CHAPTER 4:
SERVICE QUALITY AND TOTAL QUALITY MANAGEMENT

4.1 Introduction

In the previous chapters concepts like marketing, relationship marketing, customer relations management, customer experience management, customer satisfaction and loyalty were discussed in detail. Grönroos (1994:352) identified relationship building and management as very important cornerstones of marketing. Some attention has been given to the building of relationships in the previous chapter, but not to management in general. Just as with any business-related aspect, the basic principles of management apply to quality and therefore it must be managed.

It is imperative to recognize that there should be a close link between marketing, customer service and service quality, as stated by Christopher *et al.* (2002:4). Koenig-Lewis *et al.* (2008:71) reported that these terms are sometimes used interchangeably and are very closely related. Kotler *et al.* (2001:10) argued that customer satisfaction is closely linked to quality, while Aldridge *et al.* (1998:200) warned that quality and satisfaction is not exactly the same concept. They contended that satisfaction is more linked to an individual transaction, while quality is a general approach.

It is therefore clear that this interaction indicates that the interrelatedness of these concepts is vital to study and understand the consequences if a specific concept is neglected and prerequisite to ensure a positive effect between it, which should be beneficial to all stakeholders.

No service quality management process can be successful without the active involvement of dedicated staff. Srikanthan *et al.* (2004:277) claimed that effective quality management requires the “collective intelligence and commitment of many people” in an organization. This aspect, including the creation of cultural changes will be discussed in this chapter.

On the most basic and fundamental level, Vassallo (2003:405) correctly points out that when customers pay for a service, they expect a certain level of quality. That forms part of the transaction and is a given. Customers will not necessarily remind the service provider of this key principle, but will most likely raise the issue should they experience any sub-standard or problematic service level. This will then lead to a reactive approach or service recovery interactions, which is not the ideal. Therefore managers must constantly remind their front-line staff of this very basic but crucial concept.

It is therefore important that this chapter should be dedicated to investigate these related concepts and indicate the common grounds, differences and possible applications in the HEI environment.

4.1.1 The difference between product quality and service quality

Earlier literature about quality only referred to product quality. In his classic study Levitt (1972:41) still denies the existence of service quality as a separate concept and argues that "there are only industries whose service components are greater or less than those of other industries". On the other hand, Rathmell (1966:32) earlier observed that marketing had a "strong goods orientation", although services represented 30-40% of economic activities at that stage already. Blois *et al.* (2000:3) agree that Rathmell should be credited for the emergence of services as a separate entity.

The service quality sub-discipline only became more relevant during the mid-1980s, as reported by Clewes (2003:70). As this study is focused on the administrative environment at the NWU, which can be considered as a services environment, it will not elaborate on the product quality. Slade *et al.* (2000:1197) reported that the services industry is a fast growing part of most economies and that competition in this sector is growing rapidly.

Yeo (2008a:267) argues that HEIs can be seen as part of the service industry, and that most HEIs strive to retain students and seize the educational market. It also shares the same complexity as is the case in the service sector. This approach is supported and forms part of the major arguments of this study.

4.2 Quality

There are several derivatives for the term "quality", including quality assurance, quality control, quality management, quality audit and quality enhancement, as pointed out by Abdous (2009:281). For clarity-purposes in this study the focus will remain on the all-inclusive term "quality".

Lagrosen *et al.* (2004:61) stated that it is vital to study the meaning of quality management for the specific situation it is applied to. In this literature review the generic principles will be considered, as well as the specific applications and meanings in the HEI environment.

In another later study Lagrosen *et al.* (2006:84) considered quality management as an ever-present routine in modern business and warned that it should not be seen as just a number of techniques or methods, but that several features needs to be taken into consideration to utilize it successfully. They also claimed that quality management has grown from some simple control procedures into a system of improvement that involves the entire organization. It is therefore clear that the management of quality is not the sole responsibility of the quality office or marketing department, as will be motivated in more detail below.

Quality management processes address the issue of a product or service non-conformance, according to Lomas (2004:158). It follows an approach of trying to prevent poor products or services from being produced in the first place by focusing on processes and emphasizing prevention rather than cure. This pro-active approach will not only be more cost-effective, but also renders higher levels of customer satisfaction and loyalty, because of the first positive experience of the customer.

Becket *et al.* (2008:40) warned that there is not yet agreement on the best quality management and measurement approaches, and different stakeholders hold diverse opinions on the meaning of the concept, as will be shown and discussed in this chapter.

Firstly the term *quality* needs to be defined by looking at the different descriptions that exist in the literature for it. This should provide a more comprehensive background, as well as the link between the term *quality* and previously discussed concepts like marketing, relationship marketing, customer relations management, customer experience management, customer satisfaction and loyalty.

4.2.1 Definition of quality

The word *quality* has been derived from the Latin word *qualis*, which can be literarily translated to "what kind of", as stated by Sahney *et al.* (2004:145). It is therefore not surprising that there are so many different interpretations of its true meaning and definition. They further described it as a "slippery" term, and confirmed its meaning will depend on the situation, its application and the specific measures used. Vidovich (2002:391) also reports that the term "quality assurance" is a complex term in the literature, and different viewpoints are often challenged.

According to Kotler *et al.* (2001:10) quality in its most basic form can be defined as "freedom from defects". Most customer-centric companies, however, go beyond this simplistic view and define it in terms of customer satisfaction, which is more appropriate.

Lagrosen *et al.* (2004:61) admitted that quality is one of the many concepts in the social sciences that are extremely difficult to define, and found in their literature review five major groups, namely:

- Transcendent definitions (subjective and personal)
- Product-based definitions (measurable)
- User-based definitions (customer satisfaction)
- Manufacturing-based definitions (conformance to specifications)
- Value-based definitions (in relation to costs)

This study supports the transcendent, user-based and value-based approaches towards quality management, as the other two are more applicable in the production-environment.

According to Abdous (2009:283) the lack of clarity about the concept of quality is cultivated and encouraged by the diverse perspectives of the different groups of stakeholders. This is also true in the HEI environment, where different groups of stakeholders (discussed earlier) will expect and demand different quality-related outcomes from the University they are involved with. It is a major challenge to ensure that these diverse requirements are determined and established whether it can be met in a fashion that is affordable, logical, practical and also beneficial for the University. If it cannot be addressed, a communication strategy should be drawn up to inform the relevant stakeholders on the reasons why their demands cannot be met.

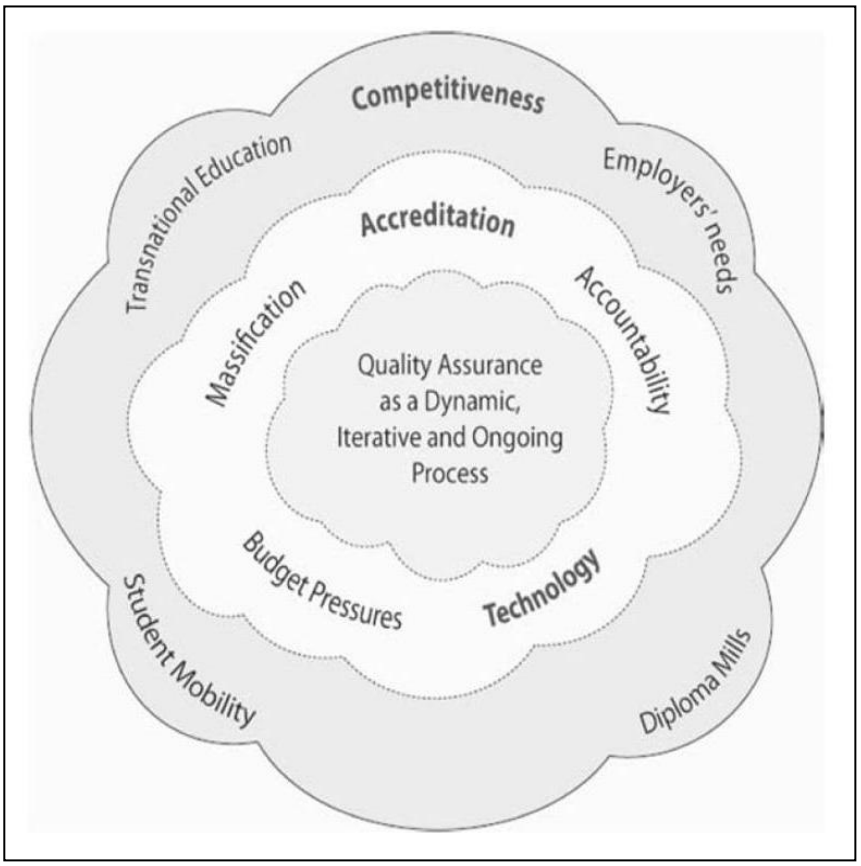
4.2.2 Levels of quality management

There are three separate layers of quality management (in increasing involvedness) according to Lagrosen *et al.* (2006:85):

- The lowest level consists of a series of practical tools and techniques.
- More comprehensive models and systems
- Values are the most important part of quality management and at the highest level.

Another model proposed refers to the different layers to illustrate the factors affecting quality assurance in a HEI environment.

Figure 4.1: Situational factors affecting quality



Source: Abdous (2009:284)

This model implies that quality is a central value of any organization, which is embedded in its daily operations. Factors like technological and financial constraints can affect it closely, while issues like the needs of employees, the nature of competition and the mobility of students can also have an effect on the outer layer.

In order to lay a proper theoretical basis for the understanding of quality management, it is necessary to focus on the different practices reported in the literature to manage quality more effectively.

4.2.3 Quality management initiatives and techniques

Roca-Puig *et al.* (2006:1112) distinguish between two aspects in the quality management framework:

- Technical aspects have a more operational focus, and deal with data systems and management
- Cultural or social aspects are more focused on the human and social side and will entail human resource and change management issues.

There are some resemblances between this and the two types of CRM-approaches (*hard* and *soft*) referred to earlier. Neither of these aspects is wrong or right, but each represents a vital part of a total approach needed to obtain success.

A similar approach is followed by Oldfield *et al.* (2000:86) when they refer to three dimensions of SQ, namely:

- Service processes
- Interpersonal factors
- Physical evidence

These factors are visible and also measurable in the SQ-environment and can be managed to ensure a pleasant service experience for customers.

According to Lagrosen *et al.* (2006:88) quality management techniques are the most tangible quality management tools and list the following ones:

- Quality circles started in Japan in the early 1990's and consist of small groups of employees who carry out quality control activities within the same workshop.
- Flow charting is considered as the most commonly used quality tool and closely related to the value process orientation. It is also referred to as service systems blueprinting or service mapping.
- Quality function deployment consists of a matrix (called the quality house) which provides an overview of the association between customer wants and product characteristics.
- Statistical process control involves the identification of processes and the clarification of its contents, followed by the defining of the desired results.
- Failure mode and effect analysis are techniques to identify and prevent possible errors.
- Poka-Yoke is another technique to prevent errors in the production process.
- Taguchi-methods strive to assess, improve and maintain quality in a cost-effective way.

It is important to realize the there are several techniques available in the marketplace that will assist managers to drive and improve their quality management initiatives. It is therefore important that they should be aware of this, be able to identify the most appropriate, effective and affordable techniques, implement and mage it by continuously evaluating to results and effects of such a technique. Managers should also strive to be consistent and not be allowed to be unnecessarily influenced by untested and unproven new tendencies, as it can

confluence the staff if there are frequent changes in the quality management techniques and approached used.

Choon Boey Lim (2008:135) investigated the implementation of quality policies at HEIs in Malaysia and found the several staff members were not aware of these policies, due to miscommunication and a lack of understanding of the policies. The study recommended that HEIs should further be cautious not to just focus on the outputs and implement the policies in a clumsy way.

Another vital and related component of the quality-environment that needs to be elaborated on, is the cost element linked to the management of quality processes, which can exist at all levels of quality management.

4.2.4 The cost of quality

It can be expected that there will be direct and indirect costs related to the implementation and execution of quality practices in any organization, which have to be taken into consideration. It should however not just be seen as a cost element, but rather as an investment in loyal customers that will benefit the organization over a longer and sustainable period of time.

Krishnan *et al.* (2000:844) referred to the American Society for Quality Control's definition of quality cost as follows: "It is a measure of costs specifically associated with the achievement or non-achievement of product or service quality, as defined by all product or service requirements established by the company and its contracts and society". This underlines the important concept that a mere investment in quality initiatives is no guarantee that the aims will be achieved. It is still vital that the quality initiatives need to be realistic, affordable, in line with the company' general mission and vision; and that constant managerial control mechanisms are needed to monitor the progress and positive outcomes.

The comparison of poor quality to the "tip of an ice berg" was done by Bartholomew (2001:40) and he warns that it affects the customers' future buying patterns. He recommends that companies should not consider cutting back on quality costs when they have to reduce their expenses, as it can have a lasting and negative effect.

4.3 Service quality (SQ)

The initial emphasis of quality management was focused for many years on product quality, as has been reported by Levitt (1972:41). Service quality (SQ) is a more recent concept, but widely accepted and implemented, as confirmed by Gi-Du Kang *et al.* (2004:266). There are still numerous challenges and disagreements about this relatively new concept. However, Abdullah (2005:305) reported that SQ has been linked to an increase in profitability and therefore considered as a vital approach to ensure a competitive edge over competitors.

This was made possible due to loyal customers committing to repeat purchases and spreading positive word-of-mouth referrals, all concepts that have been discussed in previous chapters and supported in principle.

In a later paper Abdullah (2006b:71) states that SQ is the most dominant competitive trend influencing marketing and business strategies worldwide and "a pervasive strategic force and key strategic issue". This strong statement is a useful indication of the relative importance of SQ as a new focus-area for all industries and also underlines the importance of accurately measuring SQ-levels, developing methods to improve on it, and creating more loyal customers in the process.

Paswan *et al.* (2007:76) argued that service tends to be vague and very difficult to evaluate in terms of quality, especially before purchase and consumption. This concern will be addressed later in more detail.

The concept of service marketing originated in the early 1970s, according to Grönroos (1994:352) and led to more research in Scandinavia and Finland, including work of the Nordic School of Services.

4.3.1 Definition of service quality

The word *service* has an important value and variety of meaning, according to Abdullah (2006a:571), which poses challenges drawing up a generic viewpoint of SQ.

Douglas *et al.* (2008:21) attempted to define SQ by stating that it is an attitudinal type which is related to customer satisfaction, but not equal to it. They admitted that there is no consensus between academics about the relationship between these two concepts, as has been argued before. They further referred to the relationship with customer loyalty, another construct already discussed, and states that service providers will strive to establish loyalty to ensure an increase in earnings or sustain its market share at minimum.

Abdullah (2005:307) and Abdullah (2006a:571) describes SQ as a general judgment approach about service supremacy, but admits that its exact nature is still vague and needs to be investigated further.

4.3.2 Characteristics of service

In order to comprehend the concept of SQ better, it is necessary to focus on the unique characteristics of service as a notion. In his historical work Rathmell (1966:32) admitted that there is not a clear understanding of the service concept.

According to Dimitriades (2006:784) and Brochado (2009:175) there are four characteristics of service:

- Service is intangible – it cannot be seen or touched.

- The service consumer cannot be separated from the service provider
- Services are different each time they are performed
- If a service is not consumed, it disappears.

This is partially challenged by Oldfield *et al.* (2000:87), who argue that service can be tangible in the sense that the experience can be realistic enough to meet the description of "feeling and touching it" and states that there are several tangible elements associated within the service environment.

Blois *et al.* (2000:4) follow a different approach and argue that services are processes and therefore the consumption is parallel to this process (and can thus not be separated from the process); and that the consumer participates in the service process and thus impacts on the development and outcome of the process. This approach shows a resemblance with the "student as a co-product of the education process" that was discussed earlier. It also illustrates the impact and involvement of the customer throughout the service interaction.

It has been argued before that it is necessary to ensure that sufficient SQ-levels are created in order to satisfy customers and improve their loyalty. This is confirmed by Castro *et al.* (2004:33), who mention two important benefits of providing an excellent service:

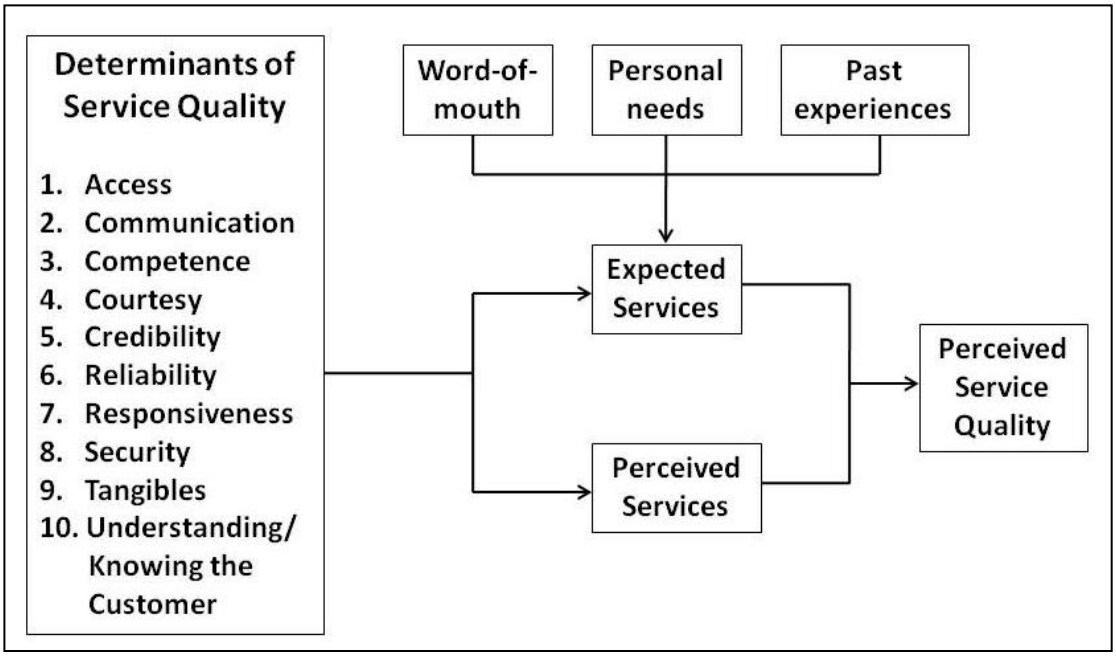
- "Such service generates positive customer perception of the company.
- Excellent service has a significant effect on overall company performance."

Other benefits, like positive word-of-mouth references, customer advocacy and –retention, as cost savings on marketing efforts to obtain new customers, have already been mentioned and discussed in Chapter 2 (paragraphs 2.3.4, 2.4.3, 2.4.6, 2.4.8 & 2.5.2).

4.3.3 Perceived service quality and desired levels

It has been argued that the SQ-levels that students experience will either positively or negatively affect their satisfaction and loyalty levels. Customers use their own framework, experiences and perceptions to judge the SQ-levels delivered and decide on their desired levels. Figure 4.2 (from the classic Parasuraman-study) illustrates the interaction between the different involved constructs clearly:

Figure 4.2: Determinants of perceived service quality



Source: Parasuraman *et al.* (1985:48)

All the above dimensions can be applied in the HEI quality management environment, as students will also enrol with a specific perception on the academic and administrative support levels they are expecting, which may have been formed by former students' references, their own needs and own past experiences. The ten determinants of SQ are also relevant to the HEI environment (tangibles refer to facilities and equipment) and should be applied on a continuous basis by staff.

SQ is directly related to the marketing concept, as the customer will evaluate and measure their perceived service quality against what was promised to them. Popli (2005:18) confirms this when stating the most effective way to measure quality, is to determine whether the customers are satisfied. It implies that the determination of the required SQ-levels does not need to be a very complicated process.

Lagrosen *et al.* (2006:89) therefore warned that marketing messages should be appealing, but still be credible and accurate. Companies, including Universities, must be cautious not to create unrealistic expectations, as it might cause more harm eventually if a dissatisfied customer distributes negative word-of-mouth messages.

It is important to realize that every stakeholder in HE (students, government, professional bodies) has a particular view of quality depending on their specific needs, as pointed out by Voss *et al.* (2007:950). Gutman *et al.* (2003:105) also stated that the service delivery has to live up to the service promises.

Parasuraman (2006:591) later confirmed that achieving 100% service consistency will be impossible and too costly, but that organizations must still endeavour to deliver excellent service levels. He stated that the greater service consistency an organization can achieve, the greater is the ability to apply outstanding service recovery when needed. This approach may be applied and found to be effective, but should never be conveyed to the customers, as they pay for the service and expects a higher level of service, as was also confirmed by Piccoli *et al.* (2009:367).

When customers enter a relationship with a service provider, they have a desired level of service in mind, according to Voss *et al.* (2007:950). This implies a service level which they hope to receive and believe can be delivered. They also have a minimum level of acceptable service as they realize that service will not always reach the desired levels- this is the adequate service level. Between these two service levels there is a zone of tolerance that customers are willing to accept. This implies that customers have a predicted level of service, which is the level of service they believe the company will perform. It is vital that the management of service-related companies understands and applies this principle.

According to Bielen *et al.* (2007:177) customers consider a number of benefits against the costs and effort of buying and using a service. Waiting time, as discussed earlier, forms part of these costs.

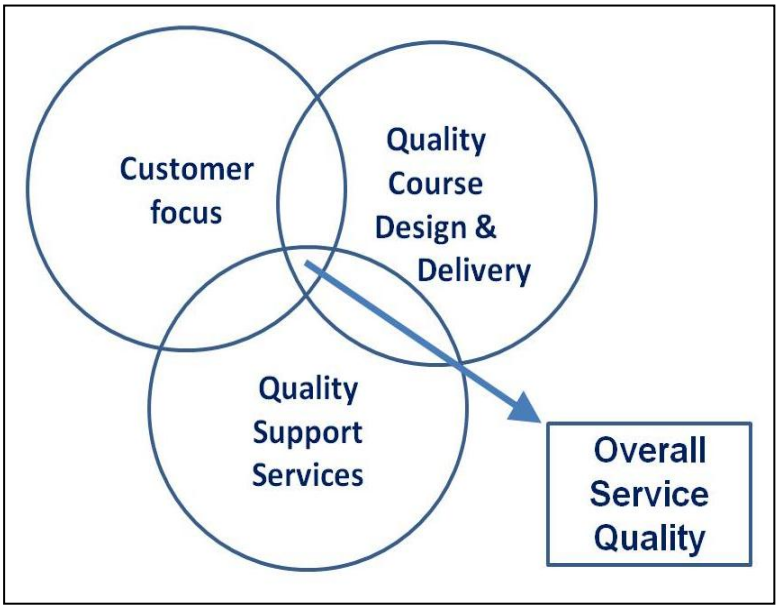
On the negative side, Yeo (2008b:153) warns that the following mistakes could lead to a decrease in service standards and a resulting damaging customer experience:

- Not knowing what the customers want
- Below-standard service quality levels
- Inconsistencies in service execution
- Service delivery promises not kept
- Tolerance levels ignored

This confirms the importance of companies' implementing measures to ensure that they know and understand the service levels their customers expects from them, as well as monitoring their own performance on a regular basis to ensure that any deviations are identified and rectifies before customers becomes dissatisfied.

The following strategic service quality framework, which is shown in Figure 4.3, can be a useful tool to illustrate how HEIs must balance their priorities to ensure that their customers experience an overall satisfactory SQ-level.

Figure 4.3: A strategic service quality framework



Source: Yeo (2008b:154)

This model focuses primarily on the student as customer, but distinguishes between two interface levels, namely the classroom and the support services environment. A combined customer focus on all these levels will lead to overall service quality, satisfied and committed customers and positive word-of-mouth referrals. It also depicts the importance of establishing and maintaining sufficient customer service levels on academic and support domains to ensure a satisfied student as customer, and confirms that these domains cannot be seen as unrelated or separated.

4.3.4 Service quality gaps

Christopher *et al.* (2002:175) defined a service quality gap as the disparity between the anticipated service level and what the customer actually experiences. This implies that perceptions (correct or wrong) play a big role, because the customer's perceived experience influences his thinking. Other factors include:

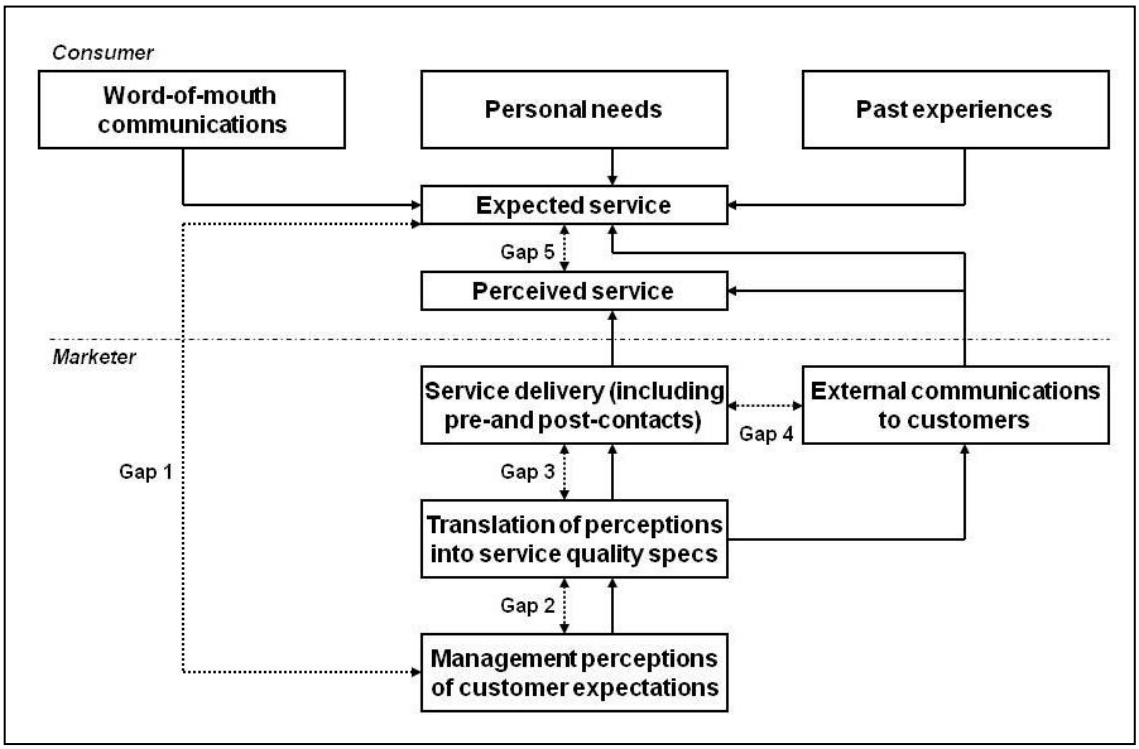
- Past experiences
- Actual needs
- Word-of-mouth information
- Advertising
- Promotions

Therefore Christopher *et al.* (2002:179) identified the following two problem areas in service quality:

- Organizations have to interpret “expectations” as the customer’s desired level of service and not what they expect will happen.
- Despite a certain level of need, customers may be willing to accept less – on a level they consider to be sufficient (in certain or all circumstance). There is thus a zone of leniency between what is believed to be satisfactory and what they require.

The quality gap is therefore a combination of facts and perceptions. The conceptual model of service quality (Figure 4.4) shows five possible service gaps:

Figure 4.4: Conceptual model of service quality



Source: Parasuraman *et al.* (1985:44)

- Gap 1: not knowing what the customer expects
- Gap 2: not selecting the correct service designs and standards
- Gap 3 is not delivering up-to-service standards
- Gap 4 is not matching performance to promises
- Gap 5 (the aggregate for gaps 1-4) is thus the gap between customer expectations and the perceived performance.

If a company’s internal SQ-measuring instruments identify an awareness that the perceived performance is below the expected level, it could become necessary to investigate the reasons for such a lapse. It might be because the customers’ perception may have been affected by a negative encounter, or an irregularity in one specific aspect of the performance.

It might also be because the organization has not properly understood the customer expectations, or it is above the organization's capability level.

4.3.5 Service recovery

Service recovery implies finding a new and mutually-acceptable solution if a service interaction fails or does not meet the required standards or something goes wrong). Parasuraman (2006:591) distinguishes between outcome recovery (e.g. offering a refund) and process recovery (e.g. offering an apology). He further states that the recovery strategy will depend on the conditions of the situation and customer receptivity to it, as well as the costs involved and how best to allocate resources.

Sheth *et al.* (2002:214) mentioned the following possible options to address the problem and move towards a situation where it should not occur again:

- Be honest with your customer and admit that a mistake has been made.
- Do not offer excuses
- Offer a value-added reparation
- Ensure that management and staff learn from the incident, and that steps are implemented to ensure that it does not happen again.

Their advice can and should be applied in the HEI-administrative environment and could lead to a more pleasant customer experience, even after things went wrong. Customers will most likely accept and even appreciate such a sincere and honest approach, because it happens very seldom that organizations admit their mistakes and act appropriately in an effort to recover the service experience.

Another aspect that can assist to lessen the risk or customer decay is the image of the service provider. Gi-Du Kang *et al.* (2004:267) stated that customers will be more likely to forgive a minor mistake of a service provider if it has a positive image. On the other hand, a negative image might lead to a magnification of the problem in the customer's opinion, making service recovery even more difficult. It is therefore part of a pro-active approach to strive towards creating a positive image of a company in the minds of customers.

Aldridge *et al.* (1998:203) advised that HEIs should respond to negative incidents which could lead to customer dissatisfaction, as it might lead to conflict and the possible submission of a complaint. This pro-active approach can lower the risk of students terminating their studies in the case of a serious service failure. It should also prevent them from becoming disaffected, which implies that they remain in the institution, but dissatisfied and disloyal and only aim to complete their studies and then leave. Their word-of-mouth references will also be most likely negative.

4.3.6 Benchmarking

Service recovery, which can be considered as a reactive measure, can be prevented if a company uses benchmarking techniques, according to Christopher *et al.* (2002:181). They state that benchmarking involves the constant evaluation of the organization's products, services and practices of other organizations who are considered to be the industry leaders. This should lead to a continuous improvement in products, services and processes. This process can be expanded to leading organizations in other industries as well, as it is sometimes easier to obtain information about them, whilst there are enough valuable principles and processes to learn from and to apply. This practice already exists in the South African HEI context, where Universities visits each other from time to time, and approach leaders in a specific process when they need to implement or improve the same process. The Higher Education Quality Committee process (HEQC), which will be discussed in more detail in the next chapter, can be considered as a more formal benchmarking exercise, although participation was compulsory.

4.3.7 Quality enhancement

Benchmarking is not the only technique that can be used, as quality enhancement, according to Lomas (2004:158), is a more transformative process which requires a deliberate change process that is directly concerned with adding value and quality.

Fundamental changes are required for an organization to enable it to provide quality services and products, according to Lagrosen *et al.* (2006:90). They suggest that there are two ways to change the consciousness of an organization. Firstly the composition of the staff can be altered by recruiting people who express positive values. These staff members should still have the required technical skills. This is obviously not practical in a large, established university, but should be kept in mind when new service departments are established – as is the case from time to time when the NWU's off-campus programmes expand. The organizational consciousness can also be improved by using specific techniques developed for this purpose.

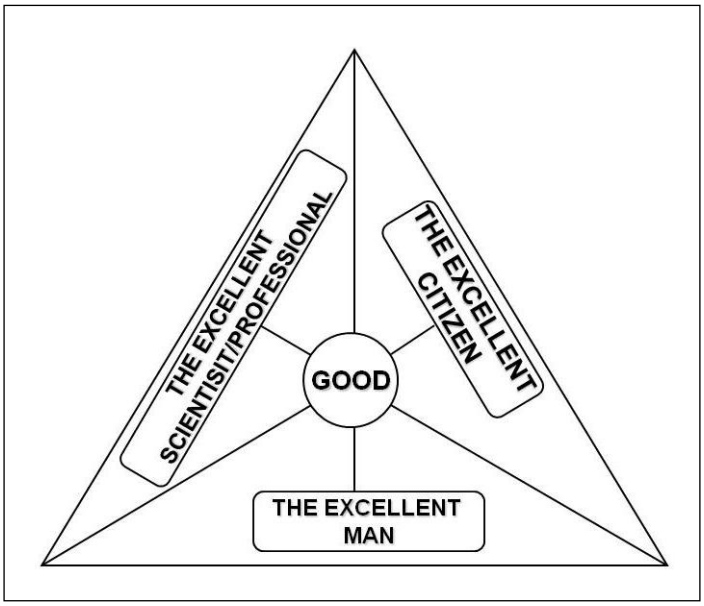
According to Lomas (2004:158) opportunity costs will occur when managing quality assurance processes and can be defined as the particular action needed to improve and enhance quality. There are no clear indications in the literature on the precise opportunity costs, but he emphasizes that it is incumbent upon senior managers in HE to utilize the limited resources in such a way that the most effective choices are made.

4.3.8 Service excellence

The highest levels of superiority in many domains, including SQ, are to strive for excellence. Anninos (2007:309) states that excellence is inseparable from the concept of *good*, while

good can only be evaluated in relation to the means it serves and the functions it performs. He has identified three hypostases of excellence, as illustrated in Figure 4.5:

Figure 4.5: The hypostases of excellence



Source: Anninos (2007:309)

- The excellent man knows exactly what his role and functions are, constantly strives towards more knowledge, lives according to his value system, and lives in harmony with his environment;
- The excellent citizen is also an excellent man, and cares about his society (where he actively participates in), he has developed responsibility as a result of the first hypostases of excellence, he becomes a creator and can be governed or will govern if asked to do so;
- The excellent scientist or professional is also an excellent citizen and excellent man. He seeks further knowledge in what he believes to be true. He philosophizes and transfers his skills and knowledge to newer generations through learning, interaction and practice.

Verma (2003:112) claims that organizations that manage to achieve excellence will surprise their customers and delight them, a beneficial concept that was discussed earlier. It is important for any company to set higher SQ-goals than their competitors, as a visible higher level of SQ may attract and retain even more customers.

4.3.9 Quality in Higher Education

According to Grant *et al.* (2002:207) HEIs started two decades ago to implement quality management initiatives following its success in the business environment. Brochado

(2009:174) also confirms that HEIs should ensure that all service interactions with students and other stakeholders are managed in such a way that it will improve the perceived SQ. Nowadays it is a more general phenomenon, although it is still not visible or applied on all levels in HEIs.

Nadiri *et al.* (2009:523) reported that SQ is a newly emerging concept in the HEI environment, and related to student satisfaction, which was discussed earlier. They argue that HEIs needs to attract, serve and retain students by ensuring that the students' needs and perceptions related to SQ are pre-determined and then satisfactory addressed. According to Bartlett *et al.* (2004:224) quality assurance in higher education delivery has become a focus of attention and clarifies it by referring to the fact that many universities have been privatized, as well as the Internet's globalizing effect on the educational market place. This viewpoint is supported by Srikanthan *et al.* (2004:266), who pleaded for a new approach towards quality management in the HEI environment. Sahney *et al.* (2006:266) also observed that HEIs are more and more recognizing the importance of a customer-focused approach and are therefore looking for new and effective ways to implement it to the mutual advantage for all stakeholders involved. In a very recent study Trivellas *et al.* (2009:382) report that quality assurance has become one of the most significant priorities for HEIs and that it requires the constant enhancement in the simplicity, precision and dependability of services rendered to stakeholders.

It is according to Lagrosen *et al.* (2004:61) even more difficult to define quality in HEIs than in other sectors, while Oldfield *et al.* (2000:93), Vidovich (2002:391), Voss *et al.* (2007:949) stated that quality in the HEI environment is a complex and multifaceted concept. There are obviously many dimensions, structures and functions present in HEIs, but this study will focus more on the administrative support environment. Sahney *et al.* (2004:147) defined quality in the HEI environment as a "fitness for purpose"-approach, which can be supported due to its simplicity and applicability. They also indicate that it can be defined as "meeting customers' needs", which is true, but can become complicated if there is no consensus on who the customers are. Therefore note should be taken of the remarks of Abdullah (2006a:569), who states that there are many disagreements on how to measure SQ in HEI, and that not enough work has been done on the identification of the primary determinants of SQ, due to the disagreements on whether students should be seen as customers or not. As was argued before, this study believes that students in the administrative environment are indeed primary customers and should be dealt with accordingly.

An excellent university is characterized by outstanding performance at all levels: management, teaching, research and external engagement practices, as confirmed by Anninos (2007:316). He emphasizes that all policies, procedures and processes in the educational support system of the university must depict these quality principles. As an

example he refers to teaching quality, which is a multidimensional concept and should therefore be comprehensively assesses by students, colleagues and administrators. Ortiz-Rodríguez *et al.* (2005:97) claimed that good support services and administrative practices can play a contributing role in assisting students to accomplish their educational goals, which should be the core business of any HEI. A similar viewpoint is stated by Ortiz-Rodríguez *et al.* (2005:97) who mention that support and administrative services can motivate students to accomplish their academic objectives.

Students nowadays have the option to enrol through distance programmes at many international universities. The local HEI is thus forced out of its comfort zone and forced to pay attention to their customers' needs and ensure that service quality received proper attention. This was also earlier mentioned by Wright *et al.* (2002:24), who claimed that "societal changes have pushed service quality to the top of the research agenda within the higher education sector". The results of this can be seen in the variety of SQ models that have been tested in and developed for the HEI environment.

It is also important to note that quality service to students remains important, irrespective of the environment in which it is delivered, as indicated by Bolliger *et al.* (2009:104). Although the situations differ between the on-and off-campus students, they all require and expect quality services to enable them to successfully complete their studies.

According to Athiyaman (2000:54) it is essential to manage the service quality at an HEI in an effort to attract and retain potential students. Once these students are enrolled, the service encounters must be managed in such a way as to lead to satisfaction and positive word-of-mouth referrals. This is important due to the global competitive situation, according to Ehigie *et al.* (2009:511). They are of the opinion that HEIs will have to get involved in a change process and adopt an entrepreneurial approach to improve their service to their customers and stakeholders. They identified the use of RM as one of these approaches to gain and maintain customer expectation, perceived service performance and eventually loyalty. Although their statement can be supported, it is unclear why they referred to an "entrepreneurial approach", and not directly to a RM-approach.

Sahney *et al.* (2006:267) proposed that quality in education has three components:

- Quality of inputs refers to the students, infrastructure, personnel and support services.
- Quality of processes is related to teaching and learning activities, although it could also be argued that there are administrative processes that form part of this item.
- Quality of outputs delivers equipped and satisfied students. All the above components contribute to achieving this valuable state.

HEIs have existing structures and practices that make it difficult to add values that would normally be enhanced in a service environment, stated Sharrock (2000:151). He also suggests that quality thinking can be applied by streamlining complex administrative processes. Srikanthan *et al.* (2005:71) agreed and confirmed that quality will only be sustained and enhanced if the organization is willing and able to improve their processes and practices. Both these arguments are true and very applicable in the modern HEI. Without it, service quality and customer satisfaction, loyalty and advocacy will be very difficult to achieve.

According to Wright *et al.* (2002:24) older students do not see education as different from other service providers and therefore expect the same levels of service excellence and this implies that HEIs will also have to be committed to a process of constant quality enhancement and appraisal. They also claim that more students are working part-time, causing their disposable income to be limited, and causing them to insist on superior quality and appropriate services in exchange for their time and money. This is most likely true for the off-campus students in the South African HEI context.

4.4 Total quality management (TQM)

SQ was discussed at length in the previous section, and shown to be relevant and applicable to the HEI environment. In order to gain a more comprehensive picture of the quality-environment, it is also necessary to look into total quality management (TQM), and to determine whether it is also appropriate apply its principles to the HEI environment.

TQM can also be described as one of the popular buzzwords in the business world. Zink (1998:41) describes TQM as an "integrative management concept", while Ross (1999:3) considers it as system-based approach among all the divisions of the organization and refers to the concept of synergy to underline its advantage. Although not all companies knows how to implement it effectively, Kotler *et al.* (2001:10) observed that many companies have adopted TQM-programmes recently with the aim to improve the quality of their products, services and marketing processes.

TQM can be considered as one of new branches of RM, because it inspired the concept of relationship quality, according to Gummesson (2002:11). New efforts are thus put in place to improve the quality of relationships. The focus therefore moves away from merely ensuring the quality of goods and services, to building lasting relationships with satisfied and loyal customers through the provision of quality goods and services. It is also important to link a TQM-approach with the attitudes and behaviour of customers, according to Alves *et al.* (2006:3), as the competitive nature of business forces companies to survive by edging their rivals and thus ensuring the retention of satisfied and loyal customers.

Glaser-Segura *et al.* (2007:121) distinguished the elevation of the customer to the focus point of quality improvement initiatives as a central TQM-principle, and argues that the customer is responsible for defining the values and quality of services they are willing to pay for by choosing a service provider after they have evaluated all options. In the same line, Becket *et al.* (2008:43) argued that TQM has the potential to cover both the internal and external stakeholders' quality viewpoints

According to Srikanthan *et al.* (2005:9) quality in HEIs must be improved and frequently evaluated. They consider it as one of the most contemporary issues on the HEI-agenda. They refer to the initial research in the 1980's that suggested that the TQM-model should be used for HEIs as a model for governance, but argues that difficulties arose due to its core thrusts (education and service) and therefore proposes that a more holistic approach is necessary.

4.4.1 Definition of TQM

According to Egan (2008:295) TQM can be defined as "a management strategy aimed at ensuring awareness of quality in all organizational processes". Boloko (2009:11) states that the staff members closest to the daily operational procedures should be in the best position to recognize and improve the quality of those actions. Effective TQM-measures should establish the best environment where constructive relationships exist between management and staff, and where people are motivated to excel in their jobs.

Becket *et al.* (2008:44) defined TQM as an all-inclusive management style which entails the involvement of all members in a company to strive towards long-term advantage for all stakeholders. A very similar TQM-definition is provided by Alves *et al.* (2006:3), who focused on the need for an effective and integrated effort to develop, maintain and improve quality to all parties involved in a company and on all important areas, including marketing, engineering, production and services. It is also suitable for and applicable to HEIs.

TQM in the HEI environment is defined by Lomas (2004:160) as a comprehensive quality management approach that involves support staff as well as academic staff and that it focuses on all organizational activities, including teaching, researching, managing, catering and housekeeping. It is thus a total approach that encourages concentration on the core activities of Universities when striving to establish quality within a culture.

A well-balanced definition of TQM, is that of Baran *et al.* (2008:83) who considered it as a management philosophy which is based on the improvement of quality, but while reducing costs throughout the value chain of the organization.

Sahney *et al.* (2004:146) placed the emphasis where it belongs, namely on the customer focus and states that the aims of TQM should be on continuous improvement and meeting customers' requirements. They admit that the single, standardized theory of TQM does not

exist yet. This might however be one of the strengths of TQM, as is remain adaptable and can be adapted for any organization.

From the above, TQM can therefore be defined as a wide-ranging and broad quality management endeavour that should include all aspects and sectors of an organization and should be visible in all policies and procedures. The outcome of such an approach should be visible and clearly measurable and should lead to more satisfied and loyal customers.

4.4.2 TQM dimensions

TQM is a very comprehensive concept, as has been shown in its different definitions. In order to get a better understanding of the TQM-concept, it is necessary to investigate the dimensions of TQM. It was identified by Tena *et al.* (2001:935), and they consider this to be a multi-dimensional concept:

- Customer focus
- Continuous improvement
- Employee fulfilment
- Organization as a complete system

All of these dimensions have been identified before in the effort to define TQM, but this model combines them well and makes it easier to comprehend TQM as an entity.

4.4.3 TQM in education

According to Srikanthan *et al.* (2005:69) HEIs started during the late 1980s to raise awareness about the application of TQM in their environment, as quality was suddenly placed on their agenda. It was preferred because TQM's holistic approach is capable to deal with both educational and service requirements. One of the earlier studies to confirm this was when Kanji *et al.* (1999:135) reported that several TQM-models were used at many HEIs across the world. They further noted that it was useful due to the fact that it aimed to represent interrelations between the different quality dimensions and that TQM can be used to accomplish constant improvements in HEIs, even if there are no quality-related problems present.

This is supported by Sakthivel *et al.* (2005:585), who believed that the goal of TQM is "to provide quality education so as to ensure students' satisfaction". Although they do not refer specifically to the support environment, the focus on customer satisfaction is adequate to ensure that all systems will have to support this notion. Li-Wei Mai (2005:863) highlights this when reporting about the application of TQM in HEIs: "The physical evidence associated with

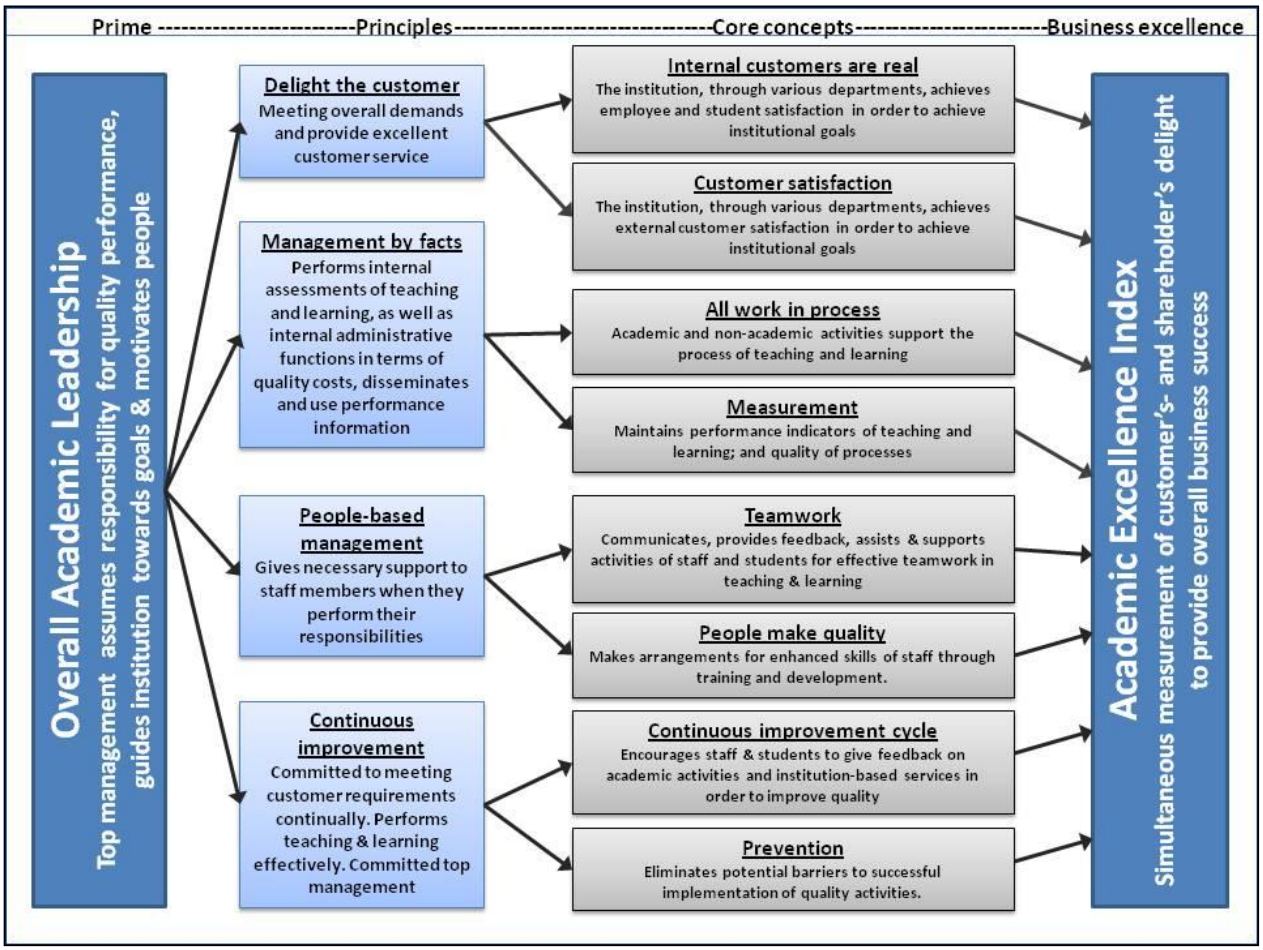
a service is now playing an increasingly important role in contributing to the level of satisfaction".

Another reason why TQM landed on the HEI-agenda, was the new competitive nature in the educational marketplace (which will be discussed at length in the next chapter), as well as the fact that students also became more aware of their role as customers, and their rights to quality education and service, as pointed out by Alves *et al.* (2006:4). HEIs started to realize this and attempted to initially improve the quality of courses, but also later the services they rendered. Student questionnaires assisted in highlight the importance to focus on all quality-related aspects, which is in line with TQM-principles.

According to Quinn *et al.* (2009:139) TQM is the most popular quality improvement methodology in the HEI environment, but has found that it is more successful in the administrative environment and where auxiliary services are rendered. This statement can be supported given the background obtained during the literature review process.

Glaser-Segura *et al.* (2007:123) argued that the application of TQM at HEIs implies that students need to be involved as "principal customers and co-participants." This is illustrated very effectively in Figure 4.6:

Figure 4.6: Measuring academic excellence model



Source: Kanji *et al.* (1999:139)

It clearly shows many of the principles and concepts described up to now in this literature review, as well as the balance between the academic core functions of teaching and learning, and the administrative support functions. The following principles and concepts need to be highlighted:

- Customer delight: The provision of a constant excellent customer experience, as discussed earlier. This applies to all internal and external customer groups.
- Data management: Use date obtained from in-house assessment processes to improve customer service levels.
- People management: Applying the principle that well-trained and motivated staff are any organization's best assets by supporting them and providing constant and effective opportunities to further improve their skills and competence levels, as will be discussed later in this chapter.
- Continuous improvement: The principle that the management of SQ is a constant process of striving to improve service levels. It is therefore necessary to obtain

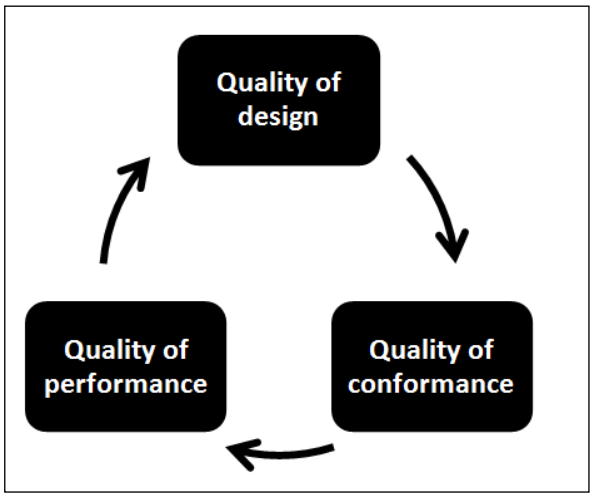
accurate and constructive feedback from all stakeholders, to process that data (as mentioned) and implement effective steps to increase SQ-levels. This is confirmed by Ortiz-Rodríguez *et al.* (2005:101), who studied the quality perceptions of distance students and found that they identified communication as the most important factor to ensure quality, and considered "feedback as the most essential factor affecting quality communications".

Mergen *et al.* (2000:345) developed a TQM-model that was used by the Rochester Institute of Technology and found to be very effective. It can be applied more widely to the HEI environment, as it indicated continuous feedback mechanisms and constant improvement processes and measures the quality of the design, the conformance and actual performance on a cyclic basis. It requires that staff must define who their customers and their needs are, improve their processes, deliver services to the customers and measure their satisfaction.

The three components of this model, shown in Figure 4.7, are:

- Quality of design, which deals with establishing a service's characteristics in a specific market at a specified cost. A good example in the HEI-operational environment will be the redesigning of the registration process for students, as was suggested before.
- Quality of conformance indicates how well the HEIs and stakeholders agree with the design requirements, including the costs. The retention of students is a good example in the HEI environment.
- Quality of performance measures how well the service performs in the marketplace and whether it is accepted by the customers, for instance whether graduates are easily employed.

Figure 4.7: TQM model in higher education



Source: Mergen *et al.* (2000:348)

It was evaluated and tested by Grant *et al.* (2002:208) and they found that all three components were equally important and significant. There are some similarities between this concept and the CEM-process illustrated earlier in Chapter 2.

In their study Aly *et al.* (2001:130) found that 94% of HEIs that implemented TQM experienced improvements, with the majority (65%) indicating that their service quality levels improved and 53% experiencing improved management of their processes. Staff also indicated a higher awareness about students and their needs. They recommend that HEIs should start to implement such an approach first with the administrative processes, because of its similarity to the business environment. On the negative side, nearly two-thirds of HEIs reported a resistance to change towards TQM-practices, which is not a surprise and serves as a warning to HEIs that even though the importation of a SQ model can be beneficial, there will be most likely a resistance to any new and uncertain approach.

4.5 Changing the culture of an organization to focus on service quality

Lagrosen (2003:473) argues that TQM can only be successfully implemented at a company if there is a corresponding change in the organizational culture. He warns that this will not happen easily, as most companies' values and culture are deeply-rooted and will not be changed easily. This will not only apply in the case of implementing TQM, but for any quality management initiative, model or approach. This is confirmed by Baran *et al.* (2008:481), who warn that the corporate culture of an organization must be changed to accommodate CRM and its principles.

Organizational culture is reflected at the common values and viewpoints of its staff and can be defined as the shared or combined personality of a HEI, according to Trivellas *et al.*

(2009:386). They also describe it as the atmosphere that is created by the societal and professional exchanges of the individual staff of the institution.

The successful embedding of a quality culture should lead to university students receiving a first-rate education, according to Lomas (2004:163). The beneficiaries of such a proposed change in culture should be the students (in their own personal growth and development), as well as the country, since well-trained graduates should also contribute to the country's economic and social prosperity. Although this study refers to the UK, these principles can also be applied to the NWU and the South African HEI environment.

4.5.1 Cultural changes in the HEI environment

Most of the Universities world-wide can be considered as having expert lecturers in subject fields like RM, CRM, TQM, learning organizations and service quality. For those HEIs to benefit from this knowledge, it needs to be transferred to the support structures – most likely via the deans and the registrar. The challenge is to successfully transfer that knowledge to functional skills and practices in the different service departments' front desks, back offices and systems. As has been pointed out, there is still a wide belief that students should not be considered as customers and therefore not necessarily treated according to the accepted customer service-principles.

Lomas (2004:157) states that the challenge is to entrench a quality culture within a University that is evident by a university-wide commitment to a shared vision and a desire for a continuous enhancement of service levels. This is necessary, because the same corporate competitive environment existing in the business-world, is becoming more prevalent in the HEI environment, with students acting more like customer, as pointed out by Yorke (2000:74) and Vidovich (2002:396).

The choice of quality management initiatives will depend in part on a university's definition of quality and suggests that a favourable organizational culture is required in order that new ideas can be discussed, assimilated, modified, accommodated and then implemented, according to Lomas (2004:160).

Berry *et al.* (2002:85) warned that it is a slow process to establish a customer experience focus culture in a company. Therefore the management of an HEI should take it into consideration when planning a more customer-centric culture implementation process, and monitor the progress constantly and accurately.

4.5.2 Senior management commitment

A change management process can expect a lot of resistance from staff, as has been confirmed. Therefore it is important that the leadership of an organization must drive the acceptance of a customer-focused approach through their use of the system and their public

commitment to its success, as stated by Baran *et al.* (2008:481). They should have clearly defined responsibilities and also the authorization to initiate and manage the required changes, according to Shutler *et al.* (1998:157).

Lomas (2004:162) argues that if quality is to be embedded successfully in a university, then high-level management and leadership abilities will be crucial. He suggests that the following major challenges might be problematic for senior staff:

- Determining the appropriate strategy
- Implementing the appropriate strategy
- Putting in place the organizational structure
- Developing a conducive and supportive organizational culture. Rich (2000:174) warned that there is a growing recognition that awareness of a customers' corporate culture can have a acute effect on the ability of service providers to establish meaningful relationships with customers.

Managers must ensure that any changes in culture or approach should be implemented steadily and staff should receive understandable and thorough information about the new approach, the logic behind it, and the expected benefits for all stakeholders, as proposed by Lagrosen (2003:485). There must also be open communication channels to allow them to voice any concerns or uncertainties. Care should also be taken to document these changes in detail and publish it in manuals. The ISO 9000-process, which will be discussed in the next section, is a good example of such a thoroughly-documented quality management process.

It is further suggested by Lomas (2004:162) that transformational leaders, and not transactional managers, are required to embed quality. Srikanthan *et al.* (2004:272) shared the same viewpoint and claimed these transformational leaders have special characteristics that enable them to create, encourage and preserve the atmosphere for changes in the organizational culture and –processes. In a later study Srikanthan *et al.* (2005:76) claim that the leadership of senior management's will require the ability to successfully convert the realities of the commercial world into the internal life of the HEI. Their role as change agents is therefore vital and it is imperative that they lead by example, as also confirmed by Sakthivel *et al.* (2005:576). They further state that effective leadership will proof itself in the principle of "what is preached has been practiced". They also state that senior management must ensure that all systems and staff cooperate to ensure the fulfilment of the agreed objectives of customer focus and satisfaction.

The top management of HEIs should be directly involved in the quality management processes, and be willing to invest in the process, as was suggested by Krishnan *et al.*

(2000:848). This top-level commitment concept is supported by Michael *et al.* (2004:200) and Becket *et al.* (2008:44). Roca-Puig *et al.* (2006:1122) suggested that this should include their involvement at both technical (*hard effect)* and functional (*soft effect*) quality management levels and argue that it will have a considerable influence on customer satisfaction levels. The same distinction between technical and functional aspects was earlier confirmed by Gi-Du Kang *et al.* (2004:267).

Lomas (2004:160) also highlights the fact that "the inter-relatedness and interdependence of strategy, structure and culture" implies that all these concepts will necessitate the continuous awareness of management.

4.5.3 Staff training

There have been numerous references in this study on the importance to ensure that staff that deal with customers should be properly trained and empowered to understand the different components of a customer-focused approach and how to implement it in a practical manner and on a daily basis.

It is vital to ensure that a company's own staff members are also satisfied and loyal, and build their careers to ensure transfer of positive skills and good return in investment in terms of staff training. Hill (2006:11) claims that many organizations have failed to communicate the importance of improving customer service to their staff. It is therefore vital that these concepts should be relayed to staff before enrolling on a training schedule. They should also understand the importance and relevance of the training programmes and not see it as a mere break in the daily routine.

Sheth *et al.* (2002:75) stated that "these frontline staff should be able to tune in on a personal level with the client". They should therefore be able obtain the necessary detail without impeding on the customer's privacy. The customer's body-language and tone of voice should be studied to attempt to determine their actual message and intentions. It can take years of experience to develop these skills, but staff should also be trained and sensitised on these vital facets of customer service and retention. The reference to providing the customer with "sufficient breathing space" is valuable advice, as it emphasizes the principle of the difference between a CRM- and CEM-approach as was discussed earlier. Many organizations still make the mistake of implementing processes and systems they think will resolve the customer's problems, without giving the customer the opportunity to speak their mind and even vent their anger and frustration at someone. Therefore it is important that staff should be properly trained and sensitized to understand this concept. They should also be reassured that dealing with angry and frustrated customers is not necessarily a pleasant experience, but still a valuable opportunity for the company to identify problem areas and create opportunities to rectify it and improve further on their SQ-levels. The alternative,

having dissatisfied customers leaving without *speaking their minds* might be easier on the front-line staff, but creates the dangerous situation of a company thinking that *all is well*, while there is a continuous customer decay process happening without the staff knowing about it. According to Nadiri *et al.* (2009:532) it is therefore imperative to have well-trained staff that understand and practice the expected SQ-levels.

Administrative staff should also receive social skills training to assist them to interact better with students, according to Lin *et al.* (2008:409). They proposed the use of focus groups and involving students in training sessions to create different realistic situations in the interaction with them. They further claimed that such an approach can assist to show students more about the administrative support that is available to them and can therefore be a mutually-beneficial process. It supports the concept discussed on the previous page, and also underlines the importance of recruiting and appointing front-line staff that have the potential and personalities to allow these social skills to be developed and nurtured.

An interesting observation of DeShields *et al.* (2005:138) is that the mere presence of well-trained staff and competent staff will not necessarily satisfy students, but their absence will negatively affect the SQ-experience of the students. Administrative staff should thus be trained not to expect gratitude from students after each service encounter, but still realize that their contribution is vital and the negative impact will be visible should they be absent or lower their standards.

4.5.4 Team design and effectiveness

A vital aspect in any organization that is needed to ensure efficient SQ-levels is the composition of the teams that deals with customers in the front and back offices. Helfert *et al.* (1999:6) focused their work on the team composition, or number of persons involved in a team. They recommend that the team should be just large enough to do the work it is required to do (apply the principle of *least group size*) and warns that smaller groups are not technically able to perform its tasks, while there is the risk of process losses and *social loafing"* in larger group. They should have technical skills and boundary-spanning competence, as well as the following social competence characteristics:

- Communication ability
- Extraversion
- Conflict management skills
- Empathy
- Emotional stability
- Self-reflectiveness

- Sense of justice
- Cooperatively.

These skills can be nurtured and improved, but it is vital in the recruitment, selection and placement of new staff to ensure that new appointees have the necessary basic competencies and capabilities referred to above. It should be recognized that some personality types will find it more difficult to display or develop these characteristics. If there are front-line staff members whose personalities are incompatible with these characteristics, it should be considered to move them to an environment where they do not deal directly with customers.

Egan (2008:181) claims that employee staying longer with a company will also be more familiar with it. It is therefore important to attempt to retain experienced and customer-focused staff by creating an environment they enjoy to work at. Staff retention efforts should therefore also be a management priority, especially valuable and experienced staff that displays and practices the above characteristics.

It is also important to ensure that new values are created and enhanced during a training programme. The following six values are more important than others and should be nurtured and further developed in staff, according to Lagrosen *et al.* (2006:87):

- Customer orientation implies that all efforts should be directed at satisfying the customer
- Leadership commitment, including top management
- Participation of everybody implies total commitment of all staff members.
- Continuous improvement refers to a dynamic environment.
- Process orientation implies that for every process there should be a responsible person.
- Management by facts indicated that all decisions taken should be based on reliable facts.

Srikanthan *et al.* (2004:276) focused on two of these values and claimed that improvement and accountability are both known aspects of quality assurance and that if improvement is enhanced, accountability should be developed automatically. It therefore supports the principle of creating a sense of ownership of the quality management process on all staff levels.

According to Helfert *et al.* (1999:2) the presence of a universal, understandable, challenging and exact objective for each team, will ensure that the members are committed and will have

a motivating, simplifying, and synchronising function, and should also lead to a reduction in conflict.

Intrinsic rewards seem to be a more effective indicator of SQ, and that external rewards (at organizational and social levels) should be applied with more care, as was reported by Malhotra *et al.* (2006:10). They would rather influence the employees' job attitude than the SQ-levels they produce. Further research about this subject is proposed, as staff retention is a vital component to ensure consistently high SQ-levels.

4.6 Service quality processes and -models

The theoretical background of SQ and TQM has shown several important components. It is necessary to look further into some applicable SQ-processes and -models in order to measure whether a company is on target to achieve its agreed SQ-or TQM-goals.

There is also a need for an evaluation system in HEIs to give the student the opportunity to report on their experiences with staff and processes, as monitoring reliability becomes very important in maintaining quality levels, according to Clewes (2003:70). Tan *et al.* (2004:23) predict that there needs to be an increase in the use of assessment tools as attention to service quality in HE heightens.

Christopher *et al.* (2002:175) claimed that service quality is a function of customer perceptions and the organization's resources and activities. It can therefore be defined as the match between what customers expect and what they actually experience.

It is argued by Clewes (2003:71) that because of the distinctive characteristics of service, a distinctive approach of defining and measuring service quality is required. A service-marketing detention of quality revolves around the idea that quality has to be judged on the assessment of the user of the service.

There are a large number of SQ models reported in the literature, as reported by Abdullah (2005:307), but there is still no consensus on the most effective SQ model for the HEI environment. Therefore the most important ones will be discussed briefly below, after which the most appropriate model will be indicated.

4.6.1 A brief discussion of the different SQ processes and models

4.6.1.1 ISO 9000-process

According to Becket *et al.* (2008:44) the International Organization for Standardization (ISO), an international standard-setting body, developed their ISO 9000 quality assurance standard and focuses on constant involvement and a pro-active approach. It strives to improve customer satisfaction and attain continuous quality enhancement.

Shutler *et al.* (1998:155) and Sakthivel *et al.* (2005:575) stated that the ISO-processes can be considered as being associated with TQM, as it utilizes TQM-philosophies and focuses on customer satisfaction. TQM has been discussed at length and shown to be applicable in the HEI environment.

One limitation might be the specific requirements referring to product design, failure and processes, as reported by Shutler *et al.* (1998:153). This implies that ISO is more applicable for the production- or manufacturing environment, but it could also be argued that the "raw material" referred to is the new students, while the manufacturing process represents the learning environment, and the quality control phase is the examinations. The study guides can also be seen as part of the physical materials used in the process. It therefore seems that the argument of applying ISO in HEI can be useful. This is in contrast with Yeo (2008b:152), who emphasizes that there are no real products involved in the HEI environment, and that the major differences between HEIs could be perceived as the differences in customer experiences. Both arguments have elements of truth that are applicable and useful.

Lagrosen *et al.* (2006:88) are of the opinion that the ISO 9000-standard is the most frequently used quality management model, as it contains a large number of criteria. If a company manages to follow it and all processes are properly documented, they can be certified as being in line with the ISO-9000 standards. This might bring a market advantage. It should be noted that ISO 9000-certified companies do not necessarily have high quality products or services, but proves that the company works with quality in a systematic manner. Quality outcomes are thus not guaranteed.

They also mention the concept of quality awards, where a number of criteria (with point values) are drawn up and reports are submitted to a group of referees who will determine to whom these awards should be allocated. These are powerful tools to locate good examples of quality, and to even improve on them.

Yeo (2008b:153) also reports that many HEIs are following the ISO 9000-system in a "quest for excellence". This was confirmed earlier by Shutler *et al.* (1998:152), but they admit that the research on this relationship is very limited. There is still no evidence that ISO 9000 or related processes are being used in the South African HEI context, but it should be a natural development in the near future given is close association with the TQM-approach and its capabilities within HEIs.

4.6.1.2 Six Sigma

According to Watson (2003:96) Six Sigma is a cost-reducing quality management process which was developed for the production environment in the 1980's and uses analytical

methods to achieve near-faultless outcomes. This is in line with the description of Woodall (2001:600), who describes the Six Sigma as a "defect-free process".

It was later expanded to be used in all business environments, and focuses initially on the below-standard performance sections. Agreement is then reached on a satisfactory, measurable performance level and the situation is monitored until the goal has been reached. It is, however, unlikely that this is the most appropriate approach for the HEI environment.

4.6.1.3 EFQM

Becket *et al.* (2008:44) describe the European Foundation for Quality Management (EFQM) Excellence Model as a "non-prescriptive framework" with nine criteria suitable for any type of organization striving towards excellence, while Michael *et al.* (2004:201) earlier reported that the EFQM-model could assist in creating a more customer-focused culture for HEIs by learning from the mistakes made in the business environment.

4.6.1.4 SERVQUAL

SERVQUAL is based on the theoretical gaps model and defines SQ as the difference between what is expected from a service encounter and the perception of the actual service encounter, according to Brochado (2009:176). It has five generic dimensions:

- Tangibles: physical facilities, equipment, appearance of personnel
- Reliability: ability to perform the promised service dependably and accurately
- Responsiveness: willingness to help customers and provide prompt service
- Assurance: Knowledge and courtesy of staff and their ability to convey trust and confidence
- Empathy: caring, individualized attention

Alves *et al.* (2006:2) reported that the main purpose of SERVQUAL is to determine the final customer's SQ-perception. The fact that SERVQUAL attempts to functionalize SQ by comparing the perceptions of the service received with the expectations of the customer is confirmed by Abdullah (2005:306).

It is most valuable when it is used periodically, according to Alves *et al.* (2006:5), which provides the benefit of being able to classify customers in different segments according to their perceived SQ-levels experienced.

It has been used and tested extensively in the HEI environment, but heavily criticized by most authors. Slade *et al.* (2000:1200) used it, and reported that SERVQUAL has both strengths and weaknesses as a measuring instrument. Yeo (2008a:270) also used SERVQUAL and reported limited results. Chowdhary *et al.* (2007:506) are also critical and

found that no basic generalization of the relative significance of the determinants of SQ is possible with SERVQUAL, while Aldridge *et al.* (1998:200) earlier found that its application in HEIs was not successful. They are of the opinion that it is due to its static measurement approach. According to them it provides a "snapshot of satisfaction or perceptions of quality at one point in time" and claims that it does not "tell the whole story". This is a valid criticism and should be kept in mind when structuring an SQ measuring instrument.

The following further criticisms about SERVQUAL are expressed by Alves *et al.* (2006:6):

- It measures expectations that cannot exist.
- Results can be influenced by a low response rate.
- There are weak discriminations between the measured dimensions.
- The results cannot easily be generalized to other similar businesses.
- It is difficult to interpret the results.
- Negative reactions from participants have been reported, especially when the test is done frequently.
- The nature of the instrument is very broad and non-specific.

4.6.1.5 SERVPERF

Brochado (2009:176) describes SERPERV as a variation of SERVQUAL, due to its focus on the perception component only and considered as one of the most widely-adopted techniques according to Clemes *et al.* (2008:296). Abdullah (2005:306) describes SERPERF as an inadequate SQ-measuring model in the HEI environment, because it is a "*performance-only*" based model. It therefore only maintains the perception of SQ. This was confirmed in another study by Abdullah (2006b:85), who states that SERVPERV "*performed miserably*" in the HEI environment.

On the other hand, Nadiri *et al.* (2009:527) claimed that only two of the five dimensions of the SERVPERF-instrument were formed in their study, but that the instrument did maintain its reliability in the HEI environment.

4.6.1.6 Evaluated Performance (EP)

According to Abdullah (2005:206) the EP-scale attempts to measure the difference between the perceived SQ-performance and the ideal amount of a specific SQ-feature, and not the expectations of the customer.

4.6.1.7 UNISERQUAL

Athiyaman (2000:51) criticized SERVQUAL and claimed it is not a valid measurement instrument of service quality. UNISERQUAL, a 14-item service quality measurement

instrument was then constructed and tested. It was more focussed on service quality in the classroom and therefore not suitable as a SQ-instrument for this study. Athiyaman (2000:52) analysed the reliability of UNISERQUAL and reported it to be within an acceptable range, but this model was not tested and used by other researchers, .making it difficult to establish its true value and application. It is not appropriate for his study due to its focus on academic areas and other issues not related to the administrative environment at HEIs.

4.6.1.8 HETQMEX

Although it is a slightly older model, HETQMEX needs to be discussed, as it was based on the TQM-principles, but adapted for the HEI environment. It was developed by Ho *et al.* (1996:41) and was based on the fundamental SQ-concepts, including the five-s, marketing and educational quality control, circles, ISO 9000 and total preventative maintenance. Their process does contain recommendations that can be applied, including:

- Involving senior management and obtain their commitment (as has been mentioned)
- Assessing the current quality system situation, which will be useful.
- Creating a documented implementation plan, which is in line with ISO and TQM.
- Providing training to staff, which also has been proposed.
- Monitoring progress, which can also be supported in principle.

HETQMEX contains valuable advice and can be used as a control mechanism when developing an SQ model.

4.6.1.9 HedPERF

Brochado (2009:177) depicts HedPERF as an HEI specific scale that focuses on all aspects in the total service environment of the student, while Abdullah (2005:206) describes HedPERF as a "new and more comprehensive performance based measuring scale that attempts to capture the authentic determinants of service quality within the higher education sector". He further reports that HedPERF has been empirically tested for reliability, validity and uni-dimensionality.

SERVPERF was used as a basis to develop HedPERF, as 13 of its items were adapted from it, according to Abdullah (2006b:78). Another 28 items were generated from several qualitative research inputs and literature studies, including focus groups and pilot tests and the final product was divided into four factors, namely non-academic aspects (included aspects related to the willingness and capability of administrative staff to render support services to students), academic aspects (dealing with the responsibilities of academic staff, including characteristics like good communication skills and providing feedback to students),

reliability (referring to the delivery of accurate, dependable and timely services) and empathy (indicating personalized and individualized attention to the students).

After re-testing the HedPERF model, Abdullah (2006b:85) modified the factors to five, namely:

- Non-academic aspects
- Academic aspects
- Reputation
- Access
- Programme issues

He found that this modified HedPERF-model was more specific in area where SQ needed to be evaluated in the HEI environment.

4.6.1.10 Merged HedPERF/SERVPERF

In an effort to find the most appropriate SQ model for the HEI environment, Abdullah (2005:206) proposed a merged model between HedPERF and SERVPERF. This was done in an effort to find the measuring scale with the most outstanding measuring potential, but later found not to be as effective as the HedPERF model itself.

4.6.1.11 University Quality of Life and Learning (UNIQoLL)

Audin *et al.* (2003:365) developed this self-evaluation model for HEIs to monitor students' perceptions about the services they receive from their university. They decided not to use a conventional satisfaction survey, but focused on the overall quality of life experienced by students over the term of their studies (a longitudinal approach) after determining their baseline values. The results are disaggregated by academic staff to allow the university to reveal and study local variations. Although this approach can be fruitful, it covers too many fields to be relevant for this study, including academic matters and facilities on campus.

4.6.2 The most appropriate SQ model

In his comparative study to identify the most appropriate SQ model for the HEI environment, Abdullah (2005:317) found that the HedPERF scale is more suitable for the HEI-service settings, as is showed a better reliability, greater criterion and construct validity, greater explained variance and a better fit than SERVPERF and the merged HedPERF/SERVPERF models.

In another comparative study, Brochado (2009:181) found that the HedPERF model presents a high level of internal consistency and that its overall score offers a high correlation extent with:

- Overall satisfaction
- Intentions to further studies
- Word-of-mouth referrals.

The results of these thorough evaluation processes are supported and the non-academic aspects of the HedPERF model will be used in this study, as will be discussed and motivated in more details later in paragraph 5.3.1.

4.7 Conclusion

An effective quality management system is a non-negotiable reality for any organization that wants to grow and retain customers in a profitable manner. It has been shown that SQ is an independent and sustainable entity with several definitions and applications, but a specific administrative relevance in the HEI environment.

It was also shown that there are several levels at which SQ can be applied and enhanced by using different techniques. It was acknowledged that these processes can have a constant cost implication for companies, but that it should rather be seen as an investment component, since it can lead to future savings in marketing- and other related costs.

The importance of the perceived and desired SQ levels of customers was discussed, as well as the highly-applicable gaps theory. Because of the reality of service failures, some service recovery strategies were mentioned and supported.

It is also clear that TQM is a comprehensive and popular SQ-approach, with proven results in the business environment and also at some HEIs, but that more comprehensive applications, especially in the administrative environment need to be researched further.

It is however argued that the all-inclusive approach suggested and applied in TQM is in line with the integrated customer experience management-approach constructed in a previous chapter and that these two premises can be treated as interrelated concepts.

Several SQ-measuring instruments were discussed and some shortcomings when applying it in the HEI environment were highlighted. The HedPERF-model seems to the most appropriate in the administrative environment of a University and some elements of it will be used in the research model of this study.

The relevance of such an effective SQ approach in the HEI environment was supported, due to the competitive nature of the industry, which will receive detailed attention in the next chapter. Several constructs have been discussed in the previous chapter, and in each case the applicability to the HEI environment was discussed. In the last literature chapter these concepts will be referred to again, but with a specific focus on the North-West University

(NWU), where this study was conducted. It will also look at the existing customer experience and SQ related practices at the NWU.