

**INTERNATIONAL STUDENTS' EXPECTATIONS AND PERCEPTIONS  
OF  
CUSTOMER SERVICE AT THE DURBAN UNIVERSITY OF  
TECHNOLOGY**

**By**

**Dion Trevor Noel**

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Masters Degree in Technology (Marketing)  
Marketing, Retail and Public Relations Department,  
Durban University of Technology**

**Dr J. P. Govender**

**Supervisor**

**Miss D. Veerasamy**

**Co-supervisor**

## DECLARATION

I, Dion Trevor Noel, hereby declare that the work in this dissertation represents my own work and findings except where indicated, and that all references, to the best of my knowledge, are accurately reported.

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Dion Trevor Noel

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Date

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## ABSTRACT

Over the past few years, higher education institutions (HEI's) have experienced dramatic changes, in their structuring, funding and student numbers. The tertiary education sector in South Africa faces many new challenges, including, more recently, various mergers and the transformation of technikons into universities of technology. This transformation has not only brought about a change of status in these institutions, but also the mergers of intrinsically different institutions. The broadening of access to higher education under the present government policy has seen a growth in the number of international student applications to tertiary institutions.

In an increasingly competitive market for international students, institutions need to provide an optimum service. International students' perceptions of HEI's facilities and services are becoming more important. It is apparent that there is a need to measure international students' expectations and perceptions of service quality at the Durban University of Technology (DUT).

The aim of this study was to investigate customer service quality at DUT. The objectives of this study were: to determine international students' expectations of customer service at the DUT; to evaluate international students' perceptions of customer service at the DUT; to identify any gaps between expectations and perceptions of customer service at the DUT; and to identify customer service expectation and perception differences according to biographical variables. The instrument used to assess the international students' expectations and perceptions of service quality was the SERVQUAL questionnaire, measuring expectations and perceptions according to five quality dimensions. For the purposes of this study, a census was conducted. Hence, a survey was conducted among all international students enrolled in the 2010 academic year. One hundred and ninety two international students were surveyed using the SERVQUAL questionnaire. Data were analyzed using descriptive and inferential statistical techniques. Conclusions and recommendations were thereafter drawn from the literature and the findings of the study.

The study shows that international students' expectations of service quality exceeded their perceptions on the five service quality dimensions used in the SERVQUAL questionnaire. The smallest dimension gap score proved to be tangibles and reliability, both being equal, while the largest gap score of the study proved to be empathy followed by assurance and responsiveness.

Therefore, it is recommended that DUT attend to these gaps and ensure that necessary strategies are implemented so that international students receive a high level of service quality in all areas of the service dimensions.

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## LIST OF ABBREVIATIONS

DUT	Durban University of Technology
HEI	Higher Education Institution
HEI's	Higher Education Institutions
QPU	Quality Promotion Unit

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction to the study

This chapter focuses on the rationale for the study and provides an overview of the research problem, the research objectives and the research methodology that guided the study. The limitations of the study are also outlined in this chapter.

#### 1.2 Background to the study

According to the New Zealand Ministry of Education, in the last eight years, there has been a three-fold increase in the number of international students enrolled in public tertiary institutions in New Zealand. At the United Institute of Technology in Auckland, 63% of the students, enrolled in the Business Faculty in semester one, 2003, were international students (Ministry of Education, 2003).

Furthermore, a recent study by the South African Council of Higher Education estimated that there were 47 000 international students studying in South Africa who came mainly from other African states, but also from Asia, Australia, Europe, North America and South America. The number of foreign students enrolled at South African institutions has increased steadily from 34 770 in 1999 to 47 000 in 2003. The country's main markets were Botswana, Lesotho and Namibia. These three countries accounted for 58 percent of all foreign students. Apart from proximity, the Council cited two main reasons for this trend: Botswana provided its students with funding that covers their tuition, textbooks, accommodation and living expenses if they worked for their government upon completion of their studies; and the South African government has agreed to charge students from Southern Africa the same fees as local students (World Education News and Reviews, 2004: 3).

With this dramatic increase in the number of international students, the challenge for educational institutions and teachers was to be able to measure the legitimate needs and expectations of services offered to this group of students. Thereafter, steps can be taken to satisfy or even exceed them. It is against this background, that this study examined the expectations and perceptions of international students of customer service at the Durban University of Technology (DUT).

### **1.3 Problem statement**

According to Darlaston-Jones, Pike, Cohen, Young, Haunold and Drew (2003: 31), the current climate in tertiary education places students as primary consumers. Such students are becoming more conscious of their customer rights and of gaps between their expectations of service delivery and the reality of that service. Not only does this service gap present a quality assurance challenge for universities, it is also likely to contribute to withdrawal. If an organisation does not do market research on the topic of customer expectations, it may fail in providing customer requirements (Zeithaml, Bitner and Gremler, 2006: 141).

The basis of this research was to determine the extent of the gap that existed between international students' expectations of service quality and actual service delivery at the DUT.

### **1.4 The aim and objectives of the study**

The aim of this study was to investigate international students' expectations and perceptions of customer service at the DUT.

The research objectives were as follows:-

- To determine international students' expectations of customer service at the DUT;
- To evaluate international students' perceptions of customer service at the DUT;

- To identify any gaps between expectations and perceptions of customer service at the DUT; and
- To identify customer service expectation and perception differences according to biographical variables.

### **1.5 Rationale for the study**

This research analysed the current status of customer service, as perceived by foreign students at DUT. The results of this research pointed out the direction for improvement of customer service to international students applying to study at the DUT. This study could enhance the image of the DUT as a global tertiary institution.

### **1.6 Delimitation**

The theoretical component of the study was limited to customer service measure and challenges in the organizational service delivery system.

### **1.7 Limitation**

The results of this study cannot be generalized to customer service of other tertiary and private institutions or populations outside the DUT.

### **1.8 Chapter outline**

The report on this study is made up of five chapters. These chapters cover the following areas:

#### **Chapter One: Introduction**

This chapter introduces the study and provides an overview of the research problem, the research objectives, the rationale behind the study and the research methodology and limitations thereof.

## **Chapter Two: Literature Review**

The literature review gives an overview of expectations and perceptions of service quality.

## **Chapter Three: Research Methodology**

The research methodology chapter shows how the data has been collected and gathered. It provides insight into the sampling methods used, the questionnaire and various other techniques used to analyse the results. It also contains a review of the validity and reliability of the research investigation, indicating areas where errors might have occurred.

## **Chapter Four: Analysis and Results**

The purpose of this chapter is to present the statistical analysis of the data obtained through the questionnaires.

## **Chapter Five: Conclusions and Recommendations**

This final chapter draws conclusions based on the findings and thereafter proposes recommendations.

### **1.9 Conclusion**

In this chapter, an introduction was given to the problem and highlighted the fact that Higher Education is increasingly being recognised as a service industry and, as a sector, is placing greater emphasis on meeting the expectations and needs of its participating customers, that is, international students. The DUT has to become highly competitive due to the growing number of higher education institutions (HEIs). Therefore, a feedback mechanism is needed to be put in place to measure service quality. The next chapter presents a review of literature identified by other researchers and experts in the field of customer service and quality.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

Chapter 1 described the objective and scope of this study and identified the problem statement, the objectives and research methodology for the study. This chapter focuses on the review of students as customers, customers' expectations and perceptions of service quality and how these factors influence customer satisfaction and service quality dimensions in organizations. In order to improve service quality in HEIs, a clear understanding of its nature and what it actually means will be required. It is necessary to understand the consumer expectations and perceptions of service quality, the external and internal factors of the service delivery system.

In addition, the definition of customer expectations, perceptions and benefits of service quality and the link between service quality and customer satisfaction are also discussed. The literature shows that service quality is a factor that can influence return on investment and customer loyalty to any organisation.

#### 2.2 Meaning of service quality

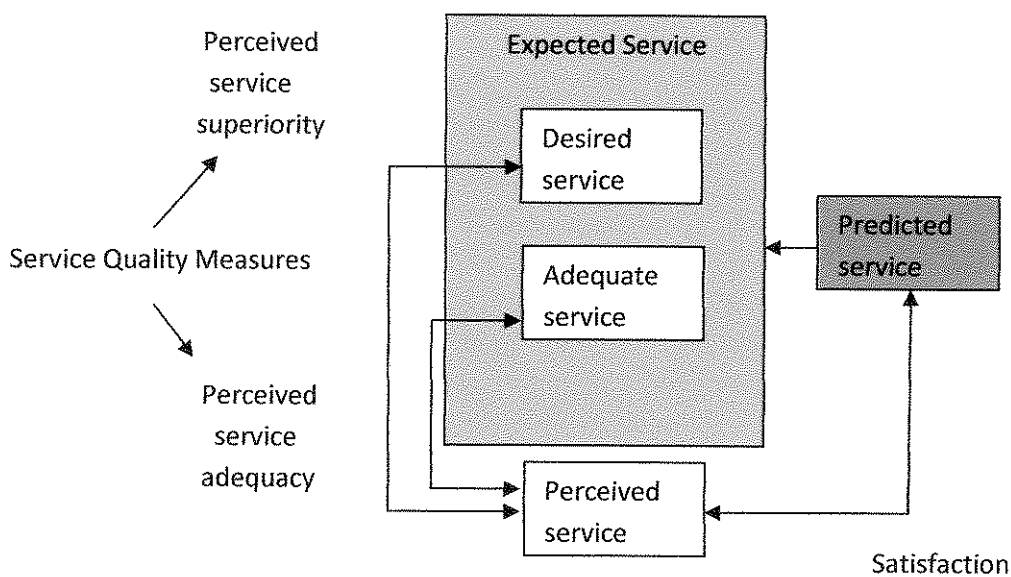
Customer service can be described as the totality of what the organisation does to add value to its products and services in the eyes of the customer. Quality is described as the measurement of how well the product or service of the organisation conforms to the customers' wants and expectations. Another way to look at this issue is to say that quality is the ability of the organisation to meet or exceed customer expectations (Brink & Berndt, 2010: 46-47).

The DUT, as a service provider, will be evaluated on a similar basis. Should the DUT's perceived service exceed the expected service, students will have a favourable image of the institution and support its services.

### 2.2.1 Conception of service quality

According to Lovelock & Wright (2002: 265-266), after making a purchase, customers compare the service expected to what is actually received. Customers decide how satisfied they are with service delivery and outcomes, and they become judgemental regarding quality. Although service quality and customer satisfaction are related concepts, they tend to differ. Many researchers believe that customers' perceptions about quality are based on long-term, cognitive evaluations of an organisation's service delivery, whereas customer satisfaction is a short-term emotional reaction to a specific service experience. Following service encounters, customers may evaluate the levels of satisfaction or dissatisfaction and may use this information to update the perceptions of service quality. Customers must experience a service before they can be satisfied or dissatisfied with the outcome. Beliefs about quality don't necessarily reflect personal experience as people often make quality decisions about services that were never consumed, basing these evaluations on comments by acquaintances or on advertising messages. Figure 2.1 shows the relationship between customer expectations, customer satisfaction and service quality.

**FIGURE 2.1 THE RELATIONSHIP AMONG EXPECTATIONS, CUSTOMER SATISFACTION AND SERVICE QUALITY**



Source: Lovelock & Wright (2002: 266)

In light of Figure 2.1, managing a business to optimise customer satisfaction is strategically important to many organisations, since the cost of mediocre service quality may be high as forty percent of revenues in some service organisations. Most organisations realise that, by improving performance on service attributes, customer satisfaction should increase. This increase should, in turn, lead to greater customer retention and improved quality (Lovelock & Wright, 2002: 266).

### **2.2.2 The basic characteristics of services**

In order to define services clearly, many early investigations focus on finding the differences between services and consumer goods. These differences refer to the “characteristics of services”. These characteristics of service also make service different from goods.

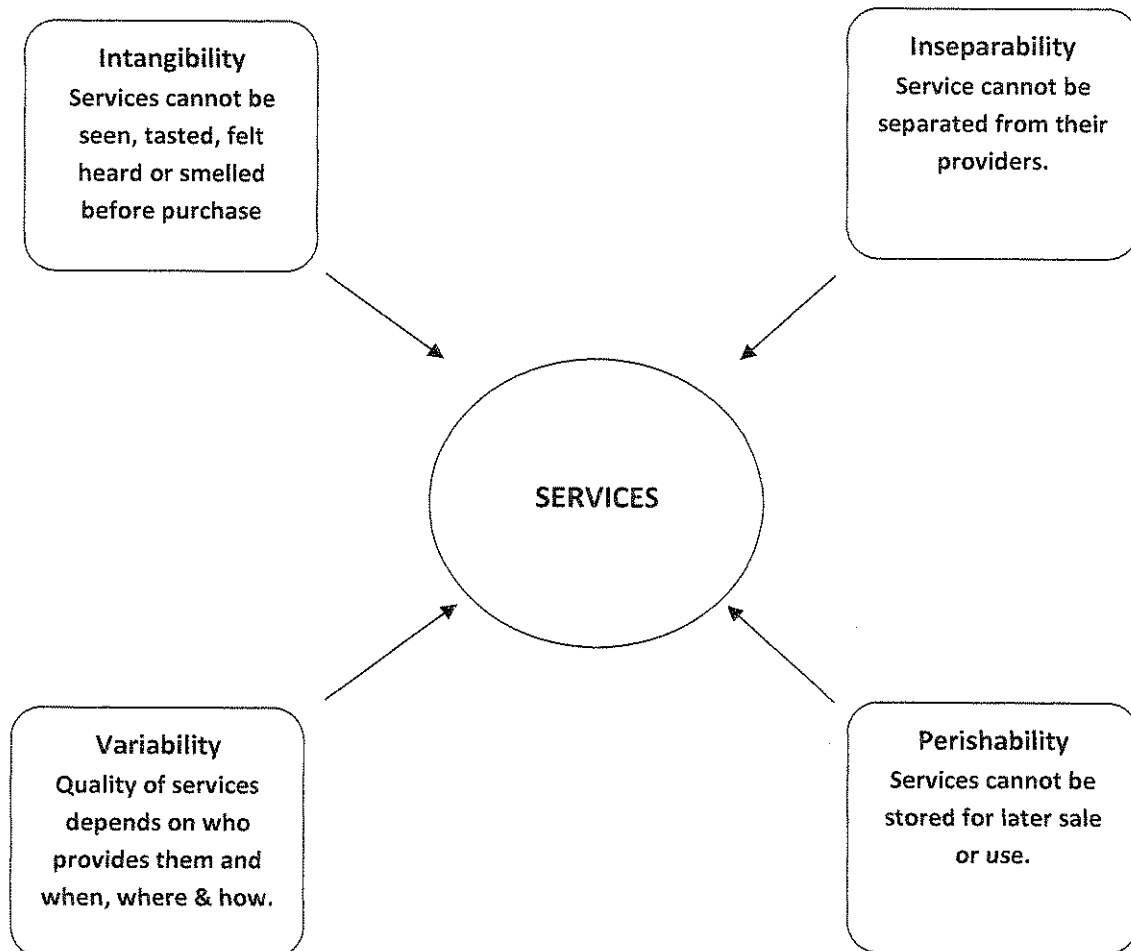
According to Kurtz and Clow (2002: 10), services possess four inherent characteristics not found in goods: intangibility, perishability, inseparability and variability. Kotler and Keller (2006: 406) suggest that no “service” will be precisely the same because services are produced by humans. There will always be variability because services depend on who provides them and when and where they are provided. Even departments at the Durban University of Technology (DUT), from both the academic and administration ambits, will not render the same service and foreign students will not receive the service delivery in the same way.

Futrell (2008: 54) believes that service quality from an organisation’s perspective means establishing requirements and specifications. If organizations want a satisfied customer to continue with the service, the former must provide an excellent level of service quality. Zeitham, Bitner and Gremler (2006: 24) state that services cannot be stored, saved, resold or returned. Customers’ perception of the quality of service that one offers is what determines success (Quintana, 2006).

Brink and Berndt (2010: 55) state that service quality involves all the activities that organizations and their employees conduct or perform to satisfy customers. Services are intangible, they are performances or actions rather than objects that can be felt or seen as with tangible goods (Zeithaml, Bitner and Gremler, 2006: 22).

To attract new customers and to keep current customers coming back, service organizations must find ways to meet these challenges. Figure 2.2 highlights the four service characteristics.

**FIGURE 2.2 FOUR SERVICE CHARACTERISTICS**



Source: Armstrong and Kotler (2006: 223)

Intangibility relates to the lack of tangible assets which cannot be seen, touched, smelled, heard, or tasted prior to purchase (Bruhn and Georgi, 2006: 13). Fitzsimmons and Fitzsimmons (2006: 24) state that organizations always try to make their intangibility offer as tangible as possible, while many manufacturers try to create an image for their products instead of focusing on the tangible aspects of their products in advertising. According to Dhurup, Singh and Surujlal (2006: 40), unlike conventional business products, services provided by HEIs are intangible and highly

subjective and buyers look at evidence of service quality to reduce uncertainty. Armstrong and Kotler (2006: 223) suggest reducing uncertainty; buyers seek certain conclusions of service quality from the place, people, equipment, and communications they receive from the service provider. Chowdhary and Prakash (2007: 496) state that an intangible service may require the customer to be mentally or physically present to receive the services offered. At DUT, international students would need to be physically present to receive the intangible service.

Ganesan-Lim, Russell-Bennett and Dagger (2008: 554) believe that customers find it difficult to determine the technical quality of the service and turn to the more easily evaluated tangible and physical aspects of the environment as substitute indicators of quality. DUT would need to ensure that the physical appearance of the facilities and equipment is maintained at a high standard to ensure high levels of technical quality. Armstrong and Kotler (2006: 223) state that because services cannot be seen, tasted, felt or heard, customers look for 'signals' of service quality to reduce uncertainty. Customers draw conclusions about quality from the place, price, equipment and communications that they can see. Therefore, the service provider must ensure the service is tangible in one or more ways and to send the right signals about quality (Armstrong and Kotler, 2006: 224). The above findings could be incorporated into the DUT marketing strategy.

Inseparability refers to the simultaneous production and consumption of services (Perez, Abad, Carrillo and Fernandez, 2007: 136). This kind of personal contact is referred to as "interactive consumption" and "interactive process" in the definition of services. It includes physical environment (e.g. an online search), behaviour of personnel, and the customer's mood and needs.

Goods can be produced and then sold at a later time; services cannot (Bruhn and Georgi, 2006: 14). Armstrong and Kotler (2006: 224) suggest that services cannot be separated from their providers, whether the providers are people or machines. If a service employee provides the service, then the employee becomes part of the service. Since the customer is also present as the service is produced, both the provider and the customer affect the service outcome.

Inseparability of the service itself from the service provider highlights the role of people in the service transaction, and their influence on quality levels. Therefore, it is difficult for the service providers to hide mistakes or quality shortfalls of the service (Perez et al., 2007: 136).

Perishability of a service means the service cannot be inventoried or stored. The degree of perishability in the quality of service is affected by the degree of intangibility (Bruhn and Georgi, 2006: 14). The perishability characteristic means that the service providers should be effective, i.e., have only one way that they should provide the right service the first time, every time. This provision also makes it impossible to have a quality check before the service can be sent to the customer. Therefore, personnel at DUT need to provide the service right the first time.

Variability refers to the unwanted or random levels of service quality that customers receive when they patronize a service because they are produced by humans (Bruhn and Georgi, 2006: 14). Fitzsimmons and Fitzsimmons (2006: 25) state that the customer is an essential part of the service process; he/she actively participates in the process of producing the service. The customer uses objective and subjective criteria to evaluate service quality. The moods and needs of the customer may lead to their different performance in similar situations. This tendency means that standardizing services is quite difficult on many occasions. The chance of variability in the final output of service delivery processes will still be at large.

According to Armstrong and Kotler (2006: 224), the quality of services depends on who provides them as well as when, where, and how they are provided. Services involve people, and people are all different. There is a strong possibility that the same enquiry would be answered slightly differently by different people (or even by the same person at different times). It is important to minimise the differences in performance (through training, standard-setting and quality assurance).

In light of the above, educational processes, in the form of lesson delivery and project supervision, can be regarded as a type of service provided by the DUT to international students, who assume the role of customers.

## **2.3 Customer**

Forde (2010: 24) defines a customer as a person, company, or entity which buys goods and services produced by another person, company, or other entity. A customer is someone who purchases or rents something from an individual or organization.

In this context, the customer refers to all international students who are affiliated to DUT.

### **2.3.1 Basic needs of customers**

Harris (2010: 5) states that all customers have the following five basic needs:

- **Service:** Customers expect the service that they think is appropriate for the level of purchase that they are making. A small, spontaneous purchase may have a smaller service need than a larger purchase that has been carefully planned and researched;
- **Price:** The cost of everything customers purchase is becoming more and more important. People and businesses want to use their financial resources as efficiently as possible. Many products, previously considered unique, are now considered commodities. This means that while a consumer previously had to travel to the local hamburger restaurant to purchase a hamburger, now one can be acquired at many other locations. This makes the component of price even more important to the customer;
- **Quality:** South African consumers are less likely today to think of their purchases as throw-away items. Customers want the products that they purchase to be durable and functional until the customer decides to replace them. This requirement of quality mandates that manufacturers and distributors produce products that live up to the customers' expectations of durability. Customers are much less likely to question price if they are doing business with a company that has a reputation for producing a high quality product;

- Action: Customers need action when a problem or question arises. Many companies offer toll-free customer assistance telephone lines, flexible return policies, and customer carryout services in response to the need for action. Customers are human beings and like to think that they are an important priority and that, when a need or question arises, someone will be ready and waiting to help them; and
- Appreciation: Customers need to know that customer service providers appreciate their business. Customer service providers can convey this appreciation in many appropriate ways. Saying “thank you” to the customer through words and actions is a good starting point. Preferred customer mailing lists, informational newsletters, special discounts, courtesy, and name recognition are good beginnings to showing customers the appreciation. Additionally, letting customers know that the service providers are glad that customers have chosen to do business with them conveys a positive message.

The DUT must focus on being customer oriented and strive to provide international students with excellent customer service to gain a competitive advantage.

### **2.3.2 External and internal customers**

Lovelock (2001: 21) believes that it is important for every business to examine and reassess how well it manages its relationships with two key groups: internal customers and external customers. In the case of the DUT, internal customers contribute to the customer service of an organization and, therefore, are essential and inseparable. Gerson (2000: 44) says that any business that fails to take this preventive initiative, before market share, sales, or profits decline, may well find itself unable to reverse the downward trend.

According to Brink and Berndt (2010: 15), external customers are the customers that the firms do business with outside their organization. External customers are those customers that firms most commonly think of when they consider whom they serve. They are the people with whom firms interact and share their knowledge and positive

attitude. External customers have the power to enhance the firms' reputation and to bring them new business. However, they are not the only customers that firms serve.

Every day, firms interact with a special group of customers who frequently go unrecognized. These customers are the internal customers. The internal customers are those people that work in the organization. They are important to the firms' success in providing their external customers with what they need (Brink and Berndt, 2010: 16). If internal customers do not see the importance of completing work promptly and of treating others with respect, it becomes very difficult for the organization to provide outstanding customer service to external customers. Internal customers were previously referred to as co-workers, but this title does not elicit the respect deserved by the people within any organization who contribute to the overall success of the organization. The idea does not appeal to those employees who want to think that, since they do not interact with external customers, they do not have a responsibility in the customer process. Internal customers should be as important to firms as their external customers.

### **2.3.3 Customer attributes**

Each customer is unique. Identifying customer attributes may allow an organization to better understand "who" its customers are. Harris (2010: 8) articulates that customer attributes are characteristics that allow customers to be categorized according to demographic, psychographic, or firmographic information. Businesses frequently attempt to group their customers to enable the business to serve the customer more appropriately.

Demographic information includes characteristics like age, income, marital status, education, stage in the family life cycle, home ownership, sex, postal code, occupation, household size, mobility patterns, ethnic background, and religion. Demographic information is a straightforward and basic method of identifying customers. Psychographic information focuses on lifestyles, modes of living, needs, motives, attitudes, reference groups, culture, social class, family influences, hobbies, and political affiliation. Psychographic information can provide a more thorough

picture of the customer. Not all individuals who earn the same income choose to spend it in the same way (Harte, 2010).

Firmographic information includes characteristics about a company such as how many employees they have; the kind of business they are in; whether they are retail, wholesale, or a service provider and their hours of operation. Since so many customer service providers serve the business-to-business environment, it has become increasingly important to understand companies themselves as entities, rather than just the individuals served as the ultimate (or end-of-the-line) consumers. Individuals take their personal experiences with them as they make business decisions and vice versa (Harris, 2010: 8).

## **2.4 Customer expectations of service**

Customer expectations may be described as the desires or wants of the consumer. The crux is that customer expectations are what the customer expects from the organisation and its range of product or services, i.e. what customers feel the organisation should offer them. These expectations are, in most instances, different from what the customer gets in real-life situations from the organisation. What is important here is to focus on the customer perceptions, rather than on the reality of the performance (Brink and Berndt, 2010: 59).

Every customer walks into a known or unknown, with a set of expectations. Expectations may be positive or negative. Sometimes, companies or individuals wrongly assume that they cannot live up to their customers' expectations. This assumption frequently stems from a misconception of what the customers expect (Harris, 2006: 16).

Zeithaml, Bitner and Gremler (2006: 81) state that expectations are beliefs about service delivery that serve as standards against which performance is judged. Customer expectations are critical to service marketers and will deeply influence customer behaviour. These authors further mention that customer expectations are not stable and are human perceptions based on verbal information, personal needs, experience and commercial information.

Coye (2004: 54) states that the concept of expectations plays an important role in most discussions of service quality. The study was applied in a variety of areas such as job satisfaction, satisfaction with leader performance and satisfaction with service performance. The author mentioned that there is still much to learn about exactly what expectations are, what role they play, and how managers can address their influence. An expectation is the subjective probability that behaviour will be followed by a certain outcome.

Expectations are what customers ideally want, for example, what customers wish for, what they expect from an excellent service provider, what the customer hopes for, and what they think should happen in their next encounter (Coye, 2004: 55). The study of Coye (2004: 54) concluded that it is incumbent on managers of service operations to be aware of the factors that influence both customers' desires and expectations and the potential opportunities for interventions that could lead to more effective management of these relationships.

#### **2.4.1 Levels of customer service expectations**

Harris (2010: 17) states that customer service providers must recognize that customers have different levels of expectations. Expectations can be divided into two distinct categories: primary expectations and secondary expectations.

Primary expectations are the customers' most basic requirements of an interaction. When international students dine at the DUT canteen, their primary expectations are to satisfy their hunger, to let someone else do the cooking, and to pay a reasonable price. Secondary expectations are expectations based on the previous experiences that are enhancements to customers' primary expectations. A customer's expectations change constantly and each customer will have his/her own unique set of expectations. While this is a challenging reality, it provides a unique opportunity for service providers to strive consistently to be what the customers want them to be.

Bruhn and Georgi (2006: 54) classify customer expectations into predictive and normative expectations. Predictive expectations have a preventative nature in that

the customer states in advance the level of output foreseen which is taken for granted or considered likely to be delivered by the service provider.

Normative expectations represent a demand for the service provider and characterise the output level required by the customer from the organisation. Metters, King-Metters, Pullman and Walton (2006: 83) suggest that customers have different types of expectations about service. Research has proven two types of customer expectations, desired service and adequate service. Desired service reflects the hopes and wishes of consumers. Adequate service represents the minimum level of performance that customers are willing to accept.

#### **2.4.2 Techniques for exceeding customers' expectations**

Many companies talk about exceeding customer expectations – delighting and surprising customers by giving them more than they expect. Harris (2010: 173) suggests that to exceed customers' expectations, firms can try the following:

- Become familiar with customers. Get to know who they are and why they do business here. Find out their likes and dislikes;
- Ask customers what their expectations are. Find out what they see as the benefit of doing business here. What would they like to do that firms aren't already doing?
- Tell customers what they can expect. Convey to customers the firm's commitment to them;
- Live up to their expectations. Follow through by accomplishing what firms have said that they would do; and
- Maintain consistency. Don't promise what firms cannot deliver, but always deliver a consistent service. Customers like to know that they will have the same positive experience every time they interact with the firm.

One important key to exceeding customers' expectations is to remember that expectations are always changing. What was previously in excess of customers' expectations may suddenly be no different from what all the competitors are doing. If firms fail to stay current with their competition, they may fail to live up to their customers' current expectations.

### **2.4.3 Zones of tolerance**

According to the disconfirmation concept of the Perceived Service Quality model, according to which the experiences of customers are compared to their expectations, customers' expectation of the level of a given service attribute is thought of and measured as one singular level of expectation. No variation in expectations is included. The zone of tolerance can vary from customer to customer, and from service attribute to service attribute. It may also, for a given customer, vary from time to time. It is suggested that, in general, it is narrower for outcomes-related service features and broader for process-related features.

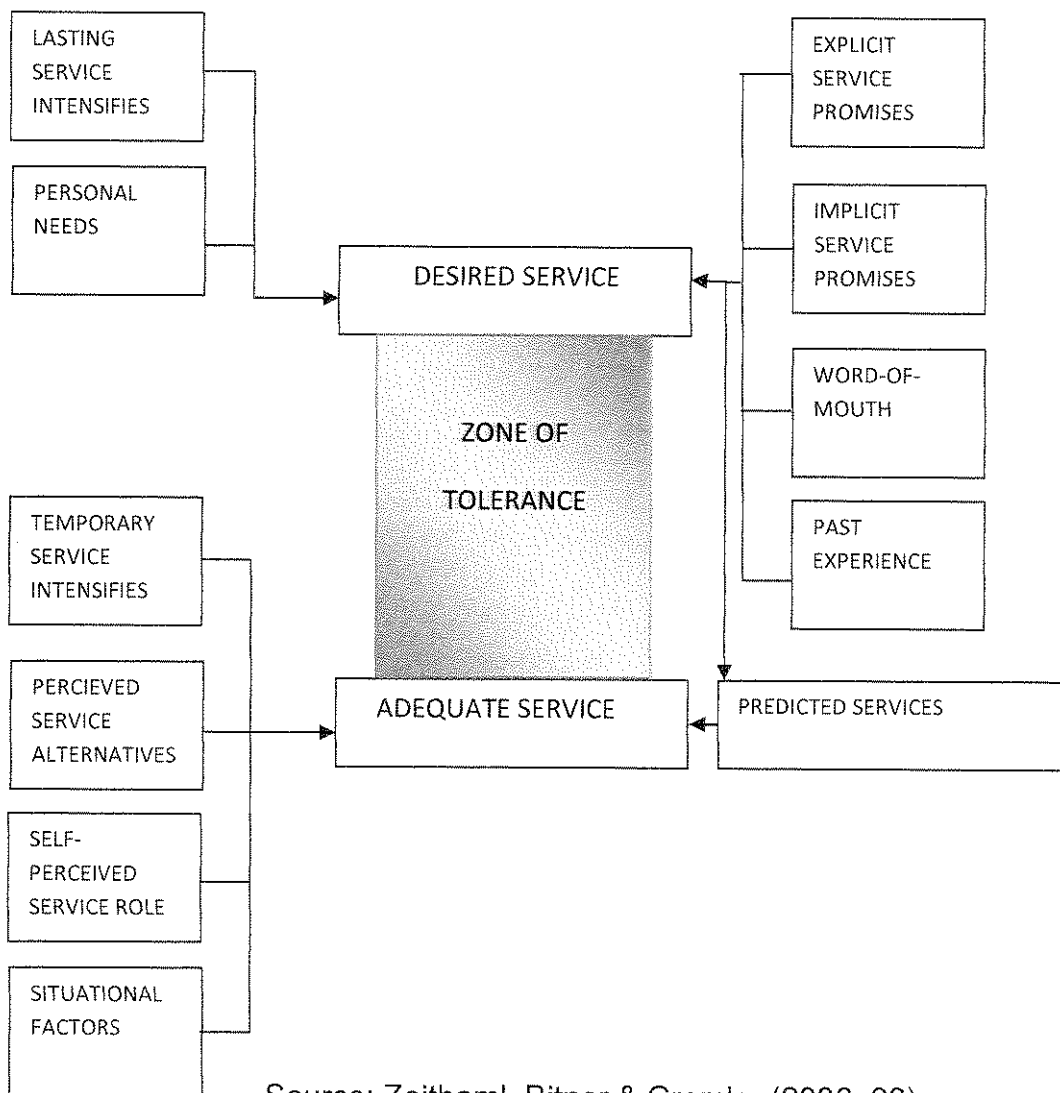
Measuring the zone of tolerance of expectations and comparing them to the experiences of customers may give management useful information about where service quality problems exist, and where there is no need for immediate action. For those attributes where the experience measurement falls in between the desired and adequate levels of expectations, the levels of perceived service quality is, at least, tolerable. Again, for those attributes where the experience measurement is lower than the adequate level, immediate corrections may be required, so that the overall level of perceived quality does not decrease. It is urgent to take action if such an attribute is considered central to customers' quality perception, than if its impact is only marginal (Grönroos, 2002: 106-107).

### **2.4.4 Factors that influence customer satisfaction**

Although many of the factors that influence customer expectations are uncontrollable, marketers should try to understand them so that they can control them (Robledo, 2007: 23). In general, these factors are divided into three parts in terms of the levels of the service expectations such as desired service expectations, adequate service expectations, and both desired and predicted service expectations.

Figure 2.3 reflects personal needs and lasting service intensifiers which are the two largest factors that influence desired service levels and elevate the level of desired service. Metters et al. (2006: 88) indicate that lasting service intensifiers are individual, stable factors that lead the customer to a heightened sensitivity to service. Desired service expectations and personal service philosophy are two important factors of the lasting service intensifiers.

**FIGURE 2.3 FACTORS THAT INFLUENCE DESIRED AND PREDICTED SERVICE**



Source: Zeithaml, Bitner & Gremler (2006: 93)

Figure 2.3 also shows the five important factors that influence adequate service (Zeithaml, Bitner and Gremler, 2006: 90):

- Temporary service intensifiers include short-term and individual factors that make a customer more aware of the need for service;
- Perceived service alternatives mean that other competitors, who obtain the same service, can influence the customers' choice and decisions;
- The customers' self-perceived service role is the third factor affecting the level of adequate service. Since customers' expectations are partly shaped by how well they believe they are performing their own role in service delivery, one role of the customer is to state the level of service expected;
- Situational factors indicate factors that customers perceive but that are beyond the control of service providers; and
- Predicted service is an estimate of the service that a customer will receive in an individual transaction with a service provider. Since customers are always likely to predict what will happen in the next service encounter or transaction in terms of their experience, predicted service is viewed in this model as an influencer of adequate service.

## **2.5 Customer perceptions of service**

Perceptions are defined in various ways. Strydom, Jooste and Cant (2000: 84) define customer perception as the process of receiving, organising and assigning meaning to information or stimuli detected by the customer's five senses and state that it gives meaning to the world that surrounds the customer. Perceptions are also described as the end result of a number of observations by the customer. Customers perceive services in terms of quality of services provided and the satisfaction level attained.

### **2.5.1 Dimensions of service quality**

Factors that can influence the quality of a service encounter in service settings include dimensions such as reliability, responsiveness, assurance, empathy and tangible factors (Dhurup, Singh and Surujlal, 2006: 40). These five dimensions are found relevant for various business services.

Silvestro (2005: 216) states that the only criteria that count in evaluating service quality are those defined by the customer. Customers will use all or some of the dimensions to determine service quality perceptions. Research suggests that cultural differences will also affect the relative importance placed on the five dimensions. Tangible features, such as personnel's or exhibition's appearance, are relatively easy to assess. However, intangible features, such as safety and understanding customers needs, may be very difficult for the professional and the customer to evaluate. Customers do not perceive quality in a one-dimensional way, but rather judge quality on multiple factors relevant to the context (Zeithaml, Bitner and Gremler, 2006: 117).

According to Brink and Berndt (2010: 60), the organisation and its employees must try to understand the customers' problems and strive to execute activities with the customers' best interests in mind. Lovelock & Wright (2007: 266-267) state that, of these five dimensions, reliability has consistently proven to be the most important factor in customers' judgement of service quality. Reliability improvements lie at the heart of service quality enhancement efforts because unreliable service implies broken promises on the attributes that customers care about the service received. If the core service is not performed reliably, customers may assume that the company is incompetent and may switch to another service provider.

The five dimensions in service quality can be demonstrated in relation to educational settings as follows:

#### **2.5.1.1 Tangibles**

Tangibles refer to the physical facilities, equipment and staff appearance. According to Brink and Berndt (2010: 60), this dimension refers to the facilities, equipment and

material which must reflect positively on the organisation. The dimension also includes the appearance of employees. The challenge for institutions is to ensure that service specifications such as course content, delivery and application meet the expectations of their customers consistently. This is a precarious concern as performance associated with these “specifications” is highly context-driven and based on a variety of factors, sometimes beyond the control of the factors involved. Learning experience and orientation, at large, cannot entirely be evaluated by grades alone. Service performance should go beyond tangible forms. In addition, learning objectives need not necessarily lead to outcomes that are strictly quantifiable (Yeo, 2008: 270).

#### **2.5.1.2 Reliability**

Reliability refers to the ability to perform service dependably and accurately. According to Yeo (2008: 270), discrepancy between promise and delivery is largely the result of inaccurate communication from advertisement and exhibitions. Some institutions tend to oversell their services, leading to grand promises that misrepresent their actual potential and academic readiness. For instance, one of the most common strategies is the promotion of facilities and support services, ranging from “hardware” to “software” availability. Others boast of their state-of-the-art technology used in laboratories, computer systems and other learning facilities. The organisation must provide the customer with accurate service the first time around. It must deliver what is promised within the specific time frame set out. If this delivery is done in a proper manner, it will enhance the perceived quality of the customer (Brink and Berndt, 2010: 60).

#### **2.5.1.3 Responsiveness**

Responsiveness relates to the willingness to help and respond to customers' needs. Institutions should be responsive to the shifting needs of their customers (students) in providing courses and training programmes that are relevant in subject matter and teaching approaches. The learning process is expected to be academically rigorous, yet flexible, in areas pertaining to course selection and assessment (Yeo, 2008: 270). Dale, Van der Wiele and Van Iwaarden (2007: 240) define responsiveness as the willingness to assist customers and to provide prompt service on a continuous

basis. Sometimes, this service may be out of the ambit of normal operating hours. This dimension focuses on attentiveness and willingness in dealing with customer requests, queries and prompt complaint resolution.

#### **2.5.1.4 Assurance**

The assurance dimension focuses on the ability of staff to inspire confidence and trust. Judgement of high or low service quality largely depends on how the customers perceive the actual performance based on their expectation. The level of tolerance in service standards exists across all areas; for instance, the more important the area, the smaller the boundary of tolerance. Customers' willingness to modify expectation of service standards can be appropriately managed through the availability of choices. These choices should diversify the expectation levels of customers in a way that the shortcomings of one service can be offset by the strengths of another (Yeo, 2008: 270).

#### **2.5.1.5 Empathy**

Empathy refers to the extent to which caring individualised service is given. It is sometimes a challenge for institutions to exceed customer expectations and demand. For instance, shortages of teaching staff at the DUT and the need for optimal enrolments have seen an increase in class sizes, stretching the teacher-student ratio. This increased ratio has implication on the level of individual attention and empathy given to each student inside and outside class. Further, when lecturers are expected to assume multiple roles, including curriculum writing, stand-up teaching, mentoring, project supervising and administrative responsibilities, the level of service quality may become less standardized and desirable over time (Yeo, 2008: 270).

### **2.5.2 Customer satisfaction**

Keeping customers happy is good for business. The marketing concept has proven that companies do not have to sacrifice profitability to keep customers happy. In fact, firms which consistently rank high on customer satisfaction also rank high in profitability; these companies have more loyal customers. The happier their

customers are with a product or service, the more likely they are to buy it again, and the less likely they are to switch to competitors' products (Blem, 2000: 14).

The original meaning of satisfaction is linked to an adequacy construct. However, as with the word 'quality', the meaning of satisfaction has evolved to imply gratification and fulfilment. Within the concept labelled satisfaction, Rust, Zahorik and Keiningham (2002: 55) suggest that there are many satisfaction states, for instance, contentment, surprise, pleasure and relief. Brown (2002: 1-13) drew attention to the fact that satisfaction must incorporate both the needs and the desires of the consumer. They argue that it is the failure to include consumer desires that has caused the logical inconsistencies in satisfaction research. Indeed, if satisfaction is to be defined in terms of an emotional response, the consumers' desires and their individual goals must play a part in determining satisfaction.

Customer satisfaction is created by correctly matching the needs of customers with the information, goods, and services that firms offer. If there is one guiding retail principle to follow, it is to "know customers and their needs". By focusing on customer satisfaction, firms will enhance the lifetime value of customers as they continue to patronize their store for years to come and refer friends or family members.

Rust, Zahorik and Keiningham (2002: 244) report that customer satisfaction is believed to be associated with fruitful customer behaviour from the firm's point of view. Many positive links have been observed between customer satisfaction, loyalty and the propensity to recommend the supplier's offer to other customers. However, their study shows that the results of many studies on these links were not correctly evaluated: 'much of our knowledge of how customer satisfaction is related to customer behaviour is derived from studies which include either very satisfied or dissatisfied customers'.

The link between customer satisfaction and behaviour and the consequences it has on loyalty, word-of-mouth and feedback to the supplier must not be over emphasized. Behavioural variables are all the more difficult to interpret when the consumer's level of satisfaction is extreme, whether it is high or low.

Consequently, the fact that customer satisfaction includes loyalty may be considered but not taken for granted because of its link to numerous behavioural variables (Griffen, Norton and Samuels, 2002: 311).

Customer satisfaction is not only linked to past experiences or what has been heard through word-of-mouth, but it is linked to the process of consuming itself. That is to say, that consumers are not just satisfied only with a product or a service but also with consuming. There are degrees of satisfaction. Consumers might be very satisfied by some aspects of the products and be very dissatisfied by other aspects. Davies (2001: 287) explores the impact of disconfirmation, and actual waiting times on customer satisfaction. It has been found that if customer satisfaction does not necessarily guarantee customer loyalty, dissatisfaction will cause customers to take their businesses elsewhere.

Churchill and Peter (2003: 178) state that customers, who are dissatisfied with the level of service they have received, will be less likely to return in the future, or if they do return, they will most likely to do so with less frequency than they did in the past. Conversely, customers, who are extremely satisfied with their service experience with a given firm, will most likely continue to return to that firm at the same frequency or even more frequently. Once again, the customer's experience with the service firm is also likely to be multiplied through interactions with other prospective customers through word-of-mouth (Cadogan, and Diamantopoulos, 2004: 353).

Satisfied customers seem to have fewer friends than dissatisfied ones and the latter appear to have louder voices. Put simply, people are far more likely to be vocal about things that go wrong as opposed to those that go right (Cartwright, 2002: 89).

Consumers may be satisfied or dissatisfied with the contact person, the core service product or any of its attributes, the surroundings or any part of the services and with the service organisation overall. As a result, satisfaction can be conceptualised as a state of mind that can constantly change and be reassessed over the encounter, or a series of encounters, and is not static even within one encounter (Gabbott and Hogg, 2002: 105).

Hasty and Reardon (2001: 121), therefore, point out to the fact that one must not underestimate the value of the ability to uncover customer satisfaction problems. This may sound like an easy proposition, except for one factor: half of the customers who have a problem will not talk to anyone in the company and only between 9 and 37 percent of them will ever return. The implications of these numbers are clear. Not only must companies strive to create an environment within the firm that will foster customer satisfaction, but they must also seek to train employees to be alert to customer problems.

By creating customer satisfaction, an organisation can retain their existing customers and attract new business, thus improving market share. On this basis, what is interesting from a consumer behaviour perspective is not the relationship between customer and satisfaction, but the overall evaluative judgement that the consumer makes about the service (Gabbott and Hogg, 2002: 105).

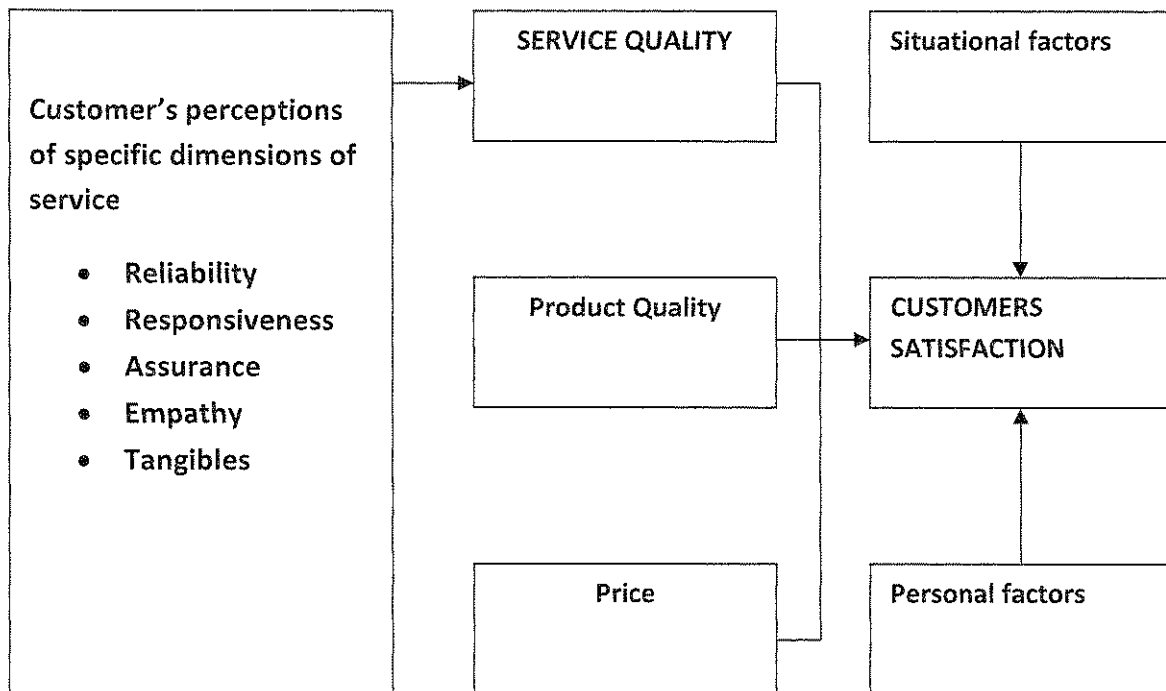
In light of the above, arguments of the authors reveal that good service delivery enhance to customer satisfaction. It is imperative that DUT conducts customer satisfaction surveys regularly to achieve a competitive advantage within its industry.

### **2.5.3 The link between service quality and customer satisfaction**

Metters et al. (2006: 110) indicate that satisfaction is the customers' fulfillment response. Satisfaction is the customer's evaluation of a product or service in terms of whether the product or service has met the customer's needs and expectations (Bruhn and Georgie, 2006: 443).

According to Brink & Berndt (2010: 59-60), customers perceive services in terms of the quality of service provided and the satisfaction level attained. These two concepts, service quality and customer satisfaction, are the focus of attention of organisations because they want to quantify (measure) them. The reason for the focus on quality of service and customer satisfaction is the belief that organisations can differentiate themselves by means of providing better service quality and overall customer satisfaction. The linkage between service quality and customer satisfaction is indicated in Figure 2.4.

**FIGURE 2.4 THE LINKAGE BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION**



Source: Brink & Berndt (2005: 59)

#### **2.5.4 Excellent customer service is so rare**

Customer service is given a lot of lip through expensive training programmes and parades of certificates of the people who have attended them, through posters and exhortations and even through declarations of intent to customers. However, in practice, the success rate has been poor. Too many organizations have yet to get the simplest aspects of customer service right – for example, getting through on the telephone quickly, or answering letters promptly, or getting a service engineer to arrive punctually (Freemantle, 2003: 5).

Harris (2006: 52) points out that customer service is rare because it requires two things that the average person and organization are unwilling to commit to: spending money and taking action. In business, everyone talks about how important customer service is, but most people don't really know how to provide outstanding customer service. Freemantle (2003: 5) said that, in the real business world, for many, both within an organization and customers of it, the idea of customer service has become a bit of sham, a bit of a gimmick. It has become a superficial and fashionable phrase

which, in practice, has little meaning. In fact, the term 'customer service' is used as a bureaucratic cosmetic in a superficial attempt to hide the ugly cracks in the way the company treats its customers (Freemantle, 2003: 7). Customer service is much more than having a great attitude or being a people person. To prepare to provide excellent customer service, one must develop the skills to be successful. Harris (2006: 53) suggests that, in addition to developing skills, organizations must assess their current level of customer service and determine if they appropriately meet their current customers' needs. Customers are changing all the time. In addition to the people, the circumstances that customers and organizations are required to operate in may change. If customer policies were established a number of years ago, or if the customer base has changed, current procedures for operation may no longer be effective. Companies must develop strategies that meet today's customers' needs.

Employees must be empowered to make decisions to benefit their customers. They must have managers who carefully hired the right people for the jobs and employees who are adequately trained to anticipate the challenges that may arise daily. Carr (2002: 211) believes that customer service is more than having a great attitude; it does require having the right attitude. Some people become so involved in trying to provide excellent customer service that they lose sight of the little things that the customer would appreciate.

There is nothing magical or clever about customer service. It is very basic. The problem is that too many companies have ignored these basics, concentrating their energies on product marketing and financial performance at the expense of the customer. Customer service should be a fundamental and integral aspect of any business and should be given equal weight in strategic considerations about the company's future (Brink and Berndt, 2010: 92). In fact, as customers acquire more disposable income during the last decade, their criterion of choice will rely less on product and price but more on service. With the increasing availability of modern technology, companies will find it relatively easy to compete on products. What they will find more difficult to do is compete on service, for service not only depends on modern technology but also on the attitude of its people and, therefore, the capability of its managers.

The challenge of providing excellent customer service never ends. Harris (2010: 53) articulates that individuals must periodically examine their performance to ensure that they are continuing to practise the positive skills that make providing customer service enjoyable and efficient. It is easy to slip into old behaviours when customer service providers are busy or have additional stress in their lives.

DUT management must periodically measure customer satisfaction. Just because DUT thinks that its customers are pleased with what it is doing for them doesn't mean that customer service is excellent. International students at DUT must be asked questions concerning what is being done well and what could be improved. International students have many concerns in their lives; just because they have not complained doesn't mean that they do not have complaints or suggestions.

### **2.5.5 Barriers to customer service**

Numerous obstacles stand in the way of the delivery of excellent customer service. Some of the common barriers include management philosophy; making it difficult for customers with a problem to contact a company or the person who can really help; unreliable equipment; restrictive company policies; difficult-to-understand warranties or owner's manuals; out-of-date procedures; or a lack of understanding of the value of service. These barriers are, in most cases, beyond the control of the customer service provider and, unfortunately, a common part of doing the job (Gerson, 2000: 117).

According to Harris (2010: 14), some barriers to excellent customer service are within the control of the customer service provider. These challenges can be overcome through diligent effort, allowing the customer service provider to do the best possible job. Some of the most common barriers to excellent customer service are:

- Laziness;
- Poor communication skills;
- Poor time management;
- Attitude;

- Moodiness;
- Lack of adequate training;
- Inability to handle stress;
- Insufficient authority;
- Serving customers on autopilot; and
- Inadequate staffing.

Customer service providers must perform periodic self-evaluations to assess their effectiveness and to identify the areas that need improvement. When that assessment is made, the individuals must take the initiative to make changes and must monitor themselves so that they don't slip into their old habits (Gerson, 2000: 118).

### **2.5.6 The cost of losing a customer**

With the increased expectations of customers and the competitiveness of the marketplace, customer service providers are recognizing the high cost of losing customers. It takes little effort to lose a customer. When service providers neglect their concerns, treat them disrespectfully, and fail to follow through with results, customers will be tempted to make their exit.

Gabbott (2002: 217) explains that when customers cease to do business with a firm and begin to do business with its competitors, several unfortunate situations occur:

- Losing income that business relationship created. This loss may seem insignificant to begin with, but over a period of time it can prove to be quite damaging;
- Losing the jobs that clients provide. If business goes elsewhere, it does not need to employ the people who were working on the account;
- A third situation that may occur is the loss of reputation. Word travels fast in the information-based society. Customers will possibly share their experience with their clients and friends. This loss may result in the immediate departure of other

business or simply in a lack of trust among current clients and any potential customers; and

- A final challenge is the loss of future business. This is an intangible variable because it is difficult to assess the long-term effects of what might have happened in the future.

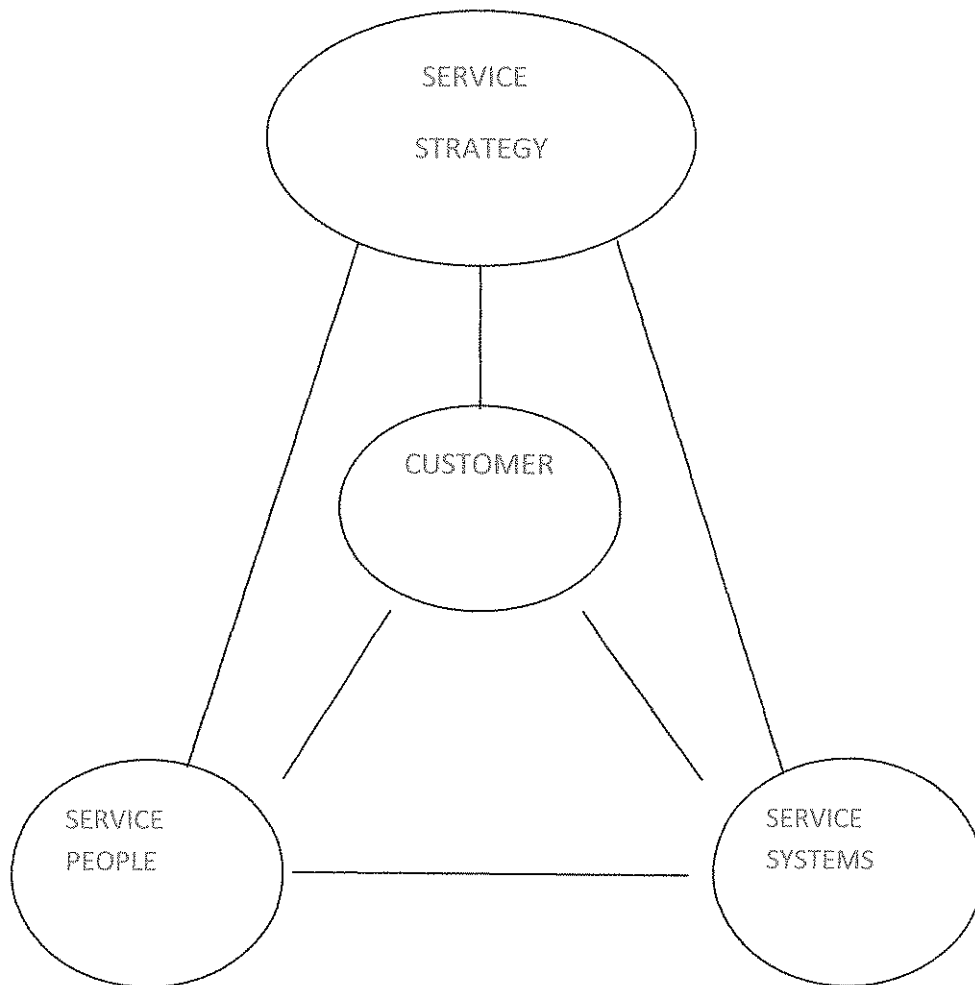
### **2.5.7 The cost of bad customer service**

Some companies may think that they can get away with bad service but there is no doubt that it is costly. Costs arise in handling complaints; in paying refunds or handling returns; in legal action dealing with customer protection bodies; and in the necessary corrective public relations. However, indirect costs are likely to be far higher and will accrue from lost sales to those who are told about the bad service and, above all, from the cost of acquiring new customers to replace those lost. The latter cost can be ten times greater than the cost of retaining existing customers through good service. The greatest cost of all is the cost of lost opportunities (Blem, 2000: 7).

### **2.5.8 The service triangle**

The service triangle illustrates the theme of customer service. It emphasizes the role of service systems, service strategies and service people in any successful organization. Each of these elements work together and revolves around the customer - the most important member of the service triangle.

**FIGURE 2.5 THE SERVICE TRIANGLE**



Source: Albrecht (2001: 77)

As shown in Figure 2.5, the service triangle focuses on the most important elements to succeed with customers. In becoming a customer-oriented business, top-level management, supervisors, middle management and front-line employees need to be familiar with each of the elements (Albrecht 2001:78).

### **2.5.9 A purchase model for service**

According to Gabbott and Hogg (2002: 34), the purchase process for services has three distinct phases. The first phase is called the pre-purchase phase. This is when purchase decisions are actually made. During this phase, consumers weigh the different alternatives available to them and the benefits each alternative would

provide. Consumers make purchase decisions based on input from internal factors, external factors, firm-produced factors and perceived risk.

After making a purchase decision, consumers, at some point in time, will move into the second phase of the purchase process—the service encounter. The service encounter is the actual interaction point between the customer and the service provider. The service is performed or provided to the customer at this stage. The primary difference between purchasing goods and purchasing services is that services tend to be inseparable in the sense that the service cannot be separated from the service provider. What transpires at the time of consumption has a significant impact on how the customer will evaluate the quality of the service and future purchase decision (Gabbott and Hogg, 2002: 34-35).

The last phase of the purchase process is the postpurchase phase, which begins upon completion of the service. During this phase consumers will make evaluations concerning the quality of service, their level of satisfaction or dissatisfaction, and future purchase intentions (Gabbott and Hogg, 2002: 35).

#### **2.5.9.1 Pre-purchase Phase**

Cook and Walters (2001:25) illustrate that customer decisions are based on internal factors such as their individual needs and wants, their past experiences, their expectations, and their level of involvement. External factors that impact their decisions are competitive options, the social context of the purchase, and word-of-mouth communications. Firm-produced factors that may have an impact on their decisions are promotional materials, the pricing structure, and facility location. The last element of this complex pre-purchase phase is perceived risk. Risk is the perceived exposure of the consumer to the chance of injury, loss, or damage resulting from the purchase decision (Kurtz and Clow, 2002: 35).

In view of the above, the factors are categorised as follows:-

- **Internal factors**

Four internal factors impact a consumer's decision during the pre-purchase phase. These factors are individual needs and wants of consumers, past experience, expectations, and level of involvement.

- **External Factors**

Three external factors influence the purchase decision during the pre-purchase phase. These factors are the competitive options available to the consumer, the social context of the purchase, and word-of-mouth communications.

- **Firm-produced Factors**

Promotions, pricing, and the distribution system are firm-produced factors impacting the purchase decision.

- **Risk**

Risk has two components: uncertainty and consequences. Uncertainty is the probability that a particular outcome or consequence will occur. Consequences are the degree of importance and danger of the outcome itself.

### **2.5.9.2 Service encounter**

The second stage of the purchase process model is the service encounter, which is the actual interaction point between the customer and the service provider. For most services, the interaction is between a customer and a human service provider. Both are present during the service performance and must interact with each other (Kurtz and Clow, 2002: 43).

Service encounter is central to the consumption experience, and, as such, is central to the management and marketing of service companies. A number of issues have also been highlighted which are worthy of restatement. First, the issue of time, which, so far, has had only a peripheral place in service research. As the relationship marketing perspective becomes more widely reviewed, concentrating as

it does upon building relationships through subsequent and sequential encounters, time dictates opportunities for developing, recovering, cross selling, up-selling and maintaining customers (Gabbott and Hogg, 2002: 70). For the consumer, time offers opportunities to develop trust, commitment, knowledge, participation and value. While discrete analysis offers a glimpse of service consumption, longitudinal research into extended encounters will become indispensable (Zeithaml, Parasuraman and Berry, 1990: 78). The second issue is that the service encounter is inextricably linked to what precedes it and what follows it in terms of consumer behaviour. The process of searching for information, learning about service offerings and evaluating different services provides a context for the encounter embodying expectations, learned responses, scripts and agendas. Equally, how the encounter was experienced, emotional and cognitive, responses to people and service will impact upon how the service organisation is viewed. While separation of the encounter into a discrete process serves both an analytical and conceptual facility, there is no doubt that, in terms of consumer behaviour, actual purchase is a very small part of the consumption process (Gabbott and Hogg, 2002: 90).

### **2.5.9.3 Post-purchase phase**

The third stage of the purchase process is the post-purchase phase. During this stage, customers will make an evaluation of the service quality they received and their overall level of satisfaction or dissatisfaction. For satisfied customers, post-purchase actions include repeat purchases, customer loyalty, and positive word-of-mouth communications. For dissatisfied customers, these actions include switching vendors and negative word-of-mouth communications (Kurtz and Clow, 2002: 51).

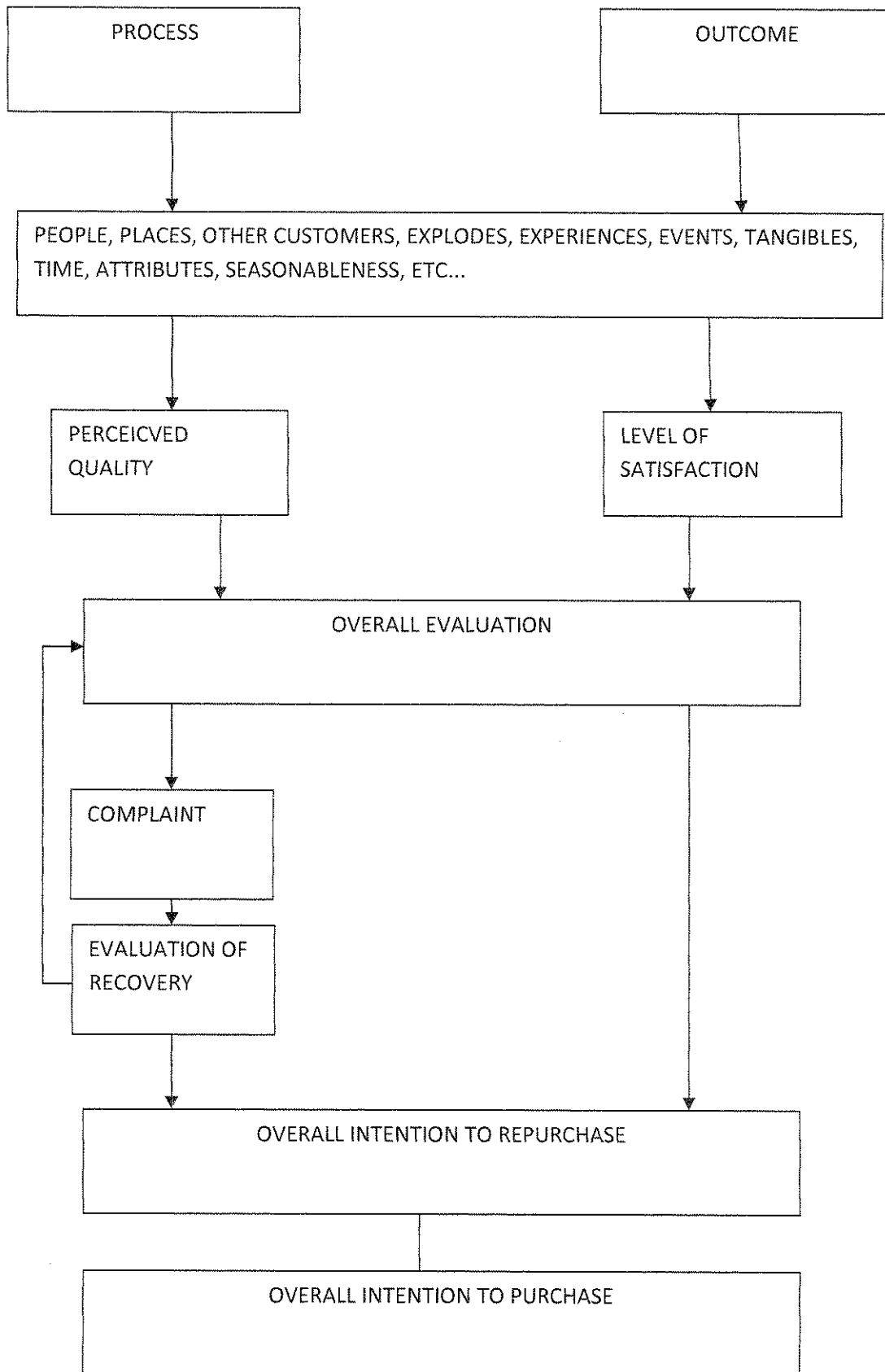
In light of the above, it can be inferred that timeous evaluation of service delivery at DUT for international students can help negate their negative perceptions. The literature on service evaluation must be considered by DUT in terms of the time issue when conducting an evaluation. Existing consumer behaviour literature points to a post-purchase phase comprising the steady depletion of the physical product. This reflects the normal course of events where the consumer purchases a product and then consumes it. In these circumstances, the evaluation takes place post-purchase, that is, after the exchange transaction. With services, the purchase can

take place at any time before, during or after consumption. Therefore, the 'post-purchase' focus of consumer behaviour literature does not have ready application to service consumers as it concentrates explicitly upon the outcome of the exchange rather than the exchange itself. As a consequence, evaluation is less time specific and is related to both the process of consumption as well as the outcome of service delivery. The basis of this is the consumer's constant evaluation of the process during the service delivery followed by an outcome evaluation after the service has been delivered (Gabbott and Hogg, 2002: 97).

Zeithaml, Parasuraman and Berry (1990: 56) suggest that the service outcome is vital in determining consumer satisfaction, but that the 'process' will be re-evaluated in light of the 'outcome'. This implies that if a service fails to deliver what it is designed to achieve, getting the process of delivery right will not be enough. There is a suggestion from the physical goods literature of a process outcome relationship between evaluation during the pre-purchase phase and the consumption/ depletion phase.

Figure 2.6 presents an evaluation model. The first point to note is the parallel, rather than sequential, positioning of service delivery (i.e., the process) and service evaluation (i.e., the evaluation). This implies that evaluation is taking place from the earliest part of the transaction, possibly before the encounter, and is likely to include specific encounters, elements of the process and outcomes. Secondly, an important distinction is made between evaluation of the outcome (i.e., the level of satisfaction) and evaluation of the process (i.e., perceived quality), which is the basis of the evaluative asymmetry referred to by Zeithaml, Parasuraman and Berry (1990). Finally, the model identifies complaint and service recovery activity as additional variables in determining the intention to repurchase.

FIGURE 2.6 EVALUATION MODEL



Source: Gabbott & Hogg (2002: 132)

The businesses organizations that will succeed are those that recognize today's customer revolution and are fully prepared to meet the challenge at the highest standards of service.

## **2.6 International students as customers**

Yeo (2008: 269) offers two distinct views of students as customers; for instance, those who regard students as primary customers associate them as being involved in the input and output of the learning process. However, those who regard students' potential employers as primary customers argue that it is important to consider the economic reality of the situation where lesson contents should be tailored to employers' needs. Students, in both contexts, have been regarded as internal customers.

Jaraiedi and Ritz (1994: 33) further argue that students have no conception of what they need to learn. Education is preparing them for the long-term benefits of the future. It is with this long-term view that potential employers are regarded as primary customers while students are regarded as secondary customers. In another view, students have been categorized as the primary beneficiaries of education and, hence, should be treated as customers. This perspective stems from the understanding that educational institutions are highly competitive on the market with strategies being aggressively developed to satisfy student needs in order to attract a sustainable market share (Joseph & Joseph, 1998: 93).

## **2.7 The understanding of quality from a South African perspective**

According to Kistan (1999: 125-126), "quality" has long been the touchstone in education globally. There is general agreement that quality and assurance of quality are important for the maintenance and enhancement of HEI's. The approach to what is intended by the word "quality", in the South African higher education context, is a flexible one. In July 1995, the universities, through the Committee of University Principals (CUP), established a Quality Promotion Unit (QPU) to investigate a quality assurance system for higher education in South Africa. The QPU argues that the notion of what is meant by "quality" should always exist, but should be characterised by four considerations, namely:

- The concept of quality is always influenced by political and economic developments;
- The notion of quality used in audits should be adaptable to suit the circumstances of each and every institution;
- The notion of quality used in audits would typically consist of a combination in various degrees of emphasis of the different concepts of quality; and
- The openness and flexibility in the approach to the definition of quality does not, however, imply that there is uncertainty or a lack of clarity in the approach.

Cheales (1994: 1-83) has identified the following main reasons as to why South African customers defect from one organisation or service provider to another:

- Better value was offered;
- Better quality was offered;
- Superior service was received;
- Better response was received;
- Because the organisation had lost its uniqueness, and
- Because the organisation became inconsistent.

Cheales (2005: 18) argues that organisations that meet and exceed customers' expectations create uniqueness in its most simplistic form. Another example is to provide a customer service level greater than that of its competitors.

Alderman (1996: 2) summarises the whole concept and process of quality as follows:-

Quality in HEI's cannot be defined by reference to a set of bureaucratic procedures. Rather, in the words used by Erfurt, quality is "the working philosophy which the Higher Education Institution (HEI) employs to achieve standards. Such standards are defined as the explicit levels of attainment needed to obtain particular academic qualifications and other assessed outcomes". HEI's set their own goals and can be inspected to see whether these goals are being achieved.

The South African Qualifications Authority (1995) contains references to a quality assurance system for education and training in South Africa. This Act is expected to influence the quality assurance for higher education in future. In this Act, the following objectives of the National Qualifications Framework (NQF) are stated:

- To create an integrated national framework for learning achievements;
- To facilitate access to and mobility and progression within education training and career paths; and
- To enhance the quality of education and training (Quality Promotion Unit, 1997: 4)

## **2.8 The benefits of quality**

According to Suganthi & Samuel (2004: 8), as quality is becoming the key factor in every walk of life, everyone has to be educated in quality principles. Many industries, service organisations and educational institutions have implemented quality systems. In industries where implementations of quality systems were successful, it has resulted in the following benefits:-

- Reduction in complaints from customers, both internal and external;
- Reduction in cost of the product;
- Reduction in production time;
- Increased system efficiency;

- Increased morale of staff; and
- Increased customer satisfaction.

It is evident that the benefits of quality will be of great importance to the DUT, as it can be the initial step towards achieving the ultimate goals of exceptional customer satisfaction, loyalty and retention.

## **2.9 What is SERVQUAL?**

The SERVQUAL developed by Zeithaml, Parasuraman, and Berry (1990) is a technique that can be used for performing a gap analysis of an organisation's service quality performance against customer service quality needs. SERVQUAL is an empirically derived method that may be used by a services organisation to improve service quality. This method involves the development of an understanding of the perceived needs of target customers.

These measured perceptions of service quality for the organisation are then compared against an organisation that is "excellent". The resulting gap analysis may then be used as a driver for service quality improvement.

According to Kotler (2003: 68), organisations that sell products, without transferring its property, are debating two interdependent competitive challenges: the differentiation and the continuous improvement of the quality. The quality of services is, therefore, a factor of strategic relevance for the organisation, having to be measured and to be analysed.

## **2.10 The use of SERVQUAL in higher education**

Zafiroopoulos and Vrana (2007: 36-37) proposed SERVQUAL as an appropriate instrument for service quality measurement in the context of higher education for various reasons, viz., to allow yearly comparisons, to determine how service improvements have affected customers' expectations and perceptions of service delivery of the HEI over time and to determine the effectiveness of service development and continuous service improvement in targeted dimensions.

However, when SERVQUAL was used, the result obtained did not turn up to be as good as expected, although the mean scores for perceptions on each of the dimensions (except tangibles) exceeded the mean expectation scores. Further analysis on the median and mode revealed that there might be comprehension difficulties, due to unsuitable words and negative clauses.

Ruby (1998: 339) demonstrated how the use of SERVQUAL can be used to study students' satisfaction with four areas of support services hypothetically related to enrolment management (academic records, admissions, career services and financial aid). He claimed that the model may not suit all areas of education although it holds a promise as a means for evaluating the quality of selected support services. Slade, Harker and Harker (2000: 1) also used the SERVQUAL instrument to capture perceptions of service quality of students leaving an institution before completing their studies, and those who stay to finish.

O'Neill (2003: 310), using SERVQUAL, tried to understand the influence of time on students' perceptions of service quality by running a longitudinal study. The sample comprised the first-year students in two stages: a) prior to orientation process; and b) after one month; and discovered that students' perceptions of quality had deteriorated-suggesting that service quality in HEI's may be influenced by time.

Chua (2004: 1) used SERVQUAL to assess the attitudes of university stakeholders (including students, parents, faculty members and employers). The findings revealed that the dimensions of SERVQUAL are primarily related to the "process" stage of the "input-process-output framework". Sherry, Bhat, Beaver and Ling (2004: 2), on the other hand, used SERVQUAL to assess the perceptions of international students (as opposed to local students), with the intention to serve better the legitimate needs and expectations of services offered to this group of students. They concluded that SERVQUAL offered useful insights and was a good starting point to measure education quality, but a more in-depth analysis of the areas would be needed. Shahin (2003: 1) also verified the adaptability of using the SERVQUAL model in the service industry by stating that SERVQUAL has a scientific basis. Furthermore, by identifying strengths and weaknesses pertaining to the dimensions of service quality, organisations can allocate resources to provide better service.

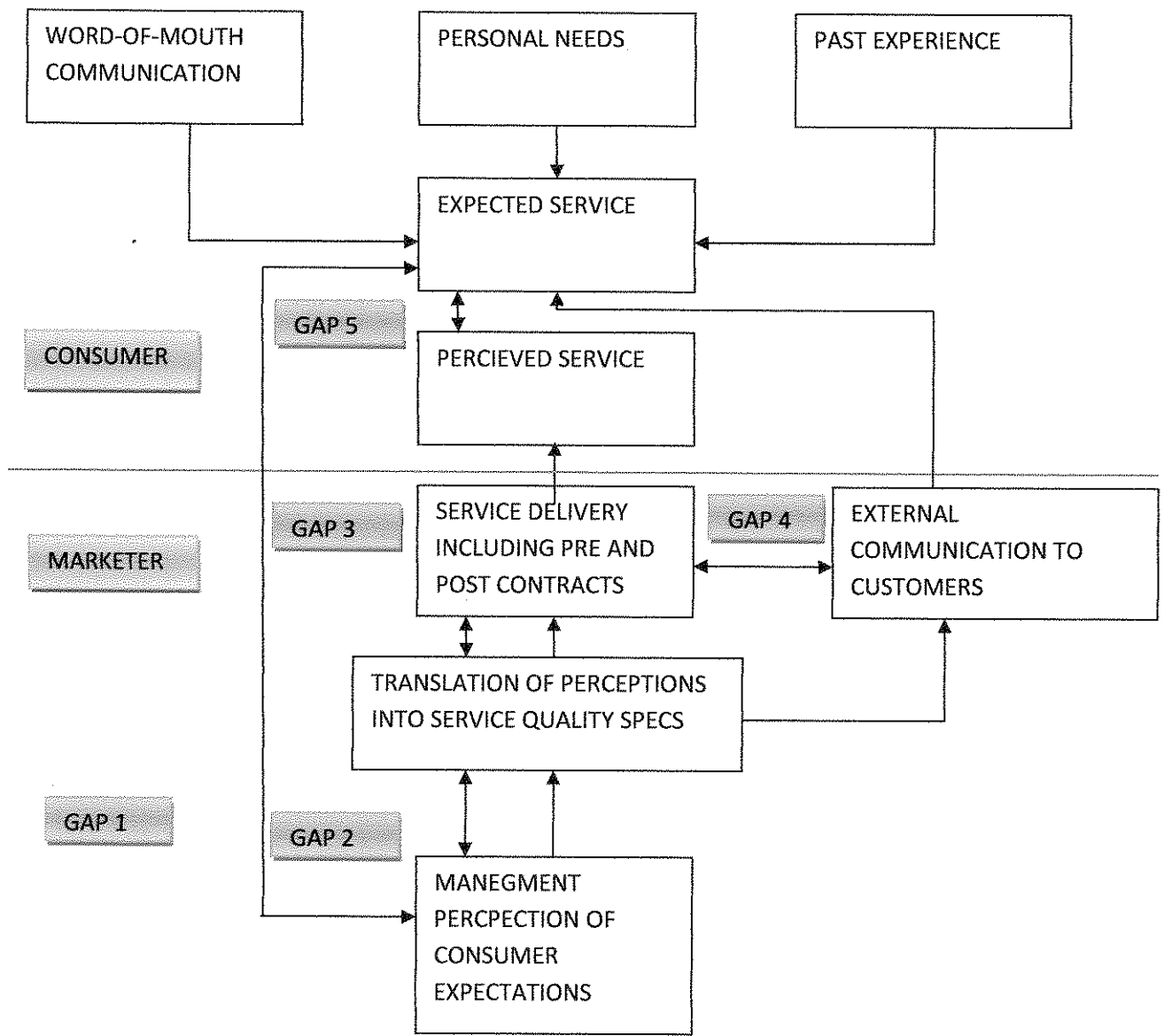
Customer service and quality are driving forces in the business community. As HEI's tussle for competitive advantage and high service quality, the evaluation of educational service quality is essential to provide motivation for and to give feedback on the effectiveness of educational plans and implementations, Tan and Kek (2004: 17), in their research, presented an enhanced approach to using SERVQUAL for measuring students' satisfaction. The research involves the use of factors concerning students' services that are queried and surveyed using the SERVQUAL methodology. The proposed instrument was tested at two local universities.

### **2.11 Managing Service Quality: The Gap Analysis Approach**

Managing service quality is concerned with managing the gaps between expectations and perceptions on the part of management, employees and customers. The most important gap is that between the customers' expectation of service and their expectation of the service actually delivered, and this is the gap that SERVQUAL is designed to investigate.

Berry and colleagues have developed the Gap Analysis Model (Figure 2.7 below), which is intended to be used for analyzing the source of quality problems and for helping managers understand how quality service can be improved.

**FIGURE 2.7: CONCEPTUAL MODEL OF SERVICE QUALITY-THE GAP ANALYSIS**



Source: Grönroos (2002: 101)

With reference to Figure 2.7, this model demonstrates how service quality emerges. The upper part of the model includes phenomena related to the customer, while the lower part shows phenomena related to the service provider. The expected service is a function of the customers' past experiences and personal needs and word-of-mouth communication. It is also influenced by the market communication activities of the organisation.

The service experienced, which, in this model, is called perceived service, on the other hand, is the outcome of a series of internal decisions and activities.

Management perceptions of customer expectations guide decisions about service quality specifications to be followed by the organisation, when service delivery (the execution of the service process) takes place. This basic structure demonstrates the steps that have to be considered when analyzing and planning service quality. The quality gaps illustrated are the result of inconsistencies in the quality management process. The ultimate gap is gap 5, which is between expected and perceived (experienced) service, which is a function of the other gaps that may have occurred in the process (Grönroos, 2002: 101-102).

The concept of service quality gaps was developed from extensive research conducted by Berry and colleagues (Parasuraman *et al.*, 1985; Zeithamel *et al.*, 1988) where the Gaps Model highlights five gaps in the delivery of service which influence a customer's judgement about the quality of service received. These gaps include the gap between:

- Gap 1: Consumers' expectations and management's perception of these expectations;
- Gap 2: The perceptions of service quality held by top management and the translation of these into quality specifications;
- Gap 3: These specifications and the service delivery at the front line;
- Gap 4: What is promised in external communications and the actual service delivered; and
- Gap 5: Perceived performance and expectations, which is a function of gaps (1) to (4)?

The notion of the service gap informs much of the work which has been undertaken to assess the satisfaction of service delivery against the expectations of the

participating customer. In identifying where such gaps exist, one cannot only gauge the overall level of customer satisfaction but can also reveal specific areas where improvements can be made to raise the level of consumer satisfaction and, therefore, the success of the service offering.

SERVQUAL represents service quality as the discrepancy between customers' expectations for a service offering and the customers' perceptions of the service received, requiring respondents to answer questions both about their expectations and their perceptions. The use of perceived, as opposed to actual service received, makes the SERVQUAL measure an attitude measure that is related to, but not the same as, satisfaction (Parasuraman *et al.*, 1988: 15).

## **2.12 The quality gaps**

The concept of service quality gaps was developed from extensive research conducted by Berry and colleagues (Parasuraman *et al.*, 1985; Zeithamel *et al.*, 1988), where service quality is defined as a function of the gap between consumers' expectations of a service and perceptions of actual services received. This gap is influenced by several other gaps which may occur in an organisation.

### **2.12.1 The management perception gap (Gap1)**

This gap means that management perceives the quality expectations inaccurately. This gap arises when there is inadequate research into customer needs, poor communication and inadequate management structure (Rowley, 1997: 9). This inadequacy can be resolved by always implementing better research, so that the needs and wishes of the customer are better observed and appreciated (Grönroos, 2002: 102).

### **2.12.2 The quality specification gap (Gap 2)**

This gap means that service quality specifications are not consistent with management's perceptions of quality expectations. This gap is a result of planning mistakes or insufficient planning procedures, bad management planning and insufficient support for planning for service quality from top management. A reason

for this deficiency is a lack of real commitment to service quality from top management because quality is not considered an issue of highest priority. A cure, in such situations, is to change an organisation's priority as quality, as perceived by customers, is an extremely vital success factor today, certainly in service competition (Grönroos, 2002: 102).

According to Rowley (1997: 9), management's understanding of customer expectations must be accurately translated into appropriate quality specifications and performance standards. This gap is caused by inadequate commitment to service quality, inappropriate goal setting, or management being inexperienced in this area.

### **2.12.3 The service delivery gap (Gap3)**

This gap means that quality specifications are not met by performance in the service production and delivery process. This inadequacy is due to specifications being too complicated and not being in line with the existing corporate culture; bad management of service operations and lack of insufficient internal marketing. The issue of internal marketing is critical. The problems can be that the wrong personnel have been recruited in the first place; workload perceived by employees, for example, too much paperwork or other administrative tasks involved, so that quality specifications cannot be fulfilled; and, perhaps, the technology and company's systems do not support quality or they may have not been properly introduced to the employee. The solution to these problems are to improve recruitment processes so that poor decisions can be avoided; clarify the tasks of all personnel and to find a solution where necessary tasks are dealt with, without interfering with quality performance and, finally, make proper changes to technology and systems so that they are supportive of the execution of the quality specifications or to improve training and internal marketing (Grönroos, 2002: 104-105).

This gap arises from shortage of resources in key areas, lack of commitment and motivation, inadequate quality control procedures or inadequate staff training (Rowley, 1997: 9).

#### **2.12.4 The market communication gap (Gap4)**

This gap means that promises given by market communication activities are not consistent with the service delivered. This gap is due to market communication planning not being integrated with service operations; lacking or insufficient coordination between traditional external marketing and operations; the organisation failing to perform according to specifications; and an inherent propensity to exaggerate and, thus, promise too much. Possible solutions are to create a system that coordinates planning and execution of external market communication campaigns with service operations and delivery. For example, every major campaign should be planned in collaboration with those involved in service production and delivery. Also, it would assist to improve planning of market communication, better planning procedures and closer management supervision (Grönroos, 2002: 105).

#### **2.12.5 The perceived service quality gap (Gap5)**

This gap means that the perceived service is not consistent with the expected service. Parasuraman *et al.* (1988) argue that gap 5 is the total sum of the preceding four gaps. If management want to close the gap between performance and expectations, it becomes important to design procedures for measuring service performance against expectations.

Considering the above, the instrument that will be used to measure the service quality at the DUT is the SERVQUAL approach. SERVQUAL is a multi-item scale developed to assess customer perceptions of service quality in service and retail businesses (Parasuraman *et al.*, 1988: 12).

### **2.13 Conclusion**

Chapter two presented literature on the various issues related to the study including service, customer service, service quality dimensions, customer satisfaction, SERVQUAL and the gap model. The five dimensions of the model were also discussed. Present international students are future global leaders. Therefore, quality in education is vital. With quality being a function of people, process and

policy, education in quality must be improved in many areas such as training, resource management and curriculum.

International students are also viewed as customers of HEI's as they are the primary beneficiaries of education. The gap analysis model should guide DUT management in determining where the reason or reasons for the quality of the service problem lie and ascertain appropriate ways to close the gap. The Gaps model of service quality revealed how the gaps can occur. Gap five (5), the difference between customers' expectations and perceptions of service quality was highlighted as the most important gap to close to ensure improved service quality within a service institution. This will be used by DUT management as the instrument to measure customer perceptions and expectations.

Chapter three (3) focuses on the research methodology used in this study.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter commences with a review of the research methodology. It addresses the instrument design, census, sampling technique, data collection, questionnaire design, validity and reliability of the instrument used in the study.

#### **3.2 Research Design**

The research utilized the survey approach. Surveys are used to gather data from a relatively large number of respondents within a limited time frame (Naoum, 2001: 44). The researcher gathered data by administering a questionnaire and then proceeded to make use of relevant descriptive and inferential statistical techniques to evaluate the data and reach conclusions.

Descriptive and inferential statistical techniques were used to evaluate and analyse international students' perceptions and expectations of service quality at the Durban University of Technology to reach conclusions. Malhotra (2001: 87) defines descriptive research as a type of decisive research which has, as its major objective, the description of something.

The study was cross sectional and quantitative, which is concerned with counting and measuring (Coldwell and Herbst, 2004: 37).

#### **3.3 Census**

A census is appropriate if the population size itself is quite small (Aaker, Kumar and Day, 2007: 379). For the purposes of this study, an attempted census was conducted. Hence, a survey was conducted among all international students enrolled in the 2010 academic year. An international list was obtained from the Department of International Education and Partnerships based at the DUT. Upon inquiry, the international student list at the DUT was 215.

During the administering of questionnaires, research assistants established that the Faculty of Arts and Designs' local and international students were on long leave due to the renovation of their campus. According to Sekaran (2003: 294), for a population of 215, an acceptable sample size is 136. Therefore, 192 responses were justified to ensure validity of the study.

### 3.4 Questionnaire Design

Wegner (1993: 17) states that "the design of a questionnaire is critical to ensure that the correct research questions are addressed and that accurate and appropriate data for statistical analysis is collected".

The questionnaire consisted of a 20 question modified version of the SERVQUAL questionnaire (Parasuraman, Zeithaml and Berry, 1985: 44). Parasuraman, Zeithaml and Berry (1988: 31) state that the skeleton, when necessary, can be adapted or supplemented to fit the characteristics of specific research needs of a particular organization. The instrument was based on a generic twenty item questionnaire, which was designed to cover the five dimensions of service quality, viz., reliability, tangibles, responsiveness, assurance and empathy (Kotler and Keller, 2006: 414). International students' perceptions and expectations of service quality at DUT were investigated using a five-point Likert scale (ranging from 1 – strongly disagree to 5 – strongly agree) which was attached to each question and respondents scored in each instance (refer to appendix 1).

The statements in the questionnaire pertaining to each dimension are as follows:

<b>Dimension</b>	<b>Statements pertaining to the dimension</b>
Tangibles	Statements 1-4
Reliability	Statements 5-8
Responsiveness	Statements 9-12
Assurance	Statements 13-16
Empathy	Statements 17-21

### **3.5 The Rating Scale**

There are four different types of attitude scale, which measures different degrees of attitude, namely: the summated or Likert scale, semantic differential, the Guttman scale and the Thurstone scale. The Likert scale is the most popular because it is easier to compile than any other scale. The Likert scale, unlike other scales, may be used for multi-dimensional attitudes. It also consists of statements whereby respondents have to indicate the degree to which they agree or disagree with its content. Some statements will represent a positive attitude, whereas others will represent a negative attitude (Welman and Kruger, 2005: 156-157). A Likert scale produces interval data (Wegner, 1993: 42).

### **3.6 Data Collection**

The object of data collection is to get a good overall picture of how a process performs. It is important that, before any study or process is carried out, calibrated gauges, which are adequate for the purpose, are available. Also, all operational personnel must fully understand what is going on and what is required of them. The data collected should accurately reflect the performance of the process (Dale *et al.*, 2007: 449-450).

A study was concluded amongst international students at DUT using a questionnaire. Research assistants were used to administer the questionnaires. They were informed on the subject matter in order to answer any queries about the completion of the questionnaires. These questionnaires were personally handed by the research assistants to international students, together with a letter of consent acknowledging confidentiality and were collected in the same manner.

The questionnaire and its contents were carefully explained and reviewed with the international students at the DUT campuses. The structure of the questionnaire was kept simple and easy for the respondents to complete.

### **3.7 Data Analysis Techniques**

The primary data of each respondent was captured by the researcher onto a Microsoft excel spreadsheet and forwarded to the statistician. In order to ensure that all the questions in the questionnaires were completed, the questionnaires were screened to ensure that properly completed questionnaires were included in the analysis. The response for each question was coded on a scale from 1 to 5 where 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree.

Data was processed by a qualified statistician using the SPSS statistical package Version 15 for the generation of results. The analysis and interpretation of data were presented using descriptive and inferential statistics. According to Welman & Kruger (2005: 242), descriptive statistics involve the description and summary of data, while inferential statistics involve the inferences that are drawn from the results. Ultimately, the results of statistical investigations can be represented graphically by means of bar charts or pie charts.

#### **3.7.1 Descriptive Statistics**

Welman, Kruger and Mitchell (2005: 231) suggest that descriptive statistics are used to describe the 4 basic features of the data in the study. Descriptive statistics refer to the organizing, summarizing and describing of quantitative data. Armstrong and Kotler (2006: 103) state that the objective of descriptive research is to describe things, such as the market potential for a product or the demographics and attitudes of consumers who buy the product or service.

Descriptive statistics, in the form of frequencies and percentages, were computed from the variables.

#### **3.7.2 Frequencies and Percentages**

According to Welman, Kruger and Mitchell (2005: 229), frequencies determine if the distribution is even across categories or if they cluster around one or two categories. Frequencies can be displayed in bar diagrams or pie charts. Responses can be skewed towards one end of the scale, for example, if international students feel

strongly about an issue. Percentages simplify data into a standard numerical range and they interpret the data into a standard form that can be compared. Based on the data collected, descriptive statistics (frequencies) were used. Graphical representation was used in the form of graphs depicting the results.

### **3.7.3 Inferential Statistics**

Inferential statistical analysis is concerned with the testing of hypothesis. The independent t-test is the most appropriate parametric test for interval measurement. This test relates to any significant difference between the two variables, perception and expectation of service quality. Primary data was collated and analysed and comments and concluding discussions were thereafter based on the results obtained (Lind *et al.*, 2001: 457-460). Inferential statistics were conducted on the basis of the demographic variables and SERVQUAL dimension scores.

### **3.8 Factor Analysis**

Factor analysis is a statistical technique whose main goal is data reduction. A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. For example, as part of a national survey on political opinions, participants may answer three separate questions regarding environmental policy, reflecting issues at the local, state and national levels. Each question, by itself, would be an inadequate measure of attitude towards environmental policy, but together they may provide a better measure of the attitude. Factor analysis can be used to establish whether the three measures do, in fact, measure the same thing. If so, they can then be combined to create a new variable, a factor score variable that contains a score for each respondent on the factor (<http://www.ats.ucla.edu/stat/spss/faq/alpha.html>).

A researcher may want to know if the skills required to be a decathlete are as varied as the ten events, or if a small number of core skills are needed to be successful in a decathlon. One need not believe that factors actually exist in order to perform a factor analysis, but, in practice, the factors are usually interpreted, given names, and spoken of as real things (Curwin and Slater, 2002: 277-278).

### **3.9 Validity**

Validity is defined, by Welman, Kruger and Mitchell (2005: 142), as the extent to which the research findings accurately represent what is really happening in the situation. The SERVQUAL's high reliability and consistent factor structures across several independent samples provide support for its trait validity (Parasuraman, Zeithaml and Berry, 1988: 28). Parasurama, Zeithaml and Berry (1988: 13) state that the procedures used in developing SERVQUAL satisfy both quantitative and qualitative evaluative requirements.

### **3.10 Reliability**

According to Welman, Kruger and Mitchell (2005: 145), reliability measures the ability of the data collection instrument and method used for the study to obtain accurate and consistent results.

The SERVQUAL questionnaire was the instrument of choice for this research project, developed by Parasuraman, Berry and Zeithaml in 1985, based on the fact that it has been proven to be the most extensively utilized instrument in the service quality field of study (Dhurup, Singh and Surujlal, 2006: 41).

SERVQUAL has been productively used in multiple contexts and is an extensively utilized instrument in the service quality field of study. Published studies have used SERVQUAL and adaptations of it in a variety of service contexts, including real estate brokers, hospitals and banks (Zeithaml, Bitner and Gremler, 2006: 153). Cronbach Alpha was calculated to measure the reliability of the measurement.

According to the Academic Technology Services at the University of California, Los Angeles (UCLA Academic Technology Services, 2002), the Cronbach's alpha measures how well a set of items (or variables) measures a single one-dimensional latent construct. When data have a multidimensional structure, Cronbach's alpha will usually be low. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (or consistency).

Cronbach's alpha can be written as a function of the number of test items and the average inter-correlation among the items. Below, for conceptual purposes, is the formula for the standardized Cronbach's alpha:

$$\alpha = \frac{N \cdot \bar{r}}{1 + (N - 1) \cdot \bar{r}}$$

Here N is equal to the number of items and r-bar is the average inter-item correlation among the items. One can see from this formula that if one increases the number of items, one will increase Cronbach's alpha. Additionally, if the average inter-item correlation is low, alpha will be low. As the average inter-item correlation increases, Cronbach's alpha increases as well. This makes sense intuitively - if the inter-item correlations are high, there is evidence that the items are measuring the same underlying construct. This is really what is meant when someone says they have "high" or "good" reliability. They are referring to how well their items measure a single one-dimensional latent construct. A reliability coefficient of 0.80 or higher is considered as "acceptable" (UCLA Academic Technology Services, 2002).

### **3.11 Conclusion**

This chapter covered the research methodology in terms of the appropriate and relevant application of the various techniques in accordance with the fundamental principles and practices of research methodology.

Chapter four presents the research findings and the interpretation of the results from the survey.

## **CHAPTER FOUR: RESEARCH FINDINGS**

### **4.1 Introduction**

The research methodology was discussed in chapter three. This chapter will present the data that has been collected through the quantitative survey. This chapter focuses on the data interpretation and analysis of results of the research.

The data from the SERVQUAL questionnaires were analysed using descriptive and inferential statistics. The responses obtained from respondents for each of the 20 questions are presented.

### **4.2 SERVQUAL methodology**

The standardised SERVQUAL instrument was used. It is constructed from 20 items, which form five dimensions, namely:

- Tangibles;
- Reliability;
- Responsiveness;
- Assurance; and
- Empathy.

The research ascertained what students perceive about the institution. It also identified gaps between expectations and perceptions. Students were asked to rank their perceptions and expectations in relation to service quality using a five-point Likert scale. Scores for the above five dimensions of SERVQUAL were also calculated.

The formula on perceived service quality, developed by Parasuraman *et al.* (1985), was stated as follows:

$$Q \text{ (Quality)} = P \text{ (Perceptions)} - E \text{ (Expectations)}$$

By subtracting the perceived from the expected rating, the net satisfaction can be estimated from the quality for each student.

### **4.3 Response rate**

Questionnaires were dispatched to all 215 respondents of the target population. 192 questionnaires were returned, constituting a response rate of 89%. According to Sekaran (2003: 294), for a population (census) of 215 (N), a sample size of 192 (n) is considered statistically acceptable at the 95% level of significance. The response rate was, therefore, considered appropriate in order to draw inferences.

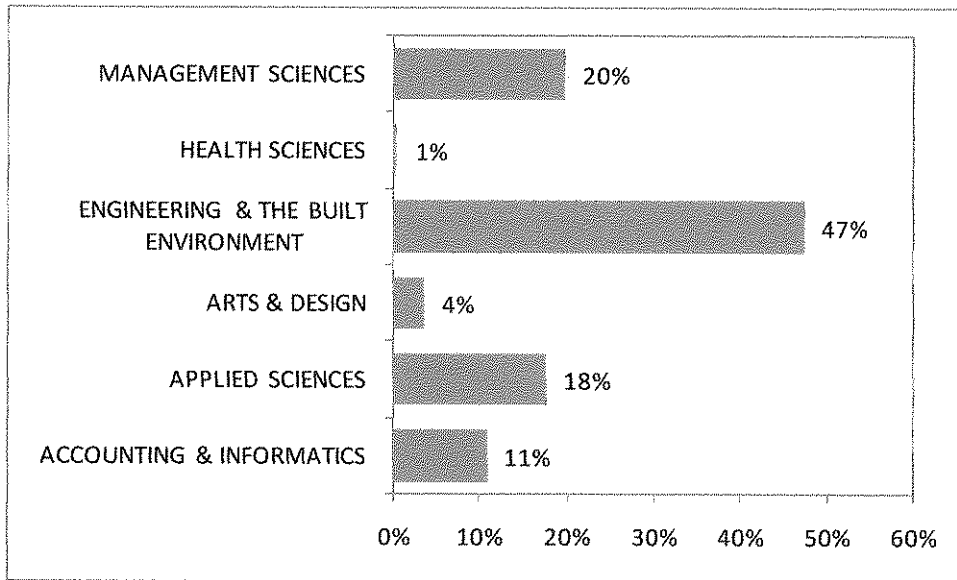
### **4.4. Demographic characteristics of respondents**

This section describes the demographic profile of respondents, including faculty, qualification, year of study, region and age group. The detailed information is explained as follows:

#### **4.4.1. Faculty**

As shown in Figure 4.1, 1% (1) was from the faculty of Health Sciences, followed by 4% (7) from Arts and Design, 11% (21) from Accounting and Informatics, 18% (34) from Applied Sciences, 20% (38) from Management Sciences and 47% (91) from Engineering and Built Environment. The majority of the sample was from Engineering and Built Environment.

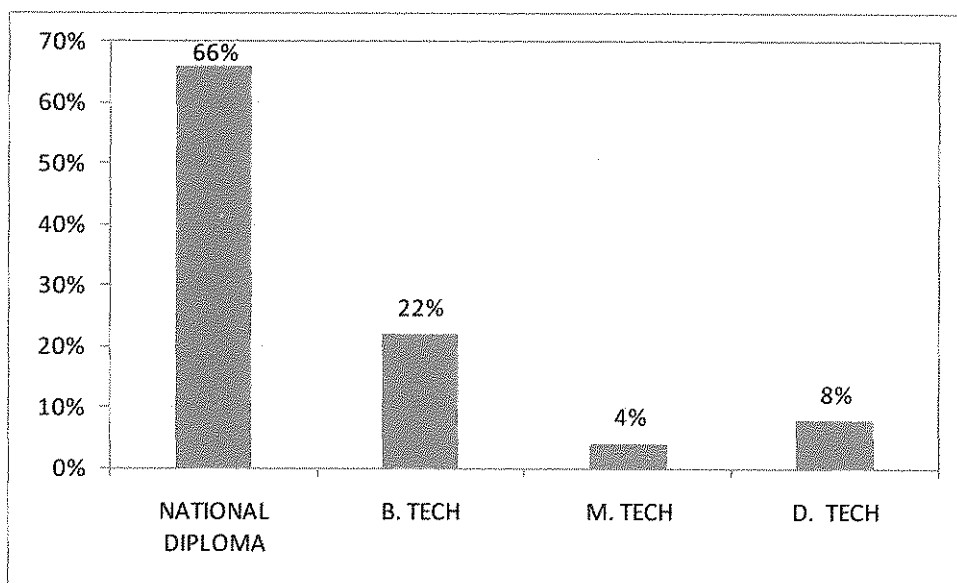
**Figure 4.1: Faculty of respondents**



#### 4.4.2 Qualification

As indicated in Figure 4.2, the percentage of National Diploma respondents was 66% (126), while the percentage of B. Tech respondents was 22% (42) followed by M.Tech respondents which was 4% (8) and D.Tech respondents was 8% (15). The majority of the respondents was studying towards the National diploma.

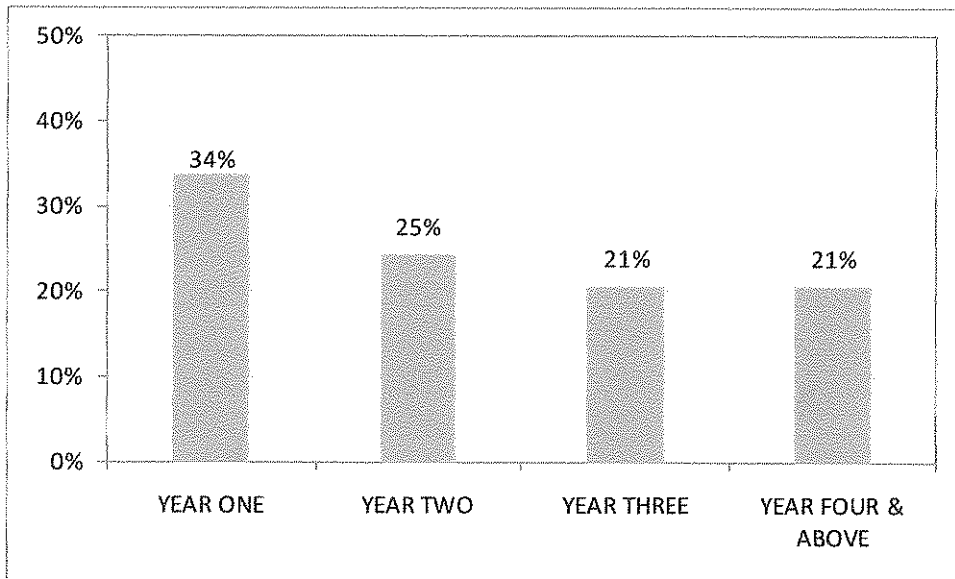
**Figure 4.2 Qualification levels of respondents**



#### 4.4.3 Year of study

As reflected in Figure 4.3, 34% (65) of the respondents were from year one, followed by 25% (47) from year two, 21% (40) from year three and 21% (40) from year four and above. The demographic level of study profile demonstrates that the first year level of study is the dominant group.

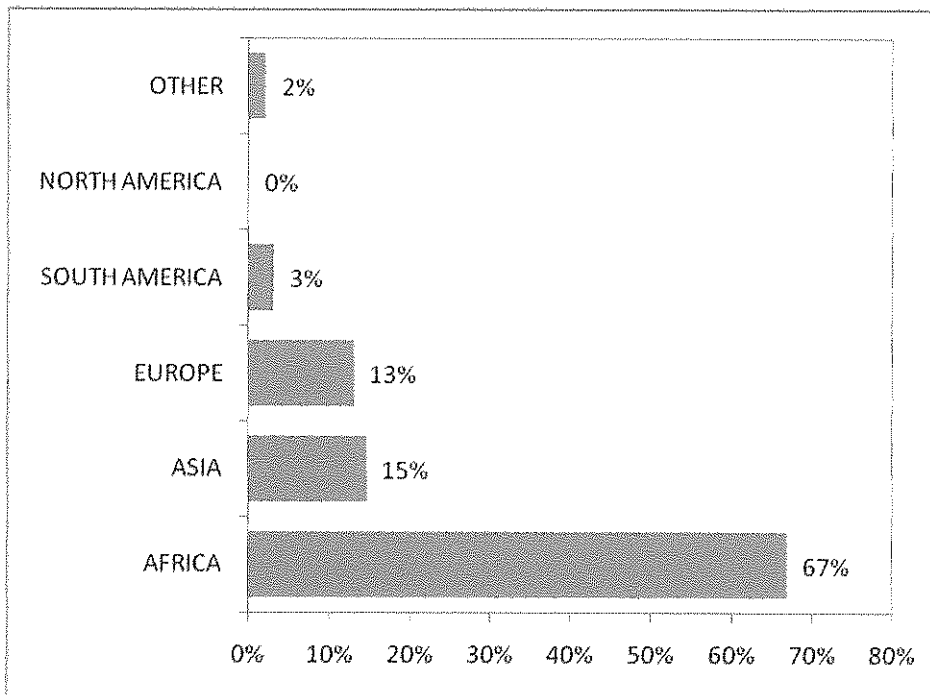
**Figure 4.3 Study year of respondents**



#### 4.4.4 Region

Figure 4.4 reveals the region dispersion of the respondents in this study. It emerged that there were six segments in terms of region, 67% (128) were from Africa, 15% (28) from Asia, 13% (25) from Europe, 3% (6) from South America and 2% (4) from other (Oceanic). The findings indicate that two-thirds of the respondents were from the African continent.

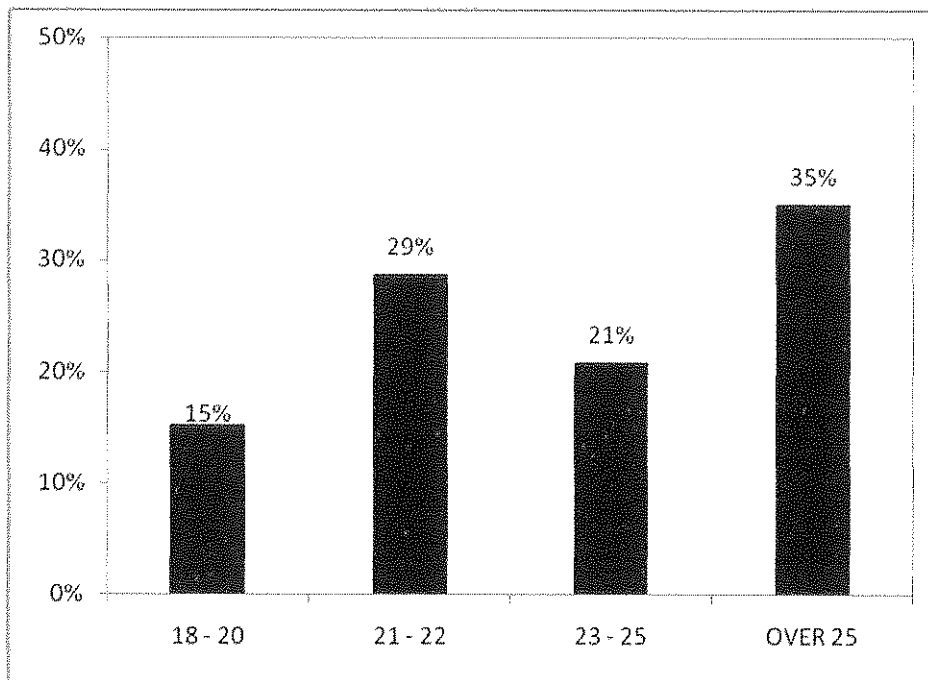
**Figure 4.4 Region of respondents**



#### **4.4.5 Age group**

Figure 4.5 reveals the age dispersion of the respondents from the sample. 15% (29) of the respondents were between the ages of 18 and 20, 29% (55) of the respondents were between the ages of 21 and 22, 21% (40) of the respondents were between the ages of 23 and 25 and 35% (65) of the respondents were above the age of 25. The findings indicate that more than half of the respondents were over the age 23.

**Figure 4.5 Age of respondents**



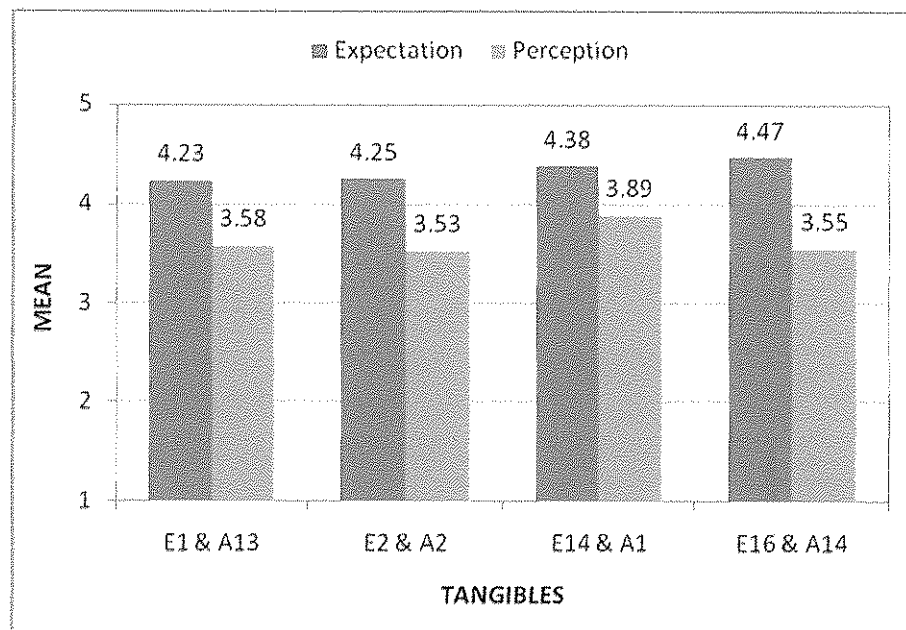
#### **4.5 Analysis of expectations and perceptions by dimensions**

This section presents a detailed analysis of the specific expectations versus perceptions for each of the five service quality dimensions. Each dimension is discussed in terms of its underlying items.

##### **4.5.1 Tangibles: expectations versus perceptions**

Figure 4.6 presents the items that constituted the tangibles dimension. The gap scores for the four tangible items were modern looking equipment (E1 and A13) 0, 65, physical facilities (E2 and A2) 0, 72, materials associated with service (E14 and A1) 0, 49 and communication and signage (E16 and A14) 0, 92. Of the four items, communication and signage (E16 and A14) was rated the highest expectation item, and modern looking equipment (E1 and A13) was rated the lowest expectation item. The gap scores for the four tangible items in terms of expectations and perceptions were similar.

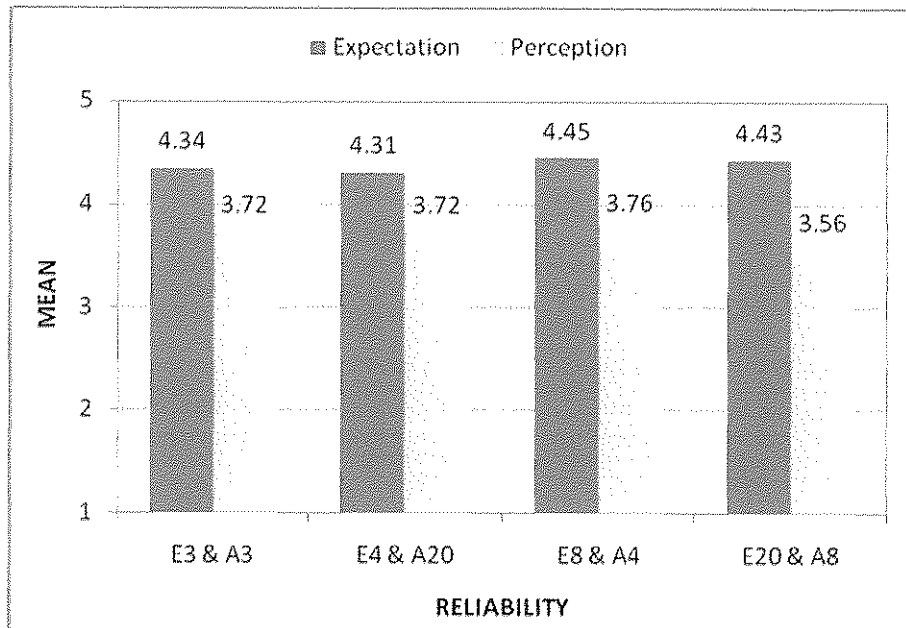
**Figure 4.6 Tangibles: expectations vs perceptions**



#### **4.5.2 Reliability: expectations versus perceptions**

Figure 4.7 reveals the expected and perceived DUT scores for the reliability dimension, in addition to the gap for each item. The fairness and reliability of assessments (E8 and A4) was ranked the highest in terms of expectations with the same standard of marking (E4 and A20) indicated as the least important. It emerged that the perceptions of accurate assessments by lecturers (E3 and A3) and the same standard of marking (E4 and A20) were equal, hence the gap was similar. The gap score for the four items were: accurate assessment of work by lecturers (E3 and A3) 0.62, the same standard of marking (E4 and A20) 0.59, fair and reliable assessment (E8 and A4) 0.69 and the keeping of accurate records and files on students (E20 and A8) 0.87. The magnitude of the difference between expectations and perceptions for the 4 items were minimal.

**Figure 4.7: Reliability: expectations vs perceptions**



#### **4.5.3 Responsiveness: expectations versus perceptions**

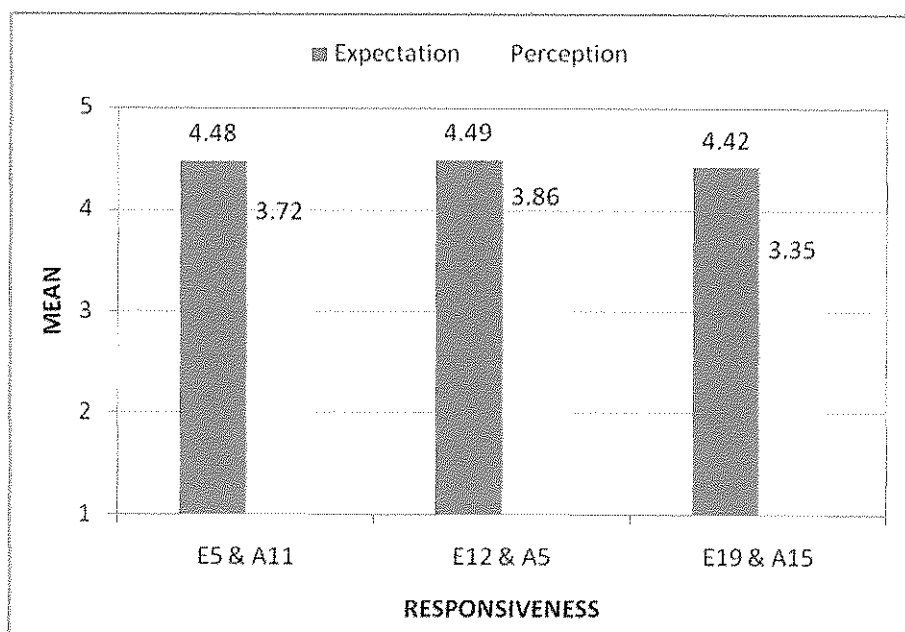
The results, as presented in Figure 4.8, indicate that the highest expectation was for academic staff being concerned about the educational progress of their students (E12 and A5), with the lowest expectation applying to the item “giving useful advice upon the arrival of new international students” (E19 and A15).

The gap scores, when comparing expectations with perceptions for each item were 1.07 (giving useful advice when new students arrive - E19 and A15) followed by 0.76 (administrative staff should be courteous and willing to help - E5 and A11) and 0.63 (academic staff being concerned about the educational progress of their students - E12 and A5).

What was interesting to note, was that the item, giving useful advice when new students arrive (E19 and A15), was the lowest expectation item but had the highest gap score whilst the item academic staff being concerned about the educational

progress of their students (E12 and A5) was the highest expectation item but had the lowest gap score. Clearly, the result of the gap score for the item, giving useful advice when new students arrive (E19 and A15), indicates that DUT needs to improve in this area.

**Figure 4.8: Responsiveness: expectations vs perceptions**



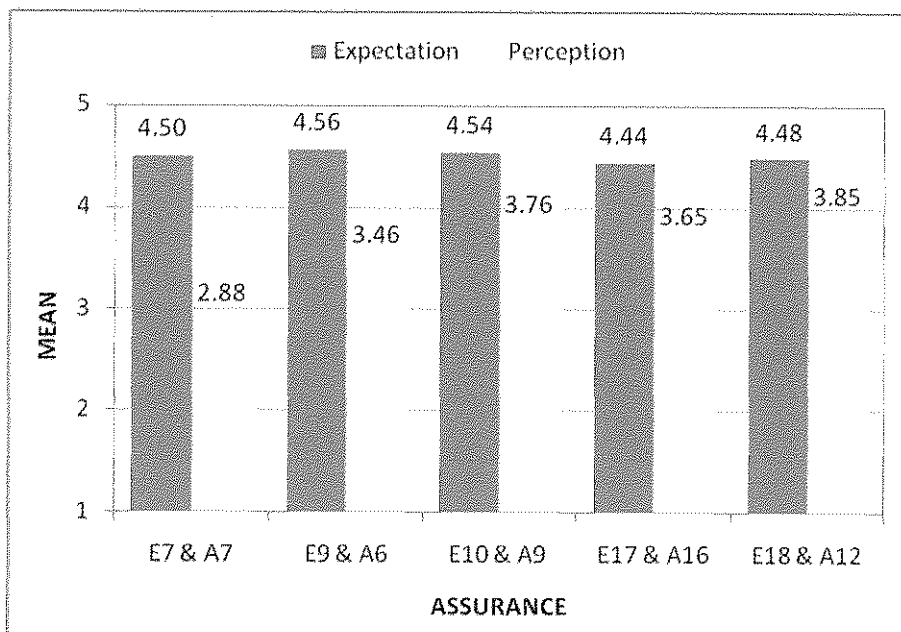
#### 4.5.4 Assurance: expectations versus perceptions

Figure 4.9 presents the results of the findings on the items that constitute the assurance dimension. The highest expectation score applied to the item: getting value for money (E9 and A6) and the lowest expectation pertaining to international students should know what to do in each subject to get a good mark.

The largest gap score (1.62) relates to provision for a good living environment (E7 and A7), and the lowest (0.63) pertaining to the extensive knowledge of lecturers in the field of learning (E18 and A12). The remaining three gap scores pertained to value for money - E9 and A6 (1.1), international students should know what to do in

each subject to get a good mark - E17 and A16 (0.79), and taught skills that you need to get good results both academically and for employment - E10 and A9 (0.78). The results reveal that the living environment of international students is not encouraging at DUT.

**Figure 4.9: Assurance: expectations vs perceptions**



**4.5.5 Empathy: expectations versus perceptions**

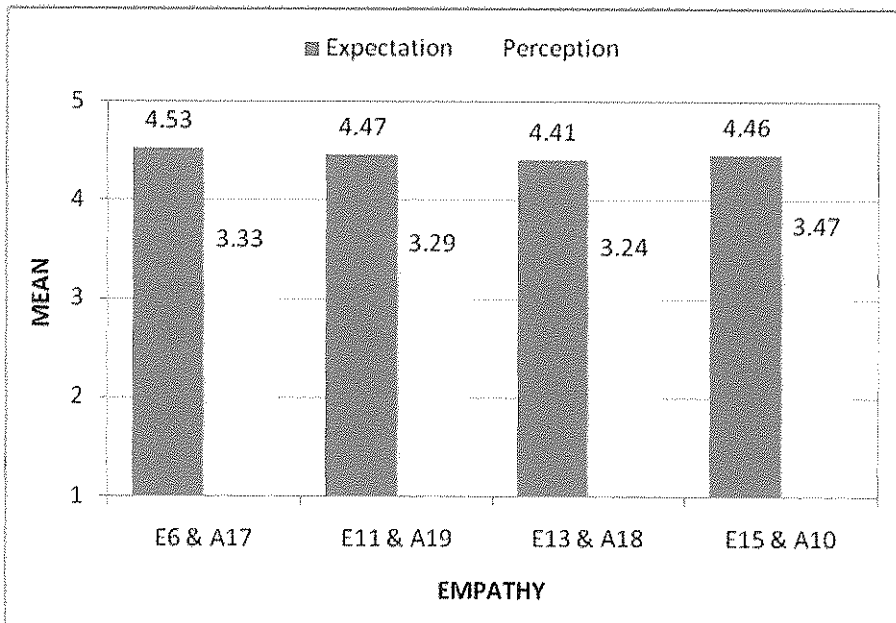
Of the four items pertaining to the empathy dimension, the highest expectation was that of foreign students be offered a range of support services (E6 and A17) whilst the lowest expectation related to item: easy access to staff that helps with language and study skills (E13 and A18).

The gap scores, when comparing expectations with perceptions for each item, were 1.2 (a range of support services - E6 and A17), 1.18 (academic staff should understand the difficulties facing international students - E11 and A19), 1.17 (easy access to find staff that helps international students with their language and study

skills - E13 and A18) and 0.99 (staff should understand the needs of international students - E15 and A10).

It is evident that all items for the empathy dimension exhibited relatively similar gap scores between expectations and perceptions. What was of interest, was that the gap score for the item, (E11 and A19) academic staff should understand the difficulties facing international students (1.18), was greater than the item (E15 and A10) staff should understand the needs of international students (0.99), thus indicating that international students were concerned primarily with their difficulties followed by their needs. The results are reflected in Figure 4.10.

**Figure 4.10 Empathy: expectations vs perceptions**



#### 4.6 Test for normality

Table 4.1 reflects the result of the One-Sample Kolmogorov-Smirnov Test which was used to determine whether the data follows a normal distribution and whether parametric tests can be used. The results show that the data is not normally distributed; hence, non-parametric methods are to be used for inferential testing. Kruskal-Wallis ANOVA, which is the non-parametric equivalent of the one-way ANOVA, is used to determine differences in means between the categories of the demographic variables (Aaker, Kumar and Day, 2007: 445).

**Table 4.1: One-Sample Kolmogorov-Test**

	N	Kolmogorov-Smirnov Z	p
Tangibles - Expectations	192	2.044	.000
Tangibles - Perceptions	192	2.941	.000
Reliability - Expectations	192	2.339	.000
Reliability - Perceptions	192	1.672	.007
Responsiveness - Expectations	192	2.715	.000
Responsiveness - Perceptions	192	2.390	.000
Assurance - Expectations	192	2.292	.000
Assurance - Perceptions	192	1.380	.044
Empathy - Expectations	192	2.173	.000
Empathy - Perceptions	192	2.026	.001

#### 4.7 Cronbach's Alpha Test

The Cronbach alpha test was computed to measure the internal consistency of the factors used in the questionnaire. According to Ghauri and Gronhaug (2002: 69), the various questions pertaining to a factor should correlate positively but they should not be perfectly correlated, as they would imply that they are capturing identical data.

Table 4.2 reflects the Cronbach's Alpha score for questions relating to expectation. The alpha score was 0.916 which indicates a high degree of internal consistency amongst the items relating to expectation. Similarly, the Cronbach's Alpha score for perception as reflected in Table 4.3 is 0.901, which also indicates a high degree of internal consistency amongst the items relating to perception.

**Table 4.2: Reliability - Expectation**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.916	20

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E1	84.43	73.890	.358	.917
E2	84.41	72.934	.491	.914
E3	84.31	72.373	.501	.913
E4	84.35	72.804	.441	.915
E5	84.18	72.251	.543	.912
E6	84.13	72.899	.623	.911
E7	84.16	71.515	.585	.911
E8	84.20	72.655	.585	.911
E9	84.09	72.117	.665	.910
E10	84.11	72.290	.666	.910
E11	84.19	72.090	.637	.910
E12	84.16	72.377	.676	.910
E13	84.24	71.442	.615	.911
E14	84.28	72.128	.482	.914
E15	84.19	71.957	.609	.911
E16	84.19	71.965	.640	.910
E17	84.22	71.282	.707	.909
E18	84.17	71.494	.642	.910
E19	84.23	71.343	.537	.913
E20	84.22	71.316	.558	.912

**Table 4.3: Reliability - Perception**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.901	20

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A1	67.30	149.184	.463	.898
A2	67.66	143.955	.599	.894
A3	67.46	149.611	.417	.899
A4	67.43	149.010	.498	.897
A5	67.32	149.296	.450	.898
A6	67.72	141.753	.621	.893
A7	68.30	144.118	.457	.899
A8	67.62	146.164	.506	.896
A9	67.42	147.523	.520	.896
A10	67.71	145.705	.527	.896
A11	67.46	144.281	.611	.894
A12	67.33	150.904	.368	.900
A13	67.60	146.502	.472	.897
A14	67.63	143.616	.592	.894
A15	67.83	142.646	.559	.895
A16	67.53	143.528	.608	.894
A17	67.85	142.387	.596	.894
A18	67.94	140.174	.600	.894
A19	67.90	138.638	.671	.892
A20	67.46	147.977	.439	.898

**4.8 Central Tendency Statistics**

Table 4.4 reflects the mean and standard deviation for each dimension. The dimensions were calculated by averaging the scores of the relevant questions. The standard deviation values reflect a small degree of deviation from the mean (indicating a small degree of difference in respondents' answers).

The mean values for dimensions relating to expectations is at least 4. On a scale of 1 to 5, this shows a high level of expectation with regards to each dimension. The mean values for dimensions relating to perceptions is between 3 and 4. On a scale of 1 to 5, this shows a moderate level of perception with regards to each dimension. The level of perception towards empathy is lowest amongst the dimensions relating to perception. There is room for improvement with regards to the level of perception.

**Table 4.4: Measures of central tendency for dimensions**

	N	Minimum	Maximum	Mean	Std. Deviation
Tangibles - Expectations	192	2.00	5.00	4.3320	.52125
Tangibles - Perceptions	192	1.25	5.00	3.6354	.77503
Reliability - Expectations	192	1.00	5.00	4.3841	.51092
Reliability - Perceptions	192	1.00	5.00	3.6914	.67502
Responsiveness - Expectations	192	1.33	5.00	4.4653	.53385
Responsiveness - Perceptions	192	1.00	5.00	3.6458	.76775
Assurance - Expectations	192	1.20	5.00	4.5052	.50874
Assurance - Perceptions	192	1.20	5.00	3.5208	.71541
Empathy - Expectations	192	1.75	5.00	4.4674	.52855
Empathy - Perceptions	192	1.00	5.00	3.3333	.96480

#### 4.9 Gap Analysis

A profile of the expectations and perceptions of the service quality dimensions as well as the rankings are presented in Table 4.5. The SERVQUAL gap scores for each dimension are represented by their values in the P-E column. A comparison between mean expectation and perception indicates a large difference between the dimensions.

The empathy dimension reflects the highest gap score (1.14) implying that it needs to be accorded the highest priority with regard to the improvement of service quality, followed by assurance and responsiveness, with tangibles and reliability being equal and having the lowest priority. The mean GAP score of -0.87 indicates that the perceptions of respondents do not meet with their expectations of overall service quality at the company.

**Table 4.5: SERVQUAL GAP Scores**

Dimension of service quality	Expectation (E)	Perception (P)	Score (P-E)	Rank
Tangibles	4.33	3.64	-0.69	4
Reliability	4.38	3.69	-0.69	4
Responsiveness	4.46	3.64	-0.82	3
Assurance	4.50	3.52	-0.98	2
Empathy	4.47	3.33	-1.14	1
Mean	4.43	3.56	-0.87	

### **Factor 1: Tangibles**

This quality dimension is related to physical facilities, equipment, materials and appearance of the service delivery. The gap for tangibles is one of the two lowest dimensions. This finding indicates that international students at DUT are dissatisfied with tangibles in terms of service facilities. On a scale of 1 to 5, the score for tangibles expectations is 4.33, which is a high level of expectation and the score for tangibles perception is below 4, indicating a moderate perception towards tangibles.

As evident in section 4.5.1 the largest gap (-0.92) was found in service quality item, communication and signage (E16 & A14). The smallest gap (-0.49) was for materials associated with service (E14 & A1).

Section 2.5.1.1 stated that the physical facilities, along with the equipment can be seen as a tangible element. The laboratories, equipment and materials can be used by international students to compare the quality of service from one HEI to another.

### **Factor 2: Reliability**

The reliability dimension relates to DUT's ability to perform the promised service dependably and accurately to international students. The perception in terms of reliability was moderate at 3.69. However, the level of expectation is high at 4.38 in terms of reliability. This dimension effectively measures the timeliness to solving and giving attention to international students' problems. The scores for this dimension mean that international students expect DUT academic and administration ambits to strive for quality, be accurate, consistent and reliable in their work.

With reference to section 4.5.2, the highest gap score (-0.87) is attributed to keeping of accurate records and files on students (E20 & A8) and the lowest gap score (-0.59) is for the same standard of marking.

As discussed in 2.5.1.2, the reliability dimension means that the customer can have confidence with the service being provided and with getting what was promised.

### **Factor 3: Responsiveness**

Items in this dimension primarily described the willingness to help international students and provide prompt service. This dimension measures the response to international students' queries/requests. The average score for this dimension was 4.46 for expected values. The score for responsiveness was 4.46 which indicates a high degree of expectation with regards to responsiveness. The score implied that

international students want good service promptly. The score for perceptions was 3.64 which indicates a moderate level of perception towards responsiveness.

The results in section 4.5.3 indicate that the largest gap was -1.07 and the lowest gap was -0.63. The average gap score was 0.82. It was clear that the item, giving useful advice when new students arrive (E19 & A15), had the biggest gap amongst all attributes and needs to be investigated.

As described in section 2.5.1.3, responsiveness is the willingness to help customers and to provide prompt service. Promptness also captures the notion of flexibility and the ability to customise the service to customer needs.

#### **Factor 4: Assurance**

The assurance dimension relates to the knowledge and courtesy of DUT employees and their ability to inspire trust and confidence in international students. The score for assurance is 4.50 for expectations, which indicates a high degree of expectation with regards to assurance. As employees are at the touch-points (coal-face) of interaction, the demeanour and deliverable service of the employees were of utmost importance. The score for perceptions was 3.52, which indicates a moderate level of perception towards responsiveness. The indication is that although the staff are meeting some assurance criteria, they are also failing short in others, for example, the dissemination of useful advice upon the arrival of new international students.

The results, evident in section 4.5.4, indicate that the largest gap (-1.62) was found in service quality item, provision for a good living environment (E7 & A7). The smallest gap (-0.63) was for item, the extensive knowledge of lecturers in the field of learning (E18 & A12).

## **Factor 5: Empathy**

This dimension relates to the caring and individualised attention by DUT to international students. The score for empathy was 4.47 for expectations, which indicates an extremely high degree of expectation with regards to empathy. The score for perceptions was 3.33, which indicates a moderate level of perception towards empathy. The dimension of empathy was the largest gap. The attention given to international students' needs to be addressed.

Section 4.5.5 indicates that the biggest gap score (-1.2) was for item, a range of support services (E6 & A17) and the lowest gap score of (-0.99) was attributed to the item, staff should understand the needs of international students (E15 & A10). The other two items viz. academic staff should understand the difficulties facing international students (E11 & A19) and easy access to find staff that helps international students with their language and study skills (E13 & A18) had relatively high gap scores as well, 1.18 and 1.17, respectively.

As discussed in section 2.5.1.5, empathy implies that employees will pay attention, listen, adapt and be flexible in delivering what individual customers need. The empathy dimension refers to the level of the HEI-specific knowledge and care. The level of care will also have a positive impact on the customer satisfaction level.

### **4.10 Comparison between expectation and perception**

The data in Table 4.6 indicates a significant difference between the level of expectation and the level of perception with regards to each of the dimensions at the 95% level ( $p < 0.05$ ). The scores for expectation are significantly higher than the scores for perception. The Wilcoxon Signed Ranked Test was used to compare the means.

**Table 4.6: Comparison between expectation & perception using the Wilcoxon Signed-Rank Test**

<b>Dimensions</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Z</b>	<b>p</b>
Tangibles - Expectations	4.3320	192	.52125		
Tangibles - Perceptions	3.6354	192	.77503	-8.606	.000*
Reliability - Expectations	4.3841	192	.51092		
Reliability - Perceptions	3.6914	192	.67502	-9.693	.000*
Responsiveness - Expectations	4.4653	192	.53385		
Responsiveness - Perceptions	3.6458	192	.76775	-9.725	.000*
Assurance - Expectations	4.5052	192	.50874		
Assurance - Perceptions	3.5208	192	.71541	-10.635	.000*
Empathy - Expectations	4.4674	192	.52855		
Empathy - Perceptions	3.3333	192	.96480	-10.371	.000*

\*significant at 95% level

#### **4.11 Comparison between faculties**

Table 4.7 reflects the results of the Kruskal-Wallis Anova used to make comparisons between faculties. Since there was only 1 student from Health Sciences, this faculty was excluded from this analysis. The p values indicate a significant difference in the empathy scores between faculties at the 95% level ( $p < 0.05$ ). The mean score for empathy-perceptions was lowest for the faculty of Art & Design. There were no significant differences among faculties for the other four dimensions.

**Table 4.7: Comparison of means between faculties using the Kruskal-Wallis Anova**

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Tangibles - Expectations	ACCOUNTING & INFORMATICS	21	4.3333	.65828			
	APPLIED SCIENCES	34	4.3235	.49055			
	ARTS & DESIGN	7	4.0714	.94334			
	ENGINEERING & THE BUILT ENVIRONMENT	91	4.3709	.46452			
	MANAGEMENT SCIENCES	38	4.3092	.50816			
	Total	191	4.3320	.52125	.756	4	.944
Tangibles - Perceptions	ACCOUNTING & INFORMATICS	21	3.5714	.87729			
	APPLIED SCIENCES	34	3.8824	.56150			
	ARTS & DESIGN	7	3.2857	.87117			
	ENGINEERING & THE BUILT ENVIRONMENT	91	3.6731	.73190			
	MANAGEMENT SCIENCES	38	3.4671	.88945			
	Total	191	3.6354	.77503	5.609	4	.230
Reliability - Expectations	ACCOUNTING & INFORMATICS	21	4.5476	.35898			
	APPLIED SCIENCES	34	4.4265	.46274			
	ARTS & DESIGN	7	3.8929	1.32961			
	ENGINEERING & THE BUILT ENVIRONMENT	91	4.3819	.44619			
	MANAGEMENT SCIENCES	38	4.3421	.49804			
	Total	191	4.3841	.51092	3.717	4	.446
Reliability - Perceptions	ACCOUNTING & INFORMATICS	21	3.7857	.58248			
	APPLIED SCIENCES	34	3.8162	.67226			
	ARTS & DESIGN	7	3.6429	.78868			
	ENGINEERING & THE BUILT ENVIRONMENT	91	3.7005	.68741			

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
	MANAGEMENT SCIENCES	38	3.5066	.67655			
	Total	191	3.6914	.67502	4.245	4	.374
Responsiveness - Expectations	ACCOUNTING & INFORMATICS	21	4.5714	.39641			
	APPLIED SCIENCES	34	4.3922	.60006			
	ARTS & DESIGN	7	4.0952	1.27242			
	ENGINEERING & THE BUILT ENVIRONMENT	91	4.5165	.45613			
	MANAGEMENT SCIENCES	38	4.4035	.49111			
	Total	191	4.4653	.53385	2.518	4	.641
Responsiveness - Perceptions	ACCOUNTING & INFORMATICS	21	3.6032	.89826			
	APPLIED SCIENCES	34	3.8333	.69267			
	ARTS & DESIGN	7	3.8571	.94000			
	ENGINEERING & THE BUILT ENVIRONMENT	91	3.5971	.74951			
	MANAGEMENT SCIENCES	38	3.6140	.75745			
	Total	191	3.6458	.76775	2.411	4	.661
Assurance - Expectations	ACCOUNTING & INFORMATICS	21	4.5810	.31562			
	APPLIED SCIENCES	34	4.4176	.56861			
	ARTS & DESIGN	7	4.1714	1.32378			
	ENGINEERING & THE BUILT ENVIRONMENT	91	4.6022	.39721			
	MANAGEMENT SCIENCES	38	4.3579	.49245			
	Total	191	4.5052	.50874	7.676	4	.104
Assurance - Perceptions	ACCOUNTING & INFORMATICS	21	3.4190	.69830			
	APPLIED SCIENCES	34	3.7412	.67065			
	ARTS & DESIGN	7	3.2857	.85524			
	ENGINEERING & THE BUILT ENVIRONMENT	91	3.5253	.71283			

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
	MANAGEMENT SCIENCES	38	3.4211	.74077			
	Total	191	3.5208	.71541	5.397	4	.249
Empathy - Expectations	ACCOUNTING & INFORMATICS	21	4.6429	.31196			
	APPLIED SCIENCES	34	4.4118	.58024			
	ARTS & DESIGN	7	3.6786	1.18773			
	ENGINEERING & THE BUILT ENVIRONMENT	91	4.5412	.43822			
	MANAGEMENT SCIENCES	38	4.3816	.48189			
	Total	191	4.4674	.52855	9.587	4	.048*
Empathy - Perceptions	ACCOUNTING & INFORMATICS	21	3.4405	1.04853			
	APPLIED SCIENCES	34	3.6544	.80720			
	ARTS & DESIGN	7	2.2500	1.20761			
	ENGINEERING & THE BUILT ENVIRONMENT	91	3.2912	.97058			
	MANAGEMENT SCIENCES	38	3.3224	.85208			
	Total	191	3.3333	.96480	10.468	4	.033*

\*Significant at 95% level

#### 4.12 Comparison between qualifications

Table 4.8 reflects the results of the comparison of mean scores between qualifications. Expectation relating to the assurance and empathy dimensions were significantly different between qualifications at the 95% level ( $p < 0.05$ ). There were no significant differences among the qualifications with regard to the remaining expectations and perceptions.

**Table 4.8: Comparison of means between qualifications using the Kruskal-Wallis Anova**

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Tangibles - Expectations	NATIONAL DIPLOMA	126	4.3948	.46406			
	B. TECH	42	4.2679	.61086			
	M. TECH	8	3.9063	.68057			
	D. TECH	15	4.2167	.54171			
	Total	191	4.3325	.52259	6.338	3	.096
Tangibles - Perceptions	NATIONAL DIPLOMA	126	3.6111	.77882			
	B. TECH	42	3.5595	.80738			
	M. TECH	8	3.9375	.49552			
	D. TECH	15	3.8667	.77843			
	Total	191	3.6335	.77662	2.779	3	.427
Reliability - Expectations	NATIONAL DIPLOMA	126	4.4286	.41214			
	B. TECH	42	4.2976	.71619			
	M. TECH	8	4.3438	.44194			
	D. TECH	15	4.2333	.59362			
	Total	191	4.3809	.51030	2.191	3	.534
Reliability - Perceptions	NATIONAL DIPLOMA	126	3.7004	.65194			
	B. TECH	42	3.6429	.68107			
	M. TECH	8	3.8750	.62678			
	D. TECH	15	3.6500	.91515			
	Total	191	3.6911	.67678	.380	3	.944
Responsiveness - Expectations	NATIONAL DIPLOMA	126	4.5317	.44458			
	B. TECH	42	4.3413	.67671			
	M. TECH	8	4.3333	.61721			
	D. TECH	15	4.2889	.66508			
	Total	191	4.4625	.53384	4.051	3	.256
Responsiveness - Perceptions	NATIONAL DIPLOMA	126	3.5952	.75496			

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
	B. TECH	42	3.6587	.73432			
	M. TECH	8	3.7500	.77152			
	D. TECH	15	4.0222	.92981			
	Total	191	3.6492	.76833	7.278	3	.064
Assurance - Expectations	NATIONAL DIPLOMA	126	4.5905	.40781			
	B. TECH	42	4.3714	.66343			
	M. TECH	8	4.1500	.60238			
	D. TECH	15	4.3200	.57470			
	Total	191	4.5026	.50881	10.340	3	.016*
Assurance - Perceptions	NATIONAL DIPLOMA	126	3.4794	.69608			
	B. TECH	42	3.5571	.65598			
	M. TECH	8	3.7750	.52847			
	D. TECH	15	3.6133	1.08882			
	Total	191	3.5194	.71701	3.156	3	.368
Empathy - Expectations	NATIONAL DIPLOMA	126	4.5516	.43625			
	B. TECH	42	4.3274	.65446			
	M. TECH	8	4.0313	.76108			
	D. TECH	15	4.3500	.54935			
	Total	191	4.4647	.52852	8.470	3	.037*
Empathy - Perceptions	NATIONAL DIPLOMA	126	3.2421	.97413			
	B. TECH	42	3.4107	.89002			
	M. TECH	8	3.6875	1.17070			
	D. TECH	15	3.8167	.75277			
	Total	191	3.3429	.95810	7.636	3	.054

\*Significant at 95% level

#### 4.13 Comparison between years of study

Table 4.9 indicates no significant difference in mean scores between years of study at the 95% level ( $p > 0.05$ )

**Table 4.9: Comparison of means between years of study using the Kruskal-Wallis Anova**

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Tangibles - Expectations	YEAR ONE	65	4.3423	.44320			
	YEAR TWO	47	4.3457	.53302			
	YEAR THREE	40	4.4000	.46271			
	YEAR FOUR & ABOVE	40	4.2313	.66600			
	Total	192	4.3320	.52125	1.318	3	.725
Tangibles - Perceptions	YEAR ONE	65	3.5731	.70534			
	YEAR TWO	47	3.7021	.70062			
	YEAR THREE	40	3.6063	.93179			
	YEAR FOUR & ABOVE	40	3.6875	.81404			
	Total	192	3.6354	.77503	2.521	3	.471
Reliability - Expectations	YEAR ONE	65	4.3769	.44221			
	YEAR TWO	47	4.3670	.40997			
	YEAR THREE	40	4.4813	.41366			
	YEAR FOUR & ABOVE	40	4.3188	.75742			
	Total	192	4.3841	.51092	1.653	3	.647
Reliability - Perceptions	YEAR ONE	65	3.6346	.67181			
	YEAR TWO	47	3.6489	.56544			
	YEAR THREE	40	3.7125	.77738			
	YEAR FOUR & ABOVE	40	3.8125	.69741			
	Total	192	3.6914	.67502	2.789	3	.425
Responsiveness - Expectations	YEAR ONE	65	4.4872	.45291			
	YEAR TWO	47	4.4468	.51206			
	YEAR THREE	40	4.5417	.48738			
	YEAR FOUR & ABOVE	40	4.3750	.70484			
	Total	192	4.4653	.53385	1.336	3	.721
Responsiveness -	YEAR ONE	65	3.5949	.69595			

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Perceptions							
	YEAR TWO	47	3.6738	.72395			
	YEAR THREE	40	3.7333	.88418			
	YEAR FOUR & ABOVE	40	3.6083	.82306			
	Total	192	3.6458	.76775	1.515	3	.679
Assurance - Expectations	YEAR ONE	65	4.5446	.42940			
	YEAR TWO	47	4.5064	.45080			
	YEAR THREE	40	4.5600	.47545			
	YEAR FOUR & ABOVE	40	4.3850	.69191			
	Total	192	4.5052	.50874	1.873	3	.599
Assurance - Perceptions	YEAR ONE	65	3.4400	.68026			
	YEAR TWO	47	3.5106	.70131			
	YEAR THREE	40	3.5650	.81131			
	YEAR FOUR & ABOVE	40	3.6200	.69695			
	Total	192	3.5208	.71541	2.113	3	.549
Empathy - Expectations	YEAR ONE	65	4.4615	.55416			
	YEAR TWO	47	4.4787	.44180			
	YEAR THREE	40	4.5625	.48288			
	YEAR FOUR & ABOVE	40	4.3688	.61755			
	Total	192	4.4674	.52855	2.494	3	.476
Empathy - Perceptions	YEAR ONE	65	3.1885	.99808			
	YEAR TWO	47	3.4255	.84364			
	YEAR THREE	40	3.3750	1.07268			
	YEAR FOUR & ABOVE	40	3.4188	.93779			
	Total	192	3.3333	.96480	2.583	3	.460

\*Significant at 95% level

#### 4.14 Comparison between regions

Table 4.10 indicates a significant difference in mean scores for empathy-perceptions between regions at the 95% level ( $p < 0.05$ ). There were no significant differences among the regions with regard to the remaining expectations and perceptions.

**Table 4.10: Comparison of means between regions using the Kruskal-Wallis Anova**

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Tangibles - Expectations	AFRICA	128	4.3359	.51401			
	ASIA	28	4.4107	.51015			
	EUROPE	25	4.3300	.60690			
	SOUTH AMERICA	6	4.0417	.53424			
	OTHER	4	4.1875	.23936			
	Total	191	4.3338	.52206	3.817	4	.431
Tangibles - Perceptions	AFRICA	128	3.5605	.81312			
	ASIA	28	3.6964	.73079			
	EUROPE	25	3.8000	.64952			
	SOUTH AMERICA	6	3.8750	.78661			
	OTHER	4	4.1250	.25000			
	Total	191	3.6335	.77662	3.775	4	.437
Reliability - Expectations	AFRICA	128	4.3730	.50684			
	ASIA	28	4.4821	.50885			
	EUROPE	25	4.4500	.44488			
	SOUTH AMERICA	6	3.9583	.79713			
	OTHER	4	4.3750	.47871			
	Total	191	4.3861	.51150	3.253	4	.516
Reliability - Perceptions	AFRICA	128	3.6504	.67677			
	ASIA	28	3.7411	.64003			
	EUROPE	25	3.6700	.71341			

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
	SOUTH AMERICA	6	4.2083	.55715			
	OTHER	4	3.9375	.77392			
	Total	191	3.6898	.67642	4.013	4	.404
Responsiveness - Expectations	AFRICA	128	4.4844	.53218			
	ASIA	28	4.4762	.56966			
	EUROPE	25	4.4533	.46027			
	SOUTH AMERICA	6	4.2222	.80737			
	OTHER	4	4.3333	.47140			
	Total	191	4.4677	.53419	1.530	4	.821
Responsiveness - Perceptions	AFRICA	128	3.5443	.76204			
	ASIA	28	3.8095	.79829			
	EUROPE	25	3.8000	.71362			
	SOUTH AMERICA	6	4.2778	.71233			
	OTHER	4	3.7500	.73912			
	Total	191	3.6440	.76934	9.240	4	.055
Assurance - Expectations	AFRICA	128	4.5406	.50344			
	ASIA	28	4.5000	.52634			
	EUROPE	25	4.4640	.46447			
	SOUTH AMERICA	6	4.2333	.78401			
	OTHER	4	4.2000	.28284			
	Total	191	4.5079	.50876	4.456	4	.348
Assurance - Perceptions	AFRICA	128	3.4578	.69561			
	ASIA	28	3.5214	.81892			
	EUROPE	25	3.6320	.67745			
	SOUTH AMERICA	6	4.1000	.81731			
	OTHER	4	3.8500	.34157			
	Total	191	3.5183	.71645	7.629	4	.106

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Empathy - Expectations	AFRICA	128	4.4805	.53298			
	ASIA	28	4.5089	.50223			
	EUROPE	25	4.4700	.50683			
	SOUTH AMERICA	6	4.4583	.64064			
	OTHER	4	3.8750	.43301			
	Total	191	4.4699	.52885	5.563	4	.234
Empathy - Perceptions	AFRICA	128	3.1387	.98553			
	ASIA	28	3.6786	.80467			
	EUROPE	25	3.7100	.71691			
	SOUTH AMERICA	6	3.9583	.99268			
	OTHER	4	3.6875	1.24791			
	Total	191	3.3298	.96612	15.075	4	.005*

\*Significant at 95% level

#### 4.15 Comparison between ages

Table 4.11 indicates a significant difference in mean scores for tangibles-expectations between age groups at the 95% level ( $p < 0.05$ ). There were no significant differences among the ages with regard to the remaining expectations and perceptions.

**Table 4.11: Comparison of means between ages using the Kruskal-Wallis Anova**

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
Tangibles - Expectations	18 - 20	29	4.2069	.48213			
	21 - 22	55	4.4364	.58178			
	23 - 25	40	4.2125	.49208			
	OVER 25	67	4.3694	.49113			
	Total	191	4.3312	.52248	8.092	3	.044*
Tangibles - Perceptions	18 - 20	29	3.6379	.61086			
	21 - 22	55	3.4727	.86157			
	23 - 25	40	3.8250	.74075			
	OVER 25	67	3.6493	.77614			
	Total	191	3.6335	.77662	4.597	3	.204
Reliability - Expectations	18 - 20	29	4.3017	.44511			
	21 - 22	55	4.4182	.60295			
	23 - 25	40	4.3250	.45362			
	OVER 25	67	4.4216	.49277			
	Total	191	4.3822	.51157	3.895	3	.273
Reliability - Perceptions	18 - 20	29	3.7586	.53653			
	21 - 22	55	3.6000	.64118			
	23 - 25	40	3.6938	.81745			
	OVER 25	67	3.7239	.66733			
	Total	191	3.6872	.67423	1.715	3	.634
Responsiveness - Expectations	18 - 20	29	4.5402	.40251			
	21 - 22	55	4.4485	.63576			
	23 - 25	40	4.4083	.44968			
	OVER 25	67	4.4726	.54479			
	Total	191	4.4625	.53384	1.358	3	.715
Responsiveness - Perceptions	18 - 20	29	3.6207	.68269			

		N	Mean	Std. Deviation	Kruskal-Wallis Chi-Square	df	p
	21 - 22	55	3.5394	.77643			
	23 - 25	40	3.6500	.78064			
	OVER 25	67	3.7413	.79735			
	Total	191	3.6457	.76977	2.201	3	.532
Assurance - Expectations	18 - 20	29	4.6414	.37179			
	21 - 22	55	4.5309	.59531			
	23 - 25	40	4.4250	.47972			
	OVER 25	67	4.4657	.49652			
	Total	191	4.5026	.50881	4.731	3	.193
Assurance - Perceptions	18 - 20	29	3.6276	.70452			
	21 - 22	55	3.3964	.65375			
	23 - 25	40	3.5250	.71853			
	OVER 25	67	3.5761	.77109			
	Total	191	3.5215	.71724	2.889	3	.409
Empathy - Expectations	18 - 20	29	4.4569	.44355			
	21 - 22	55	4.5182	.56694			
	23 - 25	40	4.4625	.46185			
	OVER 25	67	4.4254	.57243			
	Total	191	4.4647	.52852	1.316	3	.725
Empathy - Perceptions	18 - 20	29	3.2672	.86842			
	21 - 22	55	3.2182	.87540			
	23 - 25	40	3.2375	1.21680			
	OVER 25	67	3.5224	.90111			
	Total	191	3.3364	.96641	4.343	3	.227

\*Significant at 95% level

#### **4.16 Conclusion**

This chapter has presented the analysis of the data gathered in the research study. The results have been presented in the form of graphs and tables which help to provide a detailed analysis. Moreover, the results have identified service quality dimensions that require further attention. It can be seen from Table 4.5, in the SERVQUAL gap scores, that the empathy dimension has the biggest gap score of -1.14 followed by assurance dimension with a gap of -0.98.

Poor levels of communication, barriers to communication, inadequate signage, deficiency in maintenance of records, inappropriate methods of rendering advice, poor accommodation facilities, no value for money, limited support services, lack of understanding between DUT personnel and international students relating to their needs and difficulties are significant indicators which will enhance the image of DUT to international students.

The next chapter will present the conclusions and recommendations of the study.

## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The previous chapter discussed the findings of the study. This chapter discusses in depth the results and findings in respect to the objectives of the study. Further recommendations for future studies are also made.

#### 5.2 Summary of the study

##### 5.2.1 The findings on the objectives

The main research objective of this study was to ascertain international students' perceptions of service quality at the DUT. The results of the relevant research questions are presented with conclusions based on the findings discussed in chapter 4. The research on measuring service quality has focused primarily on how to meet or exceed international students' expectations and has viewed service quality as a measure of how the delivered service level matches international students' expectations. The concept of measuring the difference between expectations and perceptions in the form of the SERVQUAL gap score proved useful for assessing levels of service quality.

**Objective 1:** To identify international students' expectations in terms of the delivered services provided at DUT.

The results have shown that respondents' expectations about the services they receive from DUT exceed their perceptions. Thus, improvements are needed across all five dimensions. The gaps in all the dimensions present a challenge for the staff and management of the DUT as the institution is expected to offer their customers, the international students, excellent services at all times. If the expectations are greater than perceptions, then the perceived quality is less than satisfactory and, hence, customer dissatisfaction occurs. Chapter four highlighted that the mean

scores for expectations exceeded the mean scores for perceptions in terms of the service quality dimensions.

**Objective 2:** To ascertain the perceptions of international students towards the services provided at DUT.

Perceptions become an influential factor when measuring customers' satisfaction with the service they receive. Perceptions are considered relative to expectations. Customers perceive service in terms of the quality of the service they receive and whether or not they are satisfied with their experiences. According to the empirical findings in chapter 4, all the items in the dimensions indicate negative responses as the expectations exceed perceptions of the DUT.

**Objective 3:** To measure the gaps between international students' expectations and perceptions of service quality, using a modified version of the SERVQUAL model.

The research on measuring service quality has focused primarily on how to meet or exceed customers' expectations and has viewed service quality as a measure of how the delivered service level matches consumers' expectations. The concept of measuring the difference between expectations and perceptions in the form of the SERVQUAL gap score proved useful for assessing levels of service quality.

Chapter 4 reported the empirical findings and the results demonstrated that, in each of the five SERVQUAL dimensions, there was a negative quality gap. The empathy dimension showed the largest gap, closely followed by the assurance and responsiveness dimensions with the reliability and tangible dimensions being equally low.

**Objective 4:** To identify international students' service expectation and perception differences according to biographical variables.

In terms of the biographic data, the research revealed the maximum and minimum scores of the various demographic segments. The biographic data was obtained for faculty, qualification, year of study, region and age group. The analysis in chapter 4, highlighted the significant difference (p-values) relating to the expectations and perceptions of the 5 service quality dimensions.

### **5.2.2 The findings on the five SERVQUAL dimensions**

In terms of the tangibles dimension - questions 16 and 2 showed the highest gaps in this dimension. 71% of the respondents agreed and strongly agreed to the fact that DUT should have good communication or signage system for international students to get easy access to help. This finding implies that DUT management has to improve its communication and signage system to ensure that the DUT can provide efficient and effective service to international students. 69% of the respondents agreed that the DUT has visually appealing facilities. The challenge for the DUT is to ensure that service specifications, such as course content, delivery and application, meet the expectations of customers consistently.

The reliability dimension refers to the DUT's ability to provide the promised service in a precise and reliable manner. Reliability is the most important service dimension from a customer's point of view. The perception in terms of reliability was moderate at 3.69 on a scale of 1 to 5. However, the level of expectation was high at 4.58 in terms of reliability. The gap score was -0.69. The empirical study revealed that the largest gap in this dimension was the keeping of accurate records and files on international students. This finding implies that international students are less happy with this service. This could be due to poor management information systems.

Responsiveness is viewed as the willingness to assist customers and to provide prompt service on a continuous basis. Sometimes, this service may be out of the ambit of normal operating hours. The average score for this dimension was 4.46 for expected values. The score for perceptions was 3.64, which indicated a moderate level of perception towards responsiveness. The gap score was -0.82. The empirical study revealed that the largest gap in this dimension related to giving

useful advice upon the arrival of international students. This implies that DUT staff were viewed as inefficient service providers and/or staff assume that international students are averse to the norms and standards of DUT.

The DUT should focus on attentiveness and willingness in dealing with customers' requests, queries and prompt complaint resolution.

The assurance dimension refers to the knowledge and courtesy of employees and their ability to inspire trust and confidence as well as their service effectiveness. The score for assurance was 4.50 for expectations. The score for perceptions was 3.52. The gap score was -0.98. The DUT needs to train staff to improve on product knowledge and skills for meeting international students' expectations. The empirical study revealed that the largest gap in this dimension was related to provision for a good living environment. This implies that the accommodation facilities are not encouraging. This could be due to DUT's financial constraints.

The empathy dimension emerged as the largest quality gap score (-1.14). This dimension refers to the level of the HEIs specific service knowledge and care. The score for empathy was 4.47 for expectations, which indicated an extremely high degree of expectation with regards to empathy. The empirical study revealed that the following items, viz., a range of support services, academic staff should understand the difficulties facing international students and easy access to find staff that helps international students with their language and study skills, had the largest gaps. This implies that DUT staff failed to demonstrate care and understand the needs of international students. This could be due to the ignorance of diverse cultures.

According to Brink and Berndt (2010: 60), the DUT and its employees must try to understand the customers' problems and strive to execute activities with the customers' best interests in mind.

## **5.3 Demographic factors and service quality**

### **5.3.1 Faculty**

The analysed results showed that majority of international students are affiliated to the faculty of Engineering and the Built Environment. The results in chapter 4 indicated that there was a significant difference in empathy scores between faculties at the 95% level ( $p < 0.05$ ). The faculty of Arts and Design had the lowest score for empathy-expectation and empathy perception.

### **5.3.2 Qualification**

The study showed that two thirds of international students were studying towards the national diploma. The research results also indicated a significant difference in the assurance-expectation and empathy-expectation dimensions. The national diploma qualification had the highest score for the assurance and empathy-expectations, while the M.Tech qualification was the lowest score for both the assurance and empathy-expectations.

### **5.3.3 Year of study**

The year of study do not differ significantly in terms of their level of expectations and perceptions with regards to each of the dimensions.

### **5.3.4 Region**

The findings in the ANOVA test indicated a significant difference in the empathy-perceptions dimension. African respondents have the highest score, while those from Asia have the lowest score with regards to expectations and perceptions.

### **5.3.5 Age groups**

The study showed that the majority of international students are above 25 years. The research results indicated a significant difference in the tangibles-expectations dimension. Respondents in the 21-22 age group had the highest score, while those in the 18-20 and 23-25 age groups had the lower scores for tangibles-expectations.

## 5.4 Recommendations

Research of this nature is imperative to the DUT to ensure that the institution can implement an appropriate set of processes to continuously review and refine customer service quality. The gaps between expectations and perceptions of the results from this survey indicate that there is a need for customer service improvements to be put in place. The following recommendations are, therefore, made:-

- Management of DUT must prioritise resources when purchasing new equipment so that the facilities that customers (students) utilize are well maintained and visually appealing;
- DUT employees must be trained in service quality programmes e.g. Customers' Service Improvement Workshops, Product Knowledge Workshops, Communication Workshops and Interpersonal Skills Workshops;
- Service quality culture should be inculcated in all employees by creating awareness and encouraging and empowering employees to engage in Customers' Service Improvement Workshops, Product Knowledge Workshops, Communication Workshops and Interpersonal Skills Workshops;
- Management at DUT should ensure that appropriate feedback mechanisms are in place to check deadlines promised to students, carrying out promises timeously as well as dedication shown by staff to solve students' problems;
- Management at DUT should clarify tasks of all personnel and find solutions, where necessary, and manage tasks without the interference of quality performance; and
- Management should make appropriate changes to technology and systems so that they are supportive of the execution of the quality specifications.

## **5.5 Recommendations for further study**

This study only looked at the DUT. Future research can be undertaken among the different universities of technology and traditional universities in South Africa. In addition, future research may also look at whether the perceived and expected service quality levels differ between domestic students and international students. Finally, it is recommended to determine the effectiveness of service development and continuous service improvement in target dimensions.

## **5.6 Conclusion**

This study has highlighted the expectations and perceptions of international students at the DUT. Issues relating to the delivery of service quality and the gap scores were discussed. The importance of service delivery is crucial in HEIs to achieve a competitive advantage. In today's volatile economy, providing excellent service delivery can be the critical difference in any organization's success. In order to accomplish profits and with the deterioration of government subsidy in South Africa, the DUT need to constantly review the quality of their service delivery.

The recommendations and conclusions discussed in this chapter represent some of the measures that could possibly be taken by the DUT to improve the delivery of service quality. This study will have a positive impact on the delivery of service quality, which will assist the DUT management to increase international customer satisfaction. Finally, by identifying strengths and weaknesses pertaining to the dimensions of service quality, the DUT can allocate and utilise their resources effectively to provide improved service to international students.

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## ANNEXURE 1

59 Fleming Johnston Road

Umbilo

Durban

4001

Dear Sir/Madam

My name is Dion Trevor Noel and I am conducting research for my M. Tech. degree in Marketing at the Durban University of Technology (DUT). The title of my research project is: International students' expectations and perceptions of customer service at DUT. I would appreciate your co-operation in completing a questionnaire.

The completion of the questionnaire should not take longer than 15 minutes of your time. I want to thank you in advance for your time. Please be informed that your identity will remain anonymous and your response will be kept confidential.

Participation in this research study is voluntary and you may withdraw from the study at any time without having to give any reasons. If you have any questions, please feel free to contact me. If you have any other questions or concerns regarding the study and would like to talk to someone other than the researcher, you may as contact Dr. J. P. Govender, Department of Marketing, Retail and Public Relations, 7<sup>th</sup> floor, B block, M.L. Sultan Campus, at 0027-31-3735396.

Thanking you

Dion Trevor Noel

## ANNEXURE 2

Based on your experiences as an international student of the Durban University of Technology, kindly think about the type of university that would deliver excellent quality of service.

Kindly provide the following information in terms of your studies at DUT.

Mark the appropriate box with a cross (x).

PLEASE INDICATE THE FACULTY IN WHICH YOU ARE REGISTERED?	
ACCOUNTING & INFORMATICS	1
APPLIED SCIENCES	2
ARTS & DESIGN	3
ENGINEERING & THE BUILT ENVIRONMENT	4
HEALTH SCIENCES	5
MANAGEMENT SCIENCES	6

PLEASE INDICATE THE QUALIFICATION FOR WHICH YOU ARE REGISTERED?	
NATIONAL DIPLOMA	1
B. TECH	2
M. TECH	3
D. TECH	4

PLEASE INDICATE YOUR YEAR OF STUDY.	
YEAR ONE	1
YEAR TWO	2
YEAR THREE	3
YEAR FOUR & ABOVE	4

PLEASE INDICATE THE REGION IN WHICH YOU RESIDE?	
AFRICA	1
ASIA	2
EUROPE	3
SOUTH AMERICA	4
NORTH AMERICA	5
OTHER	6

PLEASE INDICATE YOUR AGE GROUP.	
18 - 20	1
21 - 22	2
23 - 25	3
OVER 25	4

HOW DO YOU RATE THE SERVICE LEVEL YOU EXPECT?	Strongly Disagree	Disagree	Uncertain	Agree	Strongly agree
1. An excellent university should have modern-looking equipment.	1	2	3	4	5
2. The physical facilities at an excellent university should be visually appealing.	1	2	3	4	5
3. At an excellent university, lecturers should assess your work accurately.	1	2	3	4	5
4. At an excellent university, the same standard of marking should apply to all subjects.	1	2	3	4	5
5. The administrative staff at an excellent university should be courteous and willing to help.	1	2	3	4	5
6. An excellent university should offer foreign students a range of support services.	1	2	3	4	5
7. An excellent university should provide a good living environment for foreign students.	1	2	3	4	5
8. At an excellent university, you should depend on the assessment to be fair and reliable.	1	2	3	4	5
9. At an excellent university, you should be confident that you will get value for your money.	1	2	3	4	5
10. At an excellent university, you should be taught the skills you need to get good results, both academically and for employment.	1	2	3	4	5
11. At an excellent university, academic staff should understand the difficulties facing international students.	1	2	3	4	5
12. The academic staff at an excellent university should be concerned about the educational progress of their students.	1	2	3	4	5
13. At an excellent university, it should be easy to find staff that helps international students with their language and study skills.	1	2	3	4	5
14. At an excellent university, materials associated	1	2	3	4	5

with service (such as brochures, handouts and web pages) should be visually appealing and easy to understand.					
15. At an excellent university, the staff should understand the needs of international students.	1	2	3	4	5
16. An excellent university should have a good communication and signage system so that students know where and how to get help.	1	2	3	4	5
17. At an excellent university, international students should know what to do in each subject to get a good mark.	1	2	3	4	5
18. The lecturers at an excellent university should have extensive knowledge in their field of learning.	1	2	3	4	5
19. An excellent university should give useful advice when new students arrive.	1	2	3	4	5
20. An excellent university should keep accurate records and files on students.	1	2	3	4	5

HOW DO YOU RATE THE SERVICE LEVEL YOU ACTUALLY RECEIVE?	Strongly Disagree	Disagree	Uncertain	Agree	Strongly agree
1. Brochures, handouts and web pages are visually appealing and easy to understand at DUT.	1	2	3	4	5
2. DUT's physical facilities are visually appealing.	1	2	3	4	5
3. Lecturers at DUT conduct accurate assessments.	1	2	3	4	5
4. At DUT, you can depend on the assessment to be fair and reliable.	1	2	3	4	5
5. The academic staff at DUT are concerned about the educational progress of their students.	1	2	3	4	5
6. At DUT, foreign students get value for their money.	1	2	3	4	5
7. DUT provides a good living environment for foreign students.	1	2	3	4	5
8. DUT keeps accurate records and files on international students.	1	2	3	4	5
9. At DUT, you are taught the skills you need to get good results, both academically and for future employment.	1	2	3	4	5
10. At DUT, the staff understands the needs of international students.	1	2	3	4	5
11. The administrative staff at DUT are courteous and willing to help.	1	2	3	4	5
12. The lecturers at DUT have extensive knowledge in their field of learning.	1	2	3	4	5
13. DUT has modern equipment and computer labs for students to use.	1	2	3	4	5

14. DUT has a good communication and signage system so that students know where and how to get help.	T	2	3	4	5
15. Upon arrival, international students are given good advice at DUT.	1	2	3	4	5
16. At DUT, international students know what to do in each subject to get a good mark.	1	2	3	4	5
17. DUT offers students a range of support services.	1	2	3	4	5
18. At DUT, it is easy to find staff that can help international students with their language and study skills.	1	2	3	4	5
19. The academic staff at DUT have an understanding of the difficulties facing international students.	1	2	3	4	5
20. At DUT, the same standard of marking applies to all subjects.	1	2	3	4	5

### ANNEXURE 3

Dimension	Description	Example for DUT
Tangibles	Physical facilities and equipment.	Modern looking equipment
		Physical facilities is visually appealing
		Communication and signage
		Materials are visually appealing
Reliability	Ability to perform the promised service dependably and accurately.	Fairness and reliability of assessments
		Keeping of accurate records and files on students
		Lecturers should access your work accurately..
		Same standard of marking should apply to all subject
Responsiveness	Willingness to help customers and provide prompt service.	Administrative staffs should be courteous and willing to help
		Academic staff should be concerned about the educational progress of their students
		Give useful advice when new students arrive
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence.	Provision for a good living environment
		Value for money
		Skills that you require to get good results both academically and for employment
		Know what to do in each subject to get a good mark
		Lecturers should have extensive knowledge in their field of learning
Empathy	The firm provides its caring, individualised attention to its customers	A range of support services
		Academic staff should understand the difficulties facing international students
		It should be easy to find staff that helps international students with their language and study skills
		The staff should understand the need of international students