv) Work with subordinates in improving the system.
- (v) Measure the quality of the system.
- (vi) Develop improvements in the quality of the system.
- (vii) Measure the gains in the quality, if any, and link these to customer delight and quality improvement.
- (viii) Take steps to guarantee holding the gains.

- (ix) Attempt to replicate the improvements into other areas of the organisation.
- (x) Tell others about the lessons learned.

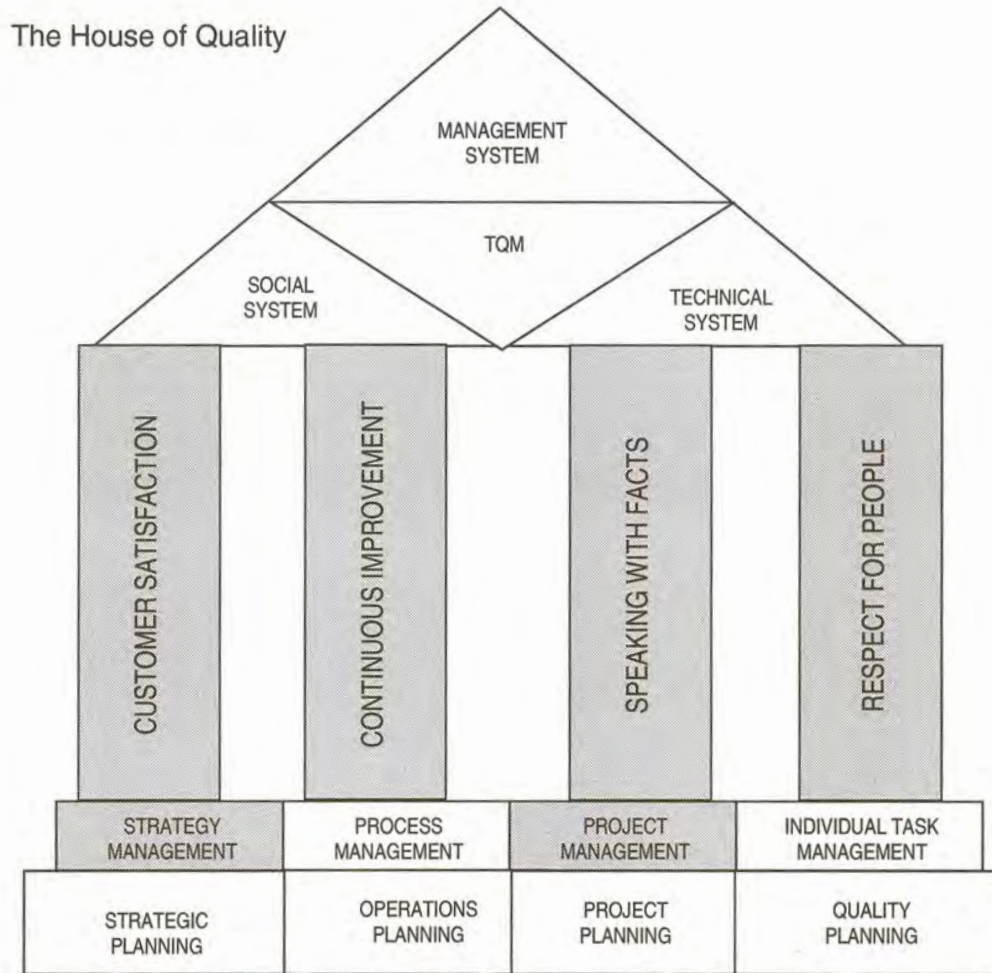


Figure 3.4 House of Total Quality.

These guidelines when implemented will assure success because of their impact on all aspects of the college or university. They are also reflected in the House of Quality, which illustrates the universality of the basic principles and procedures for carrying out total quality (Lewis and Smith, 1994: 84-85).

TQM is clearly a complex, time-consuming and arduous process that demands qualities and skills of leadership and staff lacking in most organisations. It can, therefore, not be seen as a "quick-fix" solution or strategy. It is the most comprehensive and analytical of the models, and is conceptually in line with the more fluid management style associated with market-driven and entrepreneurial organisations.

3.5.3 CONFORMANCE-TO-SPECIFICATION MODELS

In direct contrast to TQM is the range of conformance-to-specification models and systems, the most eminent of which are the BS and ISO (the international perspective of BS 5750 and ISO 9000, 9001-2 and ISO 14000 will be elaborated upon in this section) standards which consist of "a set of clearly defined clauses or characteristics and [describe] a basic set of elements for developing and implementing a quality management system" (SAQA, 1999:5).

The purpose of conformance model is to control each step or a production process so that products match technical specifications. In other words, the model specifies how an organisation's activities should be performing and working so that the output of the organisation is in line with its specifications (as determined by the organisation itself or by a customer).

Essential to this model is documentary evidence, which proves that such procedures have been followed and that quality has been achieved. Each step in the process is "tracked, described and made traceable ... and the documented procedures to be followed are set out in procedure manuals" (Strydom, 1993: 76). These procedure manuals described an organisation's systems, and form the basis of what is assessed. So, it is not the actual practices, input or output (or quality thereof) of an organisation which are assessed, but the conformance of an organisation's procedures to a standard and to a specification. Externally registered assessors who, naturally would have to inspect both the procedure manuals may drive this and various other documents related to these procedures to validate conformance. In short, the conformance to specification model is primarily concerned with meeting and

maintaining specifications, and not with improving these specifications. The main differences between the two models briefly described below can be summarised as follows:

TQM	Conformance to specifications
Is a holistic system that covers all input, output and process related activities within an institution. It also assesses these from an external and internal point of view and through creating internal and external relationships.	Is elemental in that it can be applied to discrete areas of activity, for example, a course of an examination.
Is market-driven, and the customer/learner is central in defining and assessing quality. This also implies that the criteria used to define quality are in a state of flux and negotiable.	From the outset the product is defined and specified. Only through changing the specification can the definition of quality be changed.
Internal and peer reviews drive assessment, though these are substantiated by fact-finding and data-gathering activities.	Assessment is done through third party validation and comparison of records and documents.

The following discussion elaborates on the conformance to specifications model of quality. The ISO 9000 and ISO 14000 are discussed below with the view to elaborate on the difference with other quality management systems such as TQM.

3.5.3.1 **QUALITY MANAGEMENT SYSTEMS: ISO 9000**

The question that is often asked is, 'What is ISO 9000?'. This simply refers to a series of quality management systems developed over a period of time. Sprow (1992: 73) defines it by referring to the literal meaning of *isos*, which is a shorter version of the Greek term for uniform, equal, or homogeneous. It is a deliberate transformation of the acronym for the International Organisation

for Standardization (IOS) (Lewis and Smith, 1994: 274- 275). ISO 9000 began with the launch of the Technical Committee 176 in 1979 to deal with generic quality principles -- the need for an international minimum standard for how manufacturing companies establish quality control methods, not only to control product quality, but to maintain its uniformity and predictability (Stewart et al, 1994, Rothery, 1993 as cited by Liston, 1997: 117).

A Quality Management System (QMS) constitutes a formal record of an organisation's method of managing the quality of its products and services. It enables the organisation to demonstrate to itself, its customers, and importantly to an independent accreditation body, that it has established an effective system for managing the quality of its products and services. Meeting accreditation standards permits the organisation to claim quality certification for its products and services and to advertise the fact (Beckford, 1998: 237).

The ISO 9000 series consists of two sets of documents, viz. ISO 9000, 9001, 9002 and 9003 which deals with quality assurance standards as the basis of assessment, and ISO 9004 which deals with quality management itself. Although the ISO 9000 series was particularly designed for the manufacturing industry, it is being increasingly used in the education sector, especially in the technikon sector in this country. Barton (1994) as cited by Liston (1997: 118) noted that quality systems standards do not prescribe the manner in which a system should be implemented in education and training. There is no indication of what the educational content, processes, norms or performance indicators should be. These, according to him, may be set externally by customers, government, and professional bodies, or internally. However, they do specify what activities need to be controlled, measured, and documented. Where applicable, competencies, performance indicators, standards, and benchmarks are to be identified. It must, however be borne in mind that each organisation would of necessity have its own focus, conceptual approach, creative procedures, administrative structure and method of operation.

Although ISO 9000 and its subsequent series are used successfully in industry, there are some limitations with regard to their general application in

higher education. Woodhouse (2000: 25) contends that ISO 9000 is one such system he personally would not recommend for higher education although it offers some useful ideas and structures.

A survey that has been conducted of the Curtin University in Australia in 1995 (Liston, 1997: 118- 120) suggested that there was little evidence of commitment to use ISO 9000 standards for education in the Australian higher education sector. Apparently this was as a result of little experience of competitive pressure from the education market. However, with an increasing focus on higher education, particularly in the Asia-western Pacific Region, and because of Australia's position in the region, direct competition has indeed become an issue.

Furthermore, as government funds dry up and fees increase, the worldwide trend to privatisation of the higher education makes education provision even more competitive (cf. Chapter 6 section 7a & b). This is a phenomenon that is particularly relevant as open and flexible learning packages. The use of multimedia and other learning technologies appears to attract clients or learners away from local providers, and thus make it incumbent upon universities to incorporate some form of quality management system in their offerings.

Integrating ISO 9001 Standards into a Total Quality Management system using criteria such as those for the Australian Quality Awards (AQA) or the Baldrige Awards in the USA will ensure that:

- the customers' needs and opinions are taken into account;
- a competitive strategy, including knowledge of the competition, is developed;
- the needs of the market are addressed;
- procedures (as simple as possible) to ensure quality performance are in place;
- performance measures are developed;
- processes are reviewed continuously to eliminate waste;
- effective communication is ensured; and

- evidence of continuous improvement is sought (Liston, 1997: 200).

These elements identified by a combination of the ISO 9001 and the TQM can be applied to the higher education setting in South Africa. The higher education reconfiguration requires the efficient and effective usage of resources and the attainment of quality with 'doing more with less'. Governing councils can, for instance develop performance measurements that will evaluate the performance of councils against certain benchmarking standards.

3.5.3.2 ISO 14000

A relative late- comer of the quality management systems is the ISO 14000 series of standards for Environmental Management Systems. It was launched in 1996 in response to the rising awareness of damage to the environment, and the need for a common set of standards that could be adopted by any organisation. The standards provide guidelines on the elements that an environmental management system should have and on the supporting technologies. The standards prescribe what should be done by an organisation, but not how (Beckford, 1998: 241).

ISO 14001 and ISO 14004 provide the specifications and general guidelines for the series and allow it to fulfil business needs, for any organisation, from general guidance to self-assessment and registration. Achievement of standards is claimed to lead to genuine business benefit with companies claiming process performance improvement, . . . and enhanced public image (Beckford, 1998: 241).

Although no significant link has been made with this series in relation to higher education, it could as well be applicable in certain training fields especially with respect to the relationship of technikon education and industry. According to the South African Breweries publication (1999: 6) "environmental management should be seen not as a separate initiative, but one similar to health and safety, which must be integrated into all business activities." The South African Bureau of Standards would inevitably assess the status against

the ISO 14001 system requirements, and award a certificate of the audit undertaken.

This dimension of quality could be adapted to higher education and the quality debates in as far as the assessment of the institutional climates and the promotion of quality would go. The systems theory of organisations according to Billing (1998: 149) moved the focus from the internal conditions of the organisation to relationships between the organisation and its environment. Similarly, when establishing quality management and assurance systems careful consideration should be given to the external influences that may promote or inhibit the effective functioning of these systems. External factors often cause internal reactions, which in themselves could prohibit the successful establishment and development of quality management systems (Fourie, 2000: 52).

Notwithstanding most education and training providers and institutions' theoretical and philosophical commitment to more inclusive, holistic and participative processes and policies, the same have practically adopted a conformance-to-specification model for quality management (Von Matzahn, 1993: 24). The conformance model as described has been somewhat adapted and added to by these providers, for example by encouraging more diverse reporting and accounting structures, allowing for a more interactive third-party assessment, and seeking to bring learners more firmly into the loop. However, day-to-day practices are still fairly traditional and predictable.

The debate about quality assurance and quality management models shifted dramatically in the last few years, none more so than in South Africa. The shift can be attributed to new pressures on education and training providers and institutions to become more responsive and accountable to broader socio-political demands; to balance their internal and external obligations and processes; to deliver on the demands of an increasingly global and competitive environment; to increase provisioning and access to education and training; and to create equivalencies to allow for the mobility of learners. These increased pressures and responsibilities have moved the debate away

from looking at ready-made quality management models to the development of models that are able to manage these new priorities, principles and strategies (Singh, 1999: 6).

For this reason, it has been argued by the South African Qualifications Authority (1994) that the 'new' quality management model must encapsulate the following fourteen elements, which can be read in conjunction with the Deming, Juran, Feigenbaum and Crosby's models in paragraph 3.5 below.

- It must be designed and targeted at learners and directed at improving their attainment of the necessary standards.
- It must seek to directly improve the quality of an institution's teaching and learning strategies. This means equally emphasising the outcome (output) of the educational experience as well as the process of attainment.
- It must be flexible and be able to adapt to ever changing demands and circumstances. This means moving away from rigid structures, procedures and bureaucracies and designing more responsive, manageable and creative strategies which devolve quality management and quality assurance responsibilities to a variety of levels, particularly to practitioners.
- It must give all stakeholders a role in and a sense of ownership over the quality management process. This entails developing a participatory and inclusive management style and procedures as well as inculcating democratic and quality culture and practices.
- It must directly and indirectly involve learners in the quality management process, creating a "feedback loop...and... a working relationship" between stakeholders at all levels and functions within the organisation.
- It must develop a system of measurement which proves progress and not simply outcomes or procedures.
- It must create collaborative partnerships, both internal and external to the provider and organisation.
- It must organise the diversity of delivery and teaching methods within institutions and providers. This entails creating quality systems, which integrate standards and monitor and ensure equivalencies.

- It must have an explicit purpose, which is both negotiated and agreed upon by stakeholders as well as being public and transparent.
- It must have internal capacity to follow up and improve on assessment and quality assurance results.
- It must allow for self-assessment, peer review and an external meta-evaluation capacity.
- It must be regular and cyclical. Quality management is not an event, but linked to ongoing processes which seek enhancement and improvement.
- It must result in a formal and documented analysis, which is translated into a clear plan of action for which the institution is accountable.
- It must involve both horizontal and vertical audits, participation and accountability.

What is clear from this list is that elements of both the TQM and conformance-to-specifications models are simultaneously identified as important components of quality management systems. This suggests that an integrated model needs to be developed.

One such model, according to the New Zealand Qualifications Authority, is the wheel-and-wedge model. In this model the wheel represents the participative management systems which need to be developed in a quality management model so that all staff are given the opportunity to participate in and contribute to ongoing improvement. On the other hand, the wedge represents the documented system that ensures that standardised current best practice is used, until this definition of best practice is changed. However, the wheel and wedge model, though combining the two dominant models, does not go far enough in satisfying most of the broader concerns and challenges of the above list. What the wheel-and-wedge model argues for is a technical integration of models (Woodhouse as cited by Brennan, *et. al.*, 1997: 68-70).

Simply arguing that TQM is about participation, and that conformance to specifications is about documented standards, misses the point about each model. Most essentially, TQM is about the nature of change and the internal

and external relationships an organisation develops to determine and manage such change; it is a philosophical concept that embraces change and transformation. By contrast, conformance-to-specification models are about measuring defined and static procedures, the antithesis of the change point of view. Thus, to combine (at an operational level) a commitment to quality improvement and participation with a fully-fledged, documented and accountable system is an important step, but not in itself sufficient to be located within the TQM paradigm (Whitford and Bird, 1996: 8).

Ultimately, the new model that needs to emerge has to balance the challenges of accountability (internal and external), improvement, and participation, which are at the heart of the challenges confronting education and training institutions the world over. However, simply accommodating these “pillars” in a technical and procedural manner, as the wheel and wedge model does, is problematic. Rather, institutions need to locate their integrated and combined quality management strategy within a new paradigm of transformation and change.

3.5.4 ANALYSING TQM AND CONFORMANCE TO SPECIFICATIONS PERSPECTIVES

The discussion of the principles of TQM point to the need to managing institutions that are undergoing change as it is the case in the South African higher education scenario. Institutions of higher learning are being called upon to review their missions and purposes in line with the reconfiguration agenda. The period after 1997 has been characterised by many challenges such as the 'three- year rolling plans', 'size and shape', changing the funding formula, the establishment of the Higher Education Quality Committee, the publishing of the National Plan as well as the National Working Group recommendations on the future higher education landscape. All of these challenges point to the need for institutional governance structures to take the lead in managing the change described above.

In relation to the conformance to rules or specifications, institutions of higher learning have been faced with a myriad of pieces of legislation and policy documents from the Department of Education, fresh reporting procedures, and the need to be responsive to the needs of society. Governance structures, without exception, are expected to promote good practice regardless of their past historical deficiencies.

Another point made by the TQM perspective is that all members at all levels of an institution are responsible for quality assurance. In the context of the research question, governing councils, senates, students' representative bodies as well as the institutional forums are all supposed to be engaged in the management, maintenance, control, monitoring and enhancement of quality in their institutions. Collective involvement could lead to ownership of the strategic direction an institution is destined to pursue.

It is incumbent upon institutional governance structures to foster a climate that is conducive to the attainment of the goals set by the institution. The creation of the culture of participatory decision making is another structural challenge faced by uneven South African higher education institutions. The TQM model is open and progressive in the manner that institutional governance structures are expected to be transparent and progressive in their endeavour to influence quality assurance mechanisms. Although the conformance to specifications model is conservative in its approach, certain elements of it are necessary such as sticking to rules, allocated budgets and relying on records to mention a few. A case in point of the model is the conformance to the stipulations of the Higher Education Act of 1997 and its Amendments that appear to be on-going.

A pertinent question that could be posed in relation to the research question is: 'Do these contrasting perspectives on quality point to the need for different quality assurance structures and mechanisms?'

Although the legislation governing higher education is clear about the equality of institutions, there is a need for the system to recognise the inherent

differences in approaches at institutional levels. There are competing discourses on the notions of quality and institutional quality management. Ideally, institutions would like to follow the TQM perspective, so the question becomes, 'Is it practical to have this quality management perspective in all its dimensions?' The answer could be neither here nor there since institutions have their preferences. This issue is taken further in response to the questionnaire in Chapter 6. This analysis attests to the influence that is positive, but different from the HDI-HAI perspective.

The following section summarises the characteristics of quality assurance and management planning in higher education. The South African higher education system is no exception in that the work of the quality 'gurus' (cf. 3.6), the input of SAQA, and the TQM principles/concepts all concur that "quality is everybody's business" although there are structures held responsible for quality enhancement.

3.6 CHARACTERISTICS OF THE QUALITY ASSURANCE AND MANAGEMENT PLANNING IN HIGHER EDUCATION

1. Deming's 14 points	2. Juran's ten steps	3. Feigenbaum's ten Benchmarks	4. Crosby's 14 steps	5. Peter's 12 attributes	6. SAQA's 14 elements	7. Kells's nine propositions	8. TQM concepts, principles and characteristics
1.1 Create constancy of purpose to improve product and service	2.1 Build awareness of the need and the opportunity for improvement	3.1 Quality is a company-wide process	4.1 Make it clear that management is committed to quality	5.1 Management obsession with quality – practical action backed up by emotional commitment	6.1 It must be designed and targeted at learners and directed at improving their attainment of the necessary standards	<u>Primary attributes</u> 7.1 Purpose of the process (improvement, public assurance and rationalization)	<u>Concepts</u> 8.1 A clear customer focus to satisfy the needs and expectations of the customers and the chosen target group
1.2 Adopt new philosophy for new economic age by management learning responsibilities and taking leadership for change	2.2 Set goals for improvement	3.2 Quality is what the customer says it is	4.2 Form quality improvement teams with senior representatives from each department	5.2 Passionate systems – failure will occur if there is a system without passion or vice versa, and an ideology is important, though not one necessarily based on a particular guru	6.2 Directly improve the quality of an institution's teaching and learning strategies. This means equally emphasizing the outcome (output) of the educational experience as well as the process of attainment.	7.2 Source or initiator (individual or group of institutions, government)	8.2 TQM requires continuous improvement in everything an organisation does.

<p>1.3 Cease dependence on inspection to achieve quality; eliminate the need for mass inspection by building quality into the product.</p>	<p>2.3 Organise to reach the goals (establish a quality council, identify problems, select projects, appoint teams, designate facilitators)</p>	<p>3.3 Quality and cost are a sum, not a difference.</p>	<p>4.3 Measure processes to determine where current and potential quality problems lie.</p>	<p>5.3 Ensurance of quality – this should be a feature from the start, enacted by everybody and the result of it widely displayed.</p>	<p>6.3 It must be flexible and be able to adapt to everchanging demands and circumstances. This means moving away from rigid structures, procedures and bureaucracies and designing more responsive, manageable and creative strategies which devolve quality management and quality assurance responsibilities to a variety of levels, particularly to practitioners.</p>	<p>7.3 Framework for judgements (stated intentions, peer opinions, norms and comparisons)</p>	<p>8.3 Quality assurance of internal processes (This implies that the standards are set, procedures to achieve them are defined, and adherence to these is guaranteed, problems occurring are remedied in a systematic way.)</p>
<p>1.4 End awarding business on price, instead minimize total cost and move towards single suppliers for items.</p>	<p>2.4 Give recognition.</p>	<p>3.4 Quality is an ethic</p>	<p>4.4 Establish progress monitoring for the improvement process</p>	<p>5.4 Small is beautiful – there is significance in every change and no such thing as a small</p>	<p>6.4 It must give all stakeholders a role in and a sense of ownership over the quality management</p>	<p>7.4 Focus or unit of analysis (entire institutions, institution-wide issues, services, academic</p>	<p>8.4 Process orientation (the final quality of a product or service depends on all preceding processes)</p>

				improvement.	process. This entails developing a participatory and inclusive management style and procedures as well as inculcating democratic and quality culture and practices.	programmes or departments [all aspects or teaching only] projects, people)	
1.5 Improve constantly and forever the system of production and service to improve quality and productivity and to decrease costs	2.5 Communicate results	3.5 Quality requires continuous improvement	4.5 Train supervisors to actively carry out their part of the quality improvement programme	5.5 Create endless 'Hawthorne' effects – new events are the antidote to the doldrums or flagging interest in quality	6.5 It must directly and indirectly involve learners in the quality management process, creating a feedback loop and a working relationship between stakeholders at all levels and functions within the organisation	7.5 Primary procedure(s) (self-evaluation process, external peer review process, indicators, ratings, published rankings)	8.5 Prevention instead of inspection to achieve quality. Through adequate prevention measures (appropriate design, decent planning, targeted training, adequate equipment, effective communication, etc.) less quality errors will occur, customers will be more satisfied, and less inspections and control will be needed.

<p>1.6 Institute training on the job</p>	<p>2.6 Keep score</p>	<p>3.6 Quality is the most cost-effective, least capital-intensive route to productivity.</p>	<p>4.6 Hold a zero defects day to let everyone realize that there has been a change and to reaffirm management commitment.</p>	<p>5.6 Parallel organisational structure devoted to quality improvement – this describes the creation of shadow quality teams and emphasizes that it is a route through which hourly paid workers can progress.</p>	<p>6.6 It must develop a system of measurement which proves progress and not simply outcomes or procedures.</p>	<p><u>International propositions</u> 7.6 There is a fairly strong relationship between the national cultural attributes (power distance; uncertainty avoidance; masculinity/femininity; individualism/collectivism) of a country and the type of national evaluation system one can and should build there.</p>	<p><u>Operational principles</u> 8.6 Management leadership and commitment. The driving force behind any TQM approach must be the commitment, vision and exemplary leadership of the senior management, which should be carried down to every level of management within the organisation.</p>
<p>1.7 Institute leadership; supervision should be to help to do a better job; overhaul supervision of management and production workers.</p>	<p>2.7 Provide training</p>	<p>3.7 Quality requires both individual and team zealots</p>	<p>4.7 Evaluate the cost of quality and explain its use as a management tool.</p>	<p>5.7 Quality is rewarded – recognizing quality achievement with tangible rewards provides the incentive to bring about breakthroughs in attitude.</p>	<p>6.7 It must create collaborative partnerships, both internal and external to the provider and the organisation.</p>	<p>7.7 National circumstances (size; complexity; diversity and the like)</p>	<p>8.7 TQM requires teamwork and effective TQM strategies.</p>

<p>1.8 Drive out fear so that all may work effectively for the organisation.</p>	<p>2.8 Carry out projects to solve problems.</p>	<p>3.8 Quality is a way of managing.</p>	<p>4.8 Raise the quality awareness and personal concern of all employees.</p>	<p>5.8 Everyone is trained for quality – extensive training should apply to all in the company, and this should encompass construction in cause and effect analysis, statistical process control, and group interaction.</p>	<p>6.8 It must organise the diversity of delivery and teaching methods within institutions and providers. This entails creating quality systems which integrate standards and monitor and ensure equivalencies.</p>	<p>7.8 The relative influence of national circumstances and the national cultural attributes are probably as follows: the circumstances affect the initial statement of purposes, the unit of analysis, the size of the evaluation scheme, the relationship to matters of national reform and whether a phased development of the system is needed.</p>	<p>8.8 Quality is everyones job (involvement of all employees at all levels and in all departments).</p>
<p>1.9 Break down barriers between departments; research, design, sales and production must work together to foresee problems in production and use.</p>	<p>2.9 Report progress.</p>	<p>3.9 Quality and innovation are mutually dependent.</p>	<p>4.9 Take actions to correct problems identified through previous steps.</p>	<p>5.9 Multifunction teams – teams which span the traditional organisational structures should be introduced; quality circles or, to be more recommended,</p>	<p>6.9 It must have an explicit purpose which is both negotiated and agreed upon by stakeholders as well as being public and transparent.</p>	<p>7.9 The wider the range of apparent quality and the diversity in the higher education system, the more there is a profound need for a national regulation system.</p>	<p>8.9 Focus on facts. Discussions and decisions on activities and resources allocations should be based on reliable and relevant information.</p>

				cross-functional teams such as error cause removal or corrective action teams.			
<p>1.10 Eliminate slogans, exhortations, and numerical targets for the workforce, such as zero defects or new productivity levels. Such exhortations are divisive, as the bulk of the problems belong to the system and are beyond the power of the workforce.</p>	<p>2.10 Maintain momentum by making annual improvement part of the regular systems and processes of the company.</p>	<p>3.10 Quality is implemented with a total system connected with customers and suppliers.</p>	<p>4.10 Encourage individuals to establish improvement goals for themselves and their groups.</p>	<p>5.10 Everyone is involved – the quality process is comprehensive, embracing suppliers, distributors and customers.</p>	<p>6.10 It must have internal capacity to follow up and improve on assessment and quality assurance results.</p>	<p>7.10 The larger the set of basic, systematic problems in a country or in a given institution, the more important it is to implement countrywide or institution-wide reforms in these areas (often, support levels; credentialed staff and other human resource issues; capital and other related investments) before, or at least during, the development of a national evaluation scheme.</p>	<p>8.10 TQM is based on systematic problem-solving.</p>

<p>1.11 Eliminate quotas or work standards, and management by objectives or numerical goals; substitute leadership.</p>			<p>4.11 Encourage individuals to communicate to management the obstacles they face in attaining their improvement goals.</p>	<p>5.11 When quality goes up, costs go down – quality improvement is the primary source of cost reduction. The elementary force at work is simplification of design, process or procedures.</p>	<p>6.11 It must allow for self-assessment, peer review and an external meta-evaluation capacity.</p>	<p>7.11 The lower the level of the culture of evaluation in a national system or in an institution, the more important it is to operate with an “experimental” learn-by-doing and protected period, before attempting to implement some evaluation scheme across the system.</p>	<p><u>Implementation characteristics</u> 8.11 The formulation of a clear vision and mission statement.</p>
<p>1.12 Remove barriers that rob people of their right to pride or workmanship; hourly workers, management and engineering; eliminate annual or merit ratings and management by objective.</p>			<p>4.12 Recognise and appreciate those who participate.</p>	<p>5.12 Quality improvement is a never-ending journey – all quality is relative, it does not stand still.</p>	<p>6.12 It must be regular and cyclical. Quality management is not an event, but linked to ongoing processes which seek enhancement and improvement.</p>	<p>7.12 In most settings it is important to have the national system encourage institutions to move marginal resources to pay for the evaluation scheme and the recommended improvements.</p>	<p>8.12 The establishment of a quality manual, which describes the organisation, its policy, its key processes and the responsibility and authority of the staff.</p>

<p>1.13 Institute a vigorous education and self-improvement programme.</p>			<p>4.13 Establish quality councils to communicate on a regular basis.</p>		<p>6.13 It must result in a formal and documented analysis which is translated into a clear plan of action for which the institution is accountable.</p>	<p>7.13 In most countries, although it is certainly more possible in some than in others (due to cultural factors), in the long run, the heart of the evaluation culture and the evaluation systems must be owned by, designed by and conducted by institutions and they must be internal to the institutions.</p>	<p>8.13 Systemic training of staff throughout the system.</p>
<p>1.14 Put everyone in the company to work to accomplish the transformation</p>			<p>4.14 Do it all over again to emphasise that the quality improvement programme never ends.</p>		<p>6.14 It must involve both horizontal and vertical audits, participation and accountability.</p>	<p>7.14 Cultural influences or evaluation processes may also be started in such propositional format.</p>	<p>8.14 Decision-making is delegated to the lowest possible level.</p>
							<p>8.15 Customers are asked for feedback.</p>

(Kells, 1995:18-25; Kells, 1999:209-232; Liston, 1999:11-16; SAQA, 2000:10-11; Van den Berghe, 1996:10-13 and Strydom & Van der Westhuizen, 2001:86-91).

3.7 CONCLUSION

This chapter has examined in detail the origin of the quality movement essentially from the 1940s. A number of intellectuals, commonly known as the quality 'gurus' provided some insights aimed at enriching our understanding of the dynamics of the quality movement and how it impacts on higher education governance transformation and quality. Additionally, it provides a perspective of how, from the structural transformation and reconfiguration of the higher education system in this country, we can be able to utilise the best practice principles and further improve on them in our context.

What stands out in this chapter is that quality is a relative concept, sometimes referred to as elusive. It is also something that needs to be improved continuously. It is a phenomenon that needs to be shared across the institution or organisation [by stakeholders] for the benefit of the institution. It has also been useful to examine the issue of standards in conjunction with quality because these notions are not mutually exclusive regardless of whether it is in the academia or service industry.

The principles underpinning the Total Quality Management or Continuous Quality Improvement summed up the theme in relation to the elements identified by SAQA in pursuit of acceptable quality management systems for providers of education in this country. This connection brings about the perspective of the research question in that governance structures have to tap on the quality principles available and apply them in their institutional setting for purposes of quality enhancement.

The next chapter will compare the higher education models of selected countries (notably New Zealand, Australia the United Kingdom, and to a limited extent case studies from the United States of America) and zoom in on the implications of

international comparisons in South Africa.