

**Lecturers' and students' perceptions of contributory factors towards the high failure rate in an Information Administration course at a merged University of Technology.**

By

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## DECLARATION

I, Ragani Padiachee, the undersigned, hereby declare that the contents of this dissertation constitute my own original work, which has not previously been presented to another institution, either in part or as a whole, for the purposes of obtaining a degree. Where use has been made of the work of others, this has duly been acknowledged and referenced accordingly.

.....  
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.....

Date

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.....

## **WRITING CONVENTIONS**

The author wishes to orientate the reader to the writing conventions that have been adopted in this thesis. It uses the American Psychological Association (APA 5<sup>th</sup> edition) style of referencing, an internationally recognised system. For example:

### **INTEXT CITATIONS**

Author(s), year, page/pages from which citations has been taken (where it is necessary)

(Norman, 2006)

(Norman, 2006, p. 10)

(Norman, 2006, p. 10-20)

Norman (2006) maintains that

Norman & Jones (2004) point out that ...

Norman & Pandor (2006) hold the view that ...

Norman, Marain & Jones (2006, p. 8) contend that ...

Norman (2005), Kellar (2004), Jones (2008) maintain that ...

Norman et al (2006) contend that ...

### **Internet sources with no author and no date**

“Psychological perspectives” (n.d.) states that ...

### **Internet sources with no pages numbers**

(Johnson, 2003, para. 5)

### **Brochure (Corporate author)**

Leadership Research Institute (1999).

## IN THE LIST OF REFERENCES

### Books

Names (s) of Author(s). (Date of publication). *Title* (edition), Page numbers. Place of publication. Publisher.

Example:

Bernstein, D.K. & Tiegerman, E. (1988). *Language and communication disorders in children* (2<sup>nd</sup> ed.). Columbus, OH: Meril.

### Journal Articles

Article author(s). (Date of publication). Article title. *Periodical title and volume number*, Issue (or part) number, Page number(s).

Example

Korhonen, T.T. (1988). Neuropsychological stability and prognoses of subgroups of children with learning disabilities. *Journal of Learning Disabilities*, 24(4), 22-88.

### Internet sources with no author and no date

*Psychological perspectives* (n.d.). Retrieved June 2, 2010, from [http://www.onl.org.jp/horo\\_3/htm](http://www.onl.org.jp/horo_3/htm)

### Brochure (Corporate author, author and publisher is the same)

Leadership Research Institute. (1999). Creative leadership [Brochure]. Toowoomba, Qld:

Author

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## ACRONYMS

| ACRONYMS |   |
|----------|---|
|          |   |
| ANC      | AFRICAN NATIONAL CONGRESS                   |
| CATE     | COLLEGES OF ADVANCED TECHNICAL EDUCATION    |
| CHE      | COUNCIL ON HIGHER EDUCATION                 |
| CPQA     | CENTRE FOR PROMOTIONS AND QUALITY ASSURANCE |
| CTP      | COMMITTEE OF TECHNIKON PRINCIPALS           |
| DoE      | DEPARTMENT OF EDUCATION                     |
| FTE      | FULL TIME EQUIVALENT                        |
| HAI      | HISTORICALLY ADVANTAGED INSTITUTION         |
| HBI      | HISTORICALLY BLACK INSTITUTION              |
| HDI      | HISTORICALLY DISADVANTAGED INSTITUTION      |
| HE       | HIGHER EDUCATION                            |
| HEI      | HIGHER EDUCATIONAL INSTITUTION              |
| HEQC     | HIGHER EDUCATION QUALITY COUNCIL            |
| HEQF     | HIGHER EDUCATION QUALIFICATION FRAMEWORK    |
| HESA     | HIGHER EDUCATION STATISTICS AGENCY          |
| HWI      | HISTORICALLY WHITE INSTITUTION              |
| NPHE     | NATIONAL PLAN FOR HIGHER EDUCATION          |
| NQF      | NATIONAL QUALIFICATION FRAMEWORK            |
| OMT      | OFFICE MANGEMENT AND TECHNOLOGY             |
| OMTD     | OFFICE MANAGEMENT AND TECHNOLOGY DEPARTMENT |
| OMTP     | OFFICE MANAGEMENT AND TECHNOLOGY PROGRAMME  |
| RDP      | RECONSTRUCT AND DEVELOPEMENT PROGRAMME      |
| SAIC     | SOUTH AFRICAN INDIAN COUNCIL                |
| SAQA     | SOUTH AFRICAN QUALIFICATIONS AUTHORITY      |
| TC       | TECHNICAL COLLEGE                           |
| UoT      | UNIVERSITY OF TECHNOLOGY                    |

## KEY CONCEPTS

|                        |  |
|------------------------|--|
| Attrition rate/Dropout | Attrition rate provides a measure of the proportion of students who 'drop out' of a qualification at an institution each year.   |
| Cohort                 | A study of a selected group of students over a given period of time.   |
| Entering Students      | A student registering for a qualification that he/she had not previously been registered at the institution.   |
| First time Entering    | A student who has not previously been registered at any post-secondary education institution.  |
| Graduate               | A student that has fulfilled the completion requirements of a qualification  |
| Graduate rate          | Number of Graduates divided by headcount enrolled in the same reporting year expressed as a percentage   |
| Level of Study         | The period of study identified by the head of department in relation to the registration details of a student.   |
| Retention rate         | The percentage of students either completing their qualification or still enrolled at the institution.   |
| Servicing Department   | A department that specialises in teaching a specific subject.  |
| Student Demographics   | Race and gender statistics of students   |
| Throughput rate        | Tracks a cohort of students registering for the first time at a tertiary institution and completing in minimum time (3 years, minimum time + 1, minimum time + 2, and so on. |
| Undergraduate          | Refers to National Certificate, Higher Certificate, National Diploma and B Tech qualifications   |

## ABSTRACT

Since Colonial times Education in South Africa was segregated leaving African educational systems disadvantaged with inferior services. The segregation became official when apartheid became an official policy following the general election of 1948 which resulted in the National Government taking over. This report, in particular, is a study at one of the 22 merged Higher Educational Institutions (HEIs) that was comprised of previously advantaged and disadvantaged tertiary institutions. The University of Technologies (UoTs) have a history of such segregated education dating back to its origins in 1882, when Technical Colleges were established.

While the development of the early technical colleges continued to change its focus and status, inferior services continued until very recently in 2002 when mergers of Higher Education Institutions (HEIs) occurred. The democratic government of 1994 developed to many policies in an attempt to repair the damages emanating from the apartheid system. Of the many policies, one was the redressing of educational inequalities that were created by the apartheid system.

During the early 1990s and to date there has been poor Higher Education (HE) performance. One of the goals of the 1997 White paper was to improve the throughput rates at HE in terms of pass rates and thus throughput rates. The study focuses on the high failure rate in the Information Administration (IA) course at one of the merged HEIs called Southern University of Technology<sup>1</sup> (SUT).

What has been conducted is an investigation of perceptions of contributory factors towards the high failure rate in the Information Administration course at SUT. The mentioned UoT has also implemented transformational policies as required by the Department of Education (DoE) but the desires of the Education White paper 3 of 1997 regarding the improvement of throughput rates has not changed.

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<sup>1</sup> Not the real name

The main findings of the research present the following; lack of preparedness of enrolled students and lecturers in the IA subject , the non-compliance to the institutions assessment policy and procedures, lack of quality assurance and management measures and insufficient accessibility and utilisation of the resources.

# **CHAPTER ONE: BACKGROUND TO THE STUDY AND INTRODUCTION TO THE THESIS**

## **1.1 Introduction**

This chapter begins with a discussion of the problem of the high failure rate in an Information Administration (IA) course at a merged University of Technology (UoT) and the context within which this problem exists. Thereafter, the researcher presents an eventful history that preceded the period 2003-2006 in which the problem concretely asserted itself. Embedded in this historical description is: the development of South African (SA) Colleges to UoTs; highlights of the (educational) social imbalances created in the apartheid era; and its negative impact on Historically Disadvantaged Institutions (HDIs) during post apartheid times (that is, the period after 1994 in South Africa) despite initiatives for Higher Education (HE) academic transformation. The chapter ends by discussing experiences of poor HE performance nationally and internally.

## **SECTION A**

### **1.2 The Problem: success and failure rates in the IA course at SUT**

On July 30, in 2008, a meeting was held at the Southern University of Technology (SUT) where the Dean addressed the academic staff of the Faculty of Accounting and Informatics regarding the high failure rate of students for the cohort study in 2003-2006. He reported that this poor HE performance has impacted on the throughput rates. In his presentation, amongst many programmes, the Office Management and Technology Programme (OMTP) appeared most problematic, in that it achieved the lowest throughput rates deduced from the 2003–2006 cohort of students (SUT, 2008). Of the 15 courses offered in the OMTP, two levels of the IA course were problematic as far as successful completion of the course was concerned. Table 1 below shows the success rates in the cohort for all the subjects in the OMTP, including the IA courses:

| COURSE ABBREV | COURSES                      | FTE'S ENROLLED | FTE'S PASSED | SUCCESS RATE |
|---------------|------------------------------|----------------|--------------|--------------|
| IA 1          | Information Administration 1 | 55,660         | 19,550       | 35%          |
| IA 2          | Information Administration 2 | 62,330         | 14,950       | 24%          |
| IA 3          | Information Administration 3 | 34,500         | 31,250       | 91%          |
| BA 1          | Business Administration 1    | 52,900         | 48,530       | 92%          |
| BA 2          | Business Administration 2    | 45,770         | 36,110       | 79%          |
| BA 3          | Business Administration 3    | 46,250         | 37,750       | 82%          |
| COMM 1        | English and Communication 1  | 43,470         | 41,860       | 96%          |
| COMM 2        | English and Communication 2  | 53,360         | 47,840       | 90%          |
| FA 1          | Financial Accounting 1       | 4,140          | 1,725        | 42%          |
| FA 2          | Financial Accounting 2       | 1,035          | 0,575        | 56%          |
| PM 1          | Personnel Management 1       | 52,440         | 35,880       | 68%          |
| PM 2          | Personnel Management 2       | 41,630         | 27,600       | 66%          |
| LP 1          | Legal Practice 1             | 52,440         | 37,490       | 71%          |
| LP 2          | Legal Practice 2             | 16,330         | 11,615       | 71%          |
| ML 1          | Mercantile Law 1             | 22,770         | 11,270       | 49%          |

Table 1: Success rates in OMTP (SUT, 2008)

The above consists of seven different courses, some having two to three levels. The OMTP has two major courses and these are IA and BA (see Table 1). Each of these major subjects has three levels. Students must pass each level of these majors in order to progress to the next year of study. While English and Communication 1 and 2 are also compulsory, students have an extra year to complete this course if they fail it once. The other courses (Financial Accounting, Personnel Management, Legal Practice and Mercantile Law) above are electives. When students fail an elective, they have the option to change to another elective and the failure does not hamper their progress to the next level of study.

With the exception of the courses IA 1, IA 2, FA 1 and ML 1 the success rates in the cohort for all other courses in the OMTP range between 56% and 96%. These rates are acceptable

and within historical norms. The elective courses FA 1 and ML 1 are below 50% but above 40%. While these success rates are below acceptable standards (that is, below 50%), they are not as low as IA 1 and IA 2. The courses FA 1 and ML 1 are electives and students have the option to choose another elective. Also, when failing an elective course, the student is still able to progress to the next level of study. As the final year of study has only three courses, a student could manage to study for another one or two more elective courses.

The success rates for IA 1 and IA 2, being 35% and 24% respectively, makes these courses to be seen as problematic. Students failing the IA course are faced with many major problems. Firstly, this course, being a compulsory and major course, cannot be substituted and thus leaves the student with no other option but to repeat the course until they pass it, or drop out of the university. Secondly, such students cannot complete the OMTP within the three years of study. Thirdly, such students may not graduate even though they may have passed all the other courses. Thus, the low success rates for the two levels in the IA course of the OMTP has led to a low throughput rate as well (MI, 2008).

The performance in the IA course for the three levels is not consistent. It is only the first two levels that are problematic, that is IA 1 (35%) and IA 2 (25%). IA 3 shows a success rate of 91%. This very pleasing rate not only indicates a drastic change in the IA performance trend but also has another indication. One would expect the level of difficulty to increase at the third level and possibly a lower success rate, but this is not the case. The IA3 has a success rate of 91%, which is very high. The success rates for 11 of the 15 courses are very pleasing. This might be a reflection of well performing students who manage to get through the first two courses. However, the high failure rate in the OMTP may not necessarily be attributed to only poor abilities of individual students.

Having related the problem that initiated this study it is important to discuss the context in which the problem resides, especially the background of events prior to the problem. What follows now is the development of colleges to UoTs.

### **1.3 The History of South African Universities of Technology**

Social imbalances existed at the very onset of the establishment of technical colleges (TCs) in South Africa. These imbalances and their effects continued over the years even after the implementation of transformation of HE (Moja & Hayward, 2005). Racial segregation in South Africa began in colonial times, but apartheid as an official policy was introduced following the Nationalist Party general election of 1948. The Nationalist government segregated education, medical care, and other public services, and provided blacks (this includes Africans, Indians and Coloureds) with services inferior to those of Whites (Moja & Hayward, 2005). The element of segregation and its effects characterised the nature of education of the majority sector in SA.

The origins of UoTs can be traced back to 1882 when they were known as TCs (du Pre', 2007). The researcher relates these historical details because: SUT like all other UoTs experienced a change in institutional focus and mission when becoming a UoT; and that SUT was also subjected to the impact of an apartheid educational system and transformation. Attempts by the Department of Education (DoE) for transformation were met with poor HE performance, such as high failure rates. Thus, one of the goals of the DoE Education White Paper 3 of 1997 was to improve the throughput rates. It must be pointed out that a problem of high failure rates cannot be studied in isolation from its past where such social imbalances existed and in the times of HE transformation. So the information that follows is pertinent for the study of the high failure rate.

In 1882 TCs were established in South Africa to provide human resources for the railways and mines, which catered for the steady growth of apprentices in a variety of trades (du Pre', 2007). There were TCs in the then four provinces (Cape, Natal, Orange Free State and Transvaal) of South Africa. The origins and development of the then Province of Natal TCs will be discussed in the following sub-section. These TCs were chosen for the following reasons: The place of study for this research has been conducted in Kwa-Zulu Natal and thus the researcher thought it very appropriate to discuss the background of UoTs of Kwa Zulu Natal.

### *1.3.1 Natal and ML Sultan TCs in KwaZulu-Natal (KZN)*

Literature on TCs that was established in the early 1900s of the then Natal Province reveals only two institutions. The Durban TC developed from the Durban Technical Institute as early as 1907 (Division of Corporate Affairs, 2008). The other TC, being the ML Sultan TC (declared as Higher Education Institution by the then Educational Minister in 1946) was developed from technical classes at St Aidan's Mission in 1928 (DCA, 2008). These two institutions were established in central Durban of the then Natal Province. According to the information from the Division of Corporate Affairs (2008) the two TCs had their origins based on racial categories; Durban TC for Whites and ML Sultan TC for Indians. However, they were both trying to provide skills for these specific races.

In 1907 Samuel George Campbell founded the Durban Technical Institute (DCA, 2008). The Institute provided technical courses only for 382 part time students. This training was for males of the white race only. In 1912 the Institute was renamed the Durban TC. By 1923 it became the Natal TC. In 1939 the Central Organisation of Technical Training of men and women was established in the then province of Natal to train technicians to service the machinery of warfare (DCA, 2008). For seven years the Natal Technical College played its role in training men and women for war and later in training them for the needs of peace in the burgeoning industrialised society that South Africa had become.

In the late 1800s and early 1900s, labourers came from India to work on the sugar plantations, (History of DUT, n.d.). In 1927, the Cape Town Agreement by the Union Government threatened the South African Indian population without educational qualifications with repatriation. The then South African Indian Congress (SAIC) had several reservations about this agreement and requested for the Round Table Conference to discuss and offer some suggestions for satisfactory solutions (The Cape Town Agreement is welcomed, n.d.). The then Minister of the Interior, Dr Malan had declined holding the Round Table Conference. The Indians, realising their acute position, saw it imperative to have a deputation from the then South African Indian Council (SAIC) to render a report of its labours to an emergency conference. Mrs Sarojini Naidu, the President of the then SAIC

led the deputation, procured the fullest support of every daily newspaper and sought the advice of responsible men and association societies in an effort to gain the ear of the public of India (ibid, n.d.). These efforts led the Indian Government in electing a committee to ascertain the actual position of South African Indians. This led to the Round Table Conference of the then Indian Government and then Union Government. Amongst the many concerns, was also matters regarding education (ibid, n.d.). The Union Government later pledged to uplift the Indian population. The First Agent of the Government of India, Srinivasa S Sastri arrived in June 1927 only to realise that the upliftment clause of the Agreement had not been implemented, owing to the hostility of the Europeans in Natal (The Aftermath of the Cape Town Agreement, n.d.). The efforts of SS Sastri led the then Natal Provincial Council to set up a commission of inquiry into Indian education in Natal. Pursuing the educational objective, SS Sastri initiated a project to build an Institute of higher education from Indian subscriptions. Consequently, Sastri College was opened in October 1929 by the Governor General (ibid, n.d.). This was a combined secondary school and teacher training college. Sastri College still exists today as a secondary school only. Following the commission's report, there was an increase in the amount of money spent on Indian education.

In August 1928 technical classes at St Aidan's Mission school in Durban had soon begun with a range of subjects, including commerce, typewriting and bookkeeping (DCA, 2008). With time, homecraft, catering services and secretarial classes were established. The focus was on commerce, typewriting and bookkeeping which were career oriented. The technical classes offered were held in the evenings and there were initially 230 students enrolled. By 1928 a forum was launched, which assisted the Indian race in gaining qualifications in technical and commercial skills (DCA, 2008). In 1930 the Indian Technical Education Committee was formed and this was the stepping stone of the ML Sultan TC that provided education to blacks (DCA, 2008). The facilities were increasingly developed together with rapidly growing classes. This led to the need for relocation to larger premises at Sastri College and the Hindu Tamil Institute. Diversification of courses attracted more and more students. By 1941 student numbers reached 600 and thus a consolidated campus was needed to co-ordinate teaching and classes. Financial reserves were not available but this

dream was realised because in 1941 Hajee Malukmahomed Lappa Sultan pledged 33 000£ for the construction of a TC (History of DUT, n.d.). This donation changed the face of the education sector of the then Natal province, which provided educational opportunities for the black people.

In 1946 (History of DUT, n.d.) the then education minister declared the ML Sultan TC an approved institution for Higher Education. Over the years the advantages of technical education was realised and so student numbers grew and facilities were extended to the north and south of Durban.

In 1956 (History of DUT, n.d.) ML Sultan TC was officially opened. It had developed to a three-storey building with 240 full time students and 4 760 part time students and nine branches in full operation. After the passing of the Indian Advanced Technical Education Act of 1969, the institution became a College of Advanced Technical Education (CATE) (ibid, n.d.). This meant that the college was on par with other colleges of South Africa that engaged in tertiary education.

By 1955 TCs were placed in the hands of the State and by 1957 the College was training apprentices and educating in the arts, humanities and technologies (DCA, 2008). Because of the technical nature of this training the practical hands-on component of instruction by far outweighed the theoretical component. Training would vary from a few months to three years and relevant certification was received after the successful completion of studies.

The major categories of students who enrolled at these colleges were: school-leavers who required career-oriented training; adults wanting to improve their qualifications and persons retraining for another vocation or training in handicraft, commercial, social and community-orientated courses. There were no specific academic requirements for entry into a TC (DCA, 2008).

The above described institutions are representative of typical raced based institutions throughout South Africa. Such segregation continued well into the late 1980's (just prior to

the years of the first SA democratic government in the early 1990s). Such race based institutions contributed to ensuring segregation of the various races of SA. Sub-section discussed later in this chapter provides more insight into the effects of such race based educational institutions.

#### **1.4 Administration and the changing status of TCs**

Between 1953 and 1965, the provinces shed “Bantu”, “Coloured” and “Indian” education and became responsible for “white” education only (DCA, 2008). Legislation of 1967 was a watershed for education in South Africa as it moved to provide exclusively for the needs of the White population group as colleges for blacks were administered separately. Association for the Development of Education in Africa (ADEA) (ADEA, 2000) stated that the Extension of University Education Act 45 of 1959 put an end to Black students attending White universities. There were separate tertiary institutions for Whites, Coloured, Blacks, and Asians. This Act led to the establishment of race based institutions. The HE was fragmented with inequitable distribution of resources to Historically Black and White institutions (HBI’s & HWI’s). HE was provided in separate universities and colleges after 1959 (ADEA, 2000). Eight Black universities were created in areas that were called the homelands; Coloureds and Indians were to have their own establishments in the then Cape and Natal respectively.

Maserumule (2005) stated that following the adoption of the Advanced Technical Education Act, 1967 (Act 40 of 1967), the designation of TC was changed to CATE. All students admitted in CATE were required to possess at least a senior certificate (DCA, 2008). Du Pre’ (2007) stated that in 1967 the government identified six TCs in SA for establishment and development as colleges of Advanced Technical Education (CATEs). This was as a result of the growing needs for highly skilled personnel in the commercial and industrial sectors. The Southern African Regional Universities Association (SARUA) (SARUA, n.d.) stated that the focus was on vocational/applied training and education. Instructional programmes were developed in terms of six broad vocational fields:

Engineering, Business, Arts, Agriculture, Utility Industries and Social Services (SARUA, n.d.).

The designation “colleges for advanced technical education” did not, however, amongst other reasons, get that much public approval and was subsequently, following government adoption of the Advanced Technical Education Amendment Act 43 of 1979 changed to technikon (Maserumule, 2005). Technikons were defined as career-focused institutions of higher learning whose curriculum was of experiential and vocational nature with study programmes designed in a manner aimed at producing graduates with the ability to readily put into practice their skills in the real world of work (ibid, 2005).

Maserumule (2005) explained that the concept “technikon” was a combination of “techni” (Greek word for “skill”) and “kon” (Afrikaans word for “could”). These two words formed the unique South African term to define career-focused institutions of higher learning whose curriculum was experiential and vocational in nature. Maserumule (2005) further states that this Act allowed these institutions to offer tertiary education in selected fields of study such as Engineering and Commerce. Their certificate and diploma programmes were practical, vocational, industry-focused and career-oriented at a tertiary level in order to supply the labour market with people who have particular skills, adequate technological and practical knowledge, and the necessary personal qualities to play a leading role in the working community. There were fifteen Technikons in South Africa (see Table 2).

|    | <b>NAME OF TECHNIKON</b>          | <b>AREA</b>    |
|----|-----------------------------------|----------------|
| 01 | <b>Boarder Technikon</b>          | East London    |
| 02 | <b>Cape Technikon</b>             | Cape Town      |
| 03 | <b>Eastern Cape Technikon</b>     | Butterworth    |
| 04 | <b>Free State Technikon</b>       | Bloemfontein   |
| 05 | <b>Mangosuthu Technikon</b>       | Jacobs         |
| 06 | <b>M.L. Sultan Technikon</b>      | Durban         |
| 07 | <b>Natal Technikon</b>            | Durban         |
| 08 | <b>Northern Gauteng Technikon</b> | Pretoria North |
| 09 | <b>North West Technikon</b>       | Rosslyn        |
| 10 | <b>Peninsula Technikon</b>        | Bellville      |
| 11 | <b>Port Elizabeth Technikon</b>   | Port Elizabeth |
| 12 | <b>Pretoria Technikon</b>         | Pretoria       |
| 13 | <b>Technikon South Africa</b>     | Florida        |
| 14 | <b>Vaal Triangle Technikon</b>    | Vanderbijlpark |
| 15 | <b>Witwatersrand Technikon</b>    | Doornfontein   |

Table 2: South African Technikons (n.d.)

It must be noted that it was in the 1970's that the beginning of changes to the University Act of 1959 emerged. Universities were slowly opening their doors to other race groups, where HWIs were allowing a maximum of 8% blacks (Moja & Hayward, 2005). So, it can be said that Technikons were the first Higher Education Institutions (HEIs) that saw multiracial intake of students, though to a small proportion until the late 1980s.

Du Pre (2007) states that initially Technikons mainly offered diploma and certificate courses. In 1981 the Technikons were granted permission to offer new programmes such as the four-year diplomas and post graduate diplomas as the Master's Diploma (eg. M.Dip.Tech: Public Administration). These new programmes were added to three-year National Diplomas. Thus, the academic ceiling of technikons was raised above diploma level. The introduction of these added programmes brought technikons on academic parity with universities without the use of the name "universities". Later, the Technikon Act 125 of 1993 was

passed granting technikons the power to confer degrees up to doctoral level for degrees in some programmes offered at technikons.

At this point in time (1993), the year before the first democratic elections in South Africa, there were negotiations taking place by the members of the African National Congress (ANC), its Alliance partners, the Congress of SA, Trade Union, the SA Communist party and the wider civil society (RDP, n.d.). One of the democratic policy making was the Reconstruction and Development Policy (RDP) for its socio-economic policy (ibid, n.d.). The new democratic government (ANC) chief aim in developing this policy and implementing the RDP was to address the immense socio-economic problem created in the apartheid era. This became the 1994 election manifesto and the framework for the socio-economic policy. One of the principles of the RDP was the creation and enhancement of existing services such as education. It was committed to developing an integrated system of education and training that provides equal opportunities to all irrespective of race, colour, sex, class, language, age, religion, geographical location and political or other opinion (Moja & Hayward, 2005).

Moja & Hayward (2005) stated that by 1997 it was realised that transformation had not impacted accordingly to HDIs as they were still viewed as old relics of the apartheid systems. In 2001, the then educational minister had therefore introduced the implementation of mergers.

As Jansen (2002) indicated that the merger was the single most important change amongst the many transformational attempts and therefore, this aspect will be described with more details later in this chapter. Maserumule (2005) stated that one of the items of the broader HE transformation agenda was the reduction of the number of technikons from fifteen to five. In October 2003, the then Minister of Education having approved the address and new name for the Cape Peninsula University of Technology announced that the status of technikons would be changed to Universities of Technologies (UoTs) as part of the reconfiguration of the entire HE (see Table 3). The fundamental reason for changing the designation of technikon and replacing it with UoT was necessitated by a need to conform

to the international trends and also to use concepts that are universally recognisable. South Africa was the only country in the world that, since 1979, used the concept “technikon” (Maserumule, 2005).

|   | <b>Technikons that merged <sup>2</sup> with other institutions</b>   | <b>Name of merged Institutions</b>      | <b>Type of University</b>             |
|---|--|---|---------------------------------------|
| 1 | <b>Technikon of Pretoria and Northern Gauteng</b>  | Tshwane University of Technology        | Uot                                   |
| 2 | The University of Port Elizabeth and <b>Port Elizabeth Technikon</b> (including the Port Elizabeth campus of Vista University)     | Nelson Mandela Metropolitan University  | Comprehensive University <sup>3</sup> |
| 3 | <b>Cape Technikon and Peninsula Technikon</b>  | Cape Peninsula University of Technology | UoT                                   |
| 4 | The Rand Afrikaans University and <b>Technikon Witwatersrand</b> (including the Soweto and East Rand campuses of Vista University) | University of Johannesburg              | Comprehensive University              |
| 5 | The University of Transkei, <b>Border Technikon and Eastern Cape Technikon</b>   | Eastern Cape University of Technology   | UoT                                   |
| 6 | <b>ML Sultan and Natal Technikon</b>   | Durban University of Technology         | UoT                                   |

Table 3: The Mergers of Technikons (Clemence, 2003)

The Oxford Advanced Learners’ Dictionary of Current English of 1982 defines a university as an “institution that teaches and examines students in many branches of advanced learning, awarding of degrees and providing facilities for academic research”. The word “technology” is about the application of knowledge to carry out practical tasks in the real world of work. When the word “university” is used with the qualification “technology” it

<sup>2</sup> Including merged partners such as Traditional Universities and/or their campus/es

<sup>3</sup> Includes Traditional Universities and Ex Technikons

implies a particular distinct focus with regard to the educational programmes. Therefore, the UoTs are distinct from the traditional universities in terms of their mission and focus of their educational programmes (Maserumule, 2005).

Technological universities focus on the study of technology from the viewpoint of various fields of study, rather than a particular field of study. It creates a learning organisation through engagement with business and industry. The curriculum is developed and defined by industry and professions. It is concerned primarily with the development of vocational education. The application of research in this sector is technology informed. The goals of such universities are directed towards economic advancement (du Pre', 2007). Traditional universities focus on academic disciplines and their research is mainly about expansion of knowledge through development of theories, which is called basic research (du Pre', 2007).

### **1.5 The Merger of Tertiary Institutions**

Moja & Hayward (2005) stated that the majority rule of South Africa began in 1994 and so did efforts towards converting policies and one of them being addressed and redressed is that of educational policy. This policy was developed to redress past educational inequalities. Thus, the policy framers focused on changes to the most offensive features of HE policies during the apartheid era, such as narrowing gaps in institutional inequalities, financial aid to students coming from disadvantage backgrounds, developing opportunities for disadvantaged students and staff, and so on. Since 1997 the student body was reflecting realities of the broader society.

There were marked changes from 1993 to 1999 regarding enrolments of black students. Details of these increases are shown in table 4 below (Moja & Hayward, 2005):

| INSTITUTIONS                                   | BLACK STUDENT ENROLMENT |
|--|-------------------------|
| HWI <sup>4</sup> – English-medium Universities | + 100%                  |
| HWI – Afrikaans-medium Universities            | + 120%                  |
| HWI – Technikons                               | + 49%                   |
| HBI <sup>5</sup> - Technikons                  | + 13%                   |

Table 5: Student Enrollment

Enrolments rose to 59% in the Higher Education. While increases of enrolment occurred as above, there was a 99% decrease in HBI's. The process of redressing of the Education system did not live up to expectations (Moja & Hayward, 2005). The redressing was supposed to have helped overcome the major inequalities that the apartheid education system created. Its goals were to improve access to higher education for Black South African students, assist the disadvantaged and increase the numbers of Black South African graduates. In 1999 the HBIs were still viewed as substandard apartheid relics and thus the then Education Minister, Kader Asmal observed:

The public believes that we have a crisis on our hands. Our people have a right to education that the state is not upholding. After five years of democratic reconstruction and development, the people are entitled to a better education service and they must have it (Moja & Hayward, 2005, p. 45).

Thus, in July 1999, in his call to action, the education minister announced that:

The shape and size of the HE system cannot be left to chance if we are to realise the vision of a rational, seamless higher education system.... The institutional landscape of higher education will be reviewed as a matter of urgency in collaboration with the Council on Higher Education. This landscape was largely dictated by the geo-political imagination of apartheid planners (Moja & Hayward, 2005, p. 46).

<sup>4</sup> Historically White Institution – Prior to transformation these tertiary institutions had a student population that was for the White race only.

<sup>5</sup> Historically Black Institution – Prior to transformation these tertiary institutions had a student population that was for the African race only.

In March 2001 the then Minister of Education released a National Plan for Higher Education, (NPHE) which discussed the reduction of Public HE Systems (Moja & Hayward, 2005). A national working group that was appointed by the Minister made the following recommendation in June 2001: “that there be a reduction from 36 to 21 of HEIs (universities and technikons) by way of mergers (ibid, 2005, p. 46).

The Higher Education Act No. 101 of 1997 (as amended by HE Amendment Act 55 of 1999, HE Amendment Act 54 of 2000 and HE Amendment Act 23 of 2001) allowed for mergers of public HEIs. Mergers started to take place as early as 2002; however, there was a rapidly growing poor HE performance, which will be described in the next chapter.

At this historical moment where many transformational policies, including the merger, had been implemented, it must be pointed out that despite these policies being implemented, HE performance regarding throughput rates has not been met with the kind of expectation as desired in the goals of the Education White Paper 3 of 1997 (Moja & Hayward, 2005). A preview of highlights on literature of similar problems experienced by international and national HEIs is discussed below and will be discussed in detail in the next chapter.

The phenomenon of a high drop out rate is evident at other universities, nationally and internationally, as well as at SUT. Cedrone (2008) reports that the Engineering Faculty of a University in Canada has dramatically high failure rates. This is not different from what obtains in US universities such as University of Manitoba. Marshall (2007) reports that nearly 50% of French University students fail to complete their first year successfully, and about 90 000 leave every year without a qualification. The Higher Education Statistics Agency (HESA) (2007) reports that every third British University student fails to qualify.

MacGregor (2007) reports a survey that traced the 2000-2002 cohort of students from seven different South African universities. Of 34 000 respondents, 20 000 had abandoned their studies and 14 000 had graduated. An average of 70% of the drop outs came from low-income families (73% of these were African students). In the same article MacGregor cites a report from the SA Department of Education that of the 120 000 students who had

enrolled at (HEIs) in 2005, some 36 000 students (36%) dropped out in the first year and a further 24 000 (20%) in the second and third years. Eventually only 22% of the remaining 60 000 students graduated.

SUT was one of the 22 merged HEIs optimistically created by the mergers of 2002, but the statistics reveal a progression of low throughput rates from 2000 to 2007 (SUT, 2008). The study (SUT, 2008) of first-entry OMTP students for 2003 showed that of 272 entrants only 74 graduated in 2005, 51 re-registered in 2006, and 147 had dropped out altogether, giving a drop out rate of 54.04% and a throughput rate of 27,21%. SUT (2008) shows that the high failure rate in the courses IA1 and IA2 are the main contributors to the low throughput rate for the OMTP (SUT, 2008). While other programmes at SUT showed similar trends of unacceptable low throughput rates in the cohort study, the OMTP had the lowest rate.

## **1.6 The Purpose of this study**

This study aims to investigate lecturers' and students' perceptions of the factors contributing to the high failure rate in the IA course at the merged SUT.

## **1.7 Significance of the study**

### ***1.7.1 Theoretical Significance***

This study is guided by the concepts postulated by Goldratt (1990). His five-step system will be used as a base to determine and limit the contributory factors of the high failure rate in an IA course. The contributions made from these findings in this research will further confirm Goldratt's theory of constraints.

### ***1.7.2 Practical Significance***

The findings of this study will contribute to the achievement of an important HE goal that is, throughput rates.

### ***1.7.3 Assumptions of the Study***

This study assumes that the data collected from the focussed groups will reflect the perceptions of the wider student population of the IA course at SUT.

## **1.8 The objectives of the research**

The following are two objectives of this study:

- To investigate lecturers' and students' perceptions of the factors contributing to the high failure rate in the IA course, and
- To investigate reasons for such factors contributing to the high failure rate.

## **1.9 Key research questions**

The study aimed to respond to the following two research questions:

- What are lecturers' and students' perceptions of the factors contributing to the high failure and drop out rate in the IA course?
- Why did these factors contribute to the continuous high failure rate?

## **1.10 Arrangement of the chapters in the thesis**

This thesis is arranged into five chapters, which are highlighted below:

Chapter one has discussed the problem of a high failure rate in an IA course at a merged UoT for the period 2003-2006. This followed a description of an eventful history that preceded this period. Thereafter, there was a preview of poor HE performance that was experienced both nationally and internationally.

In Chapter two, a review of the literature of tertiary performance in terms of throughput rates, drop out rates, pass rates and so on nationally and internationally is discussed. In this

chapter, the researcher makes reference to the throughput rates in South African HE and in particular at SUT where a high failure rate occurred in the IA course.

Chapter three consists of two sections:

Section A describes the following aspects: the research methodology, the research aim, the research questions, the population, the instrument used for data collection and the questions formulated during data collection, the research fields, the process of data analysis, the limitations of the research, the validity, reliability and trustworthines and ethical issues.

Section B discusses the various concepts and theories that provided the framework for this study. They are: Theory of Constraints (TOC) by Goldratt (1990), Perspectives on Assessments by MacKellar (2002), Gibson (1998), Willis (1997) and Quality Assurance by Smout (2002), and Centre for Promotions and Quality assurance (2010).

Chapter four discusses the findings of the research at SUT. The findings reveal four themes; namely, underprepared staff and students, compliance to the institutional policy and procedures, quality assurance and management measures and accessibility and utilisation of resources.

Chapter five discusses the analysis of findings, summary and recommendations based on the main findings of the four themes developed from the focused group interviews.

## **CHAPTER TWO: REVIEW OF RELATED LITERATURE**

### **2.1 Introduction**

Poor academic performances at HEIs is not a problem unique only to South Africa. There are international concerns about this growing problem at HEIs. While there appears to be growing failure rate in all disciplines, studies show that there is a stronger decline in undergraduate degrees that are of less than four years duration (Cedrone, 2008; MacGregor, 2007; Marshall, 2007). In this Chapter the researcher reviews both national and international literature on aspects relating to performance in HEIs. Aspects discussed in this chapter are experiences of poor HE performances, causes for such problematic performances and measures considered to address these problems.

### **2.2 HEI performance: the international experience**

The discussion that follows hereafter indicates a similar trend of HE performance across the various HEIs internationally. The high failure rates which may contribute to high drop out rates and/or low throughput rates has become a concern by the various HE stakeholders who have therefore conducted studies to establish the causes contributing to this problem. Some causes are common to several HEIs and others are not. Basically some causes are linked to students and their background while other causes are linked to the HEIs and their resources. The following are reports on some popular and leading HEIs.

In Canada some leading HEIs (such as University of Waterloo and Manitoba) are experiencing very high failure rates. Cedrone (2008, p. 2) reported the following: “The University of Waterloo in Canada that boasted its flagship faculty, that is Engineering, has registered increased failure rates dramatically. The problem began around 2004/5 when intakes of students were doubled”. This problem asserted itself strongly in 2006 and 2007 to other faculties as well. A taskforce was formed to investigate this problem. They reported that a complex solution would be needed to address this complex issue (ibid, 2008). It is believed that students are as academically strong as in the past but the current

students have an attitude problem. The Chairperson of this taskforce advised that the first year should be challenging enough to sift out the students who were not cut-out for the programme. Another academic of the same university had reported that students, high schools and the university were responsible for the poor student performance (ibid, 2008). He observed that current students have poor attendance and attitudes and that the faculty's course lectures needed quality teaching and high school formats are misleading. He intends to improve the pass rates by changing the examination and lecture formats (ibid, 2008).

Similar trends of failure exists at other nearby universities such as University of Manitoba. The Ottawa Citizens (2008) cited that 25% of high school students with A-averages in high school were expected to drop out in first year.

The French HE and Research Minister Valerie Pecresse has also become very concerned about the high failure rate of first year students and believes that incorrect career choices are the main cause to this problem. Marshall (2007, p. 1) reported that "Nearly 50% of French University students fail to complete their first year of studies successfully and about 90 000 students leave every year without a qualification". The French Higher Education and Research Minister, Valerie Pecresse has announced her plans to cut failure rate and has tried to implement strategies necessary for 2008 whereby it is hoped that pass rates at bachelor's degree level be improved to 50%". She believes that students fail because of incorrect career choice. She hopes to have the following measures in place for the future:

- To have pre-enrolment interviews and assessments for school-leavers to choose appropriate university courses.
- Rearrange the courses so that the first year provides more general culture and practical training such as languages, methodology and computer studies. Courses leading to specialisation to be moved out of the first year.
- To increase the number of teaching hours for students.

Declining student performance is also being experienced at some HEIs in the UK for the present decade. Many HEIs experience high drop out rates. HESA (2007) reported that one in three British university students dropout or fail to qualify. This body's latest projection revealed that about a third of the students under 21 drop out. These dropout rates vary widely among the nation's 168 HEIs. A third are unlikely to qualify at Bolton University and only 4% are expected to fail to qualify at Bristol University. The number awarded other undergraduate qualifications (excluding foundation degrees) was 117,310 in 2005/06, a decrease of 9% from 2004/05 (HESA, 2007). These data shows that there is a trend towards declining performance in this decade at certain Universities in the United Kingdom.

High dropout rates at HEIs throughout Germany have raised concern by stakeholders such as Stifterverband (An Association of donors and foundations promoting Science and Humanities since 1920). These high drop out rates led to low throughput rates and a huge wastage of public funds a year.

Gardner (2007) reported that the Stifterverband has proposed a set of measures to be undertaken at Government level. This indicates the level of concern this problem has raised. Currently government funding is based on study places and not on rates. There is a €8 billion a year wastage on students who do not complete their studies. These figures of dropouts are extremely high when compared on an international scale. Gardner (2007) said that reports from Stifterverband stated that every year 30% of students leave university without any degree. Stifterverband is prepared to award HEIs when an honest effort to support students successful studying without lowering examination standards is achieved. Gardner (2007, p. 1) reports that "first year students do not know what they have to reckon with in the semesters ahead and what abilities are required for a course". As in France, there is initiative towards establishing the aptitude of student candidates for a subject.

### 2.3 HEI performance: the national experience – South Africa

Like international HEIs the SA HEIs is also experiencing problems regarding academic performance of students. High failure rate coupled with high dropout rates are leading to low throughput rates.

A study was conducted by Nair, Reddy and Ramaila (2004) on the high failure rate at South African HEIs. Part of the study was done for the years 2002-2003 particularly on throughput rates of HE students for the White and African population groups. The DoE benchmark for throughput rates is 22% (SUT, 2008). The African students have scored well below the minimum requirement for throughput rates while the White students have scored well above the minimum requirement. See table 4.

| POPULATION GROUP | THROUGHPUT RATE (%) |
|------------------|---------------------|
| African students | 8                   |
| White students   | 25                  |

Table 4: Throughput rate (%) for populations groups at HEIs nationwide (Nair, et al, 2004)

The study also showed that African students have had a very poor throughput rate in key subject areas. See table 5 below.

| PROGRAMMES       | THROUGHPUT RATE (%) |
|------------------|---------------------|
| Engineering      | 3                   |
| Medicine         | 9                   |
| Natural Sciences | 12                  |

Table 5: Throughput rate (%) for key subject areas for African students at HEIs nationwide: (Nair et al, 2004)

In the same cohort study it was found that first-time entry students in 2004 scored better standard grade symbols in Mathematics and Physical Science than in 2003 but not the case with HG symbols. Also The English second language and first language had slightly better

HG symbols in 2004 than in 2003. This translated as an attempt on the part of the DoE to make matric results look better (Nair et al, 2004).

On analysis of the findings the following was observed by Nair et al, (2004); that high failure rates among first year students in HEIs are due to underprepared learners entering the system, there is wastage of educational funds due to dysfunctional schools, there was an unacceptable large number and proportion of students that dropped out of the system each year, as a result HEIs suffer heavy losses with respect on subsidy income which is dependent on throughput rates and, also many students who failed had used bursaries for their studies.

Taylor & Harris (2002) conducted a study on the efficiency of ten prominent South African universities. The study was for the period 1994 to 1997. They used the analytical review technique. On the efficiency test the ex-Rand Afrikaans university) (HAI) performed well in terms of graduates per staff member, and research unit per staff member but performed poorly on the graduation rates (which was 230 graduating students per 1 000 students). This translated into poor throughput rates. The ex-Durban University of Westville (HDI) performed poorly on the graduation score per staff member and research unit per staff member and even worse on the graduation rate (which was 219 students graduating per 1 000 students). The findings of the study also revealed root causes for student failure and dropout are multi-fold. They were social and academic outputs from an inadequately equipped secondary school. The study also revealed that diploma programmes are traditionally attracting weaker students than degree programmes. There were learners who despite initiatives and support mechanisms proved not yet ready to continue HE.

Causes to these problems include similar factors as their international counterpart as well as factors peculiar to SA HEIs. The literature reviewed hereafter highlights the following; transformational experiences prior to the period being researched (2006-2008), possible causes (such as; financial strains, social strains, excessive performativity, mergers and continued traditional paradigms) that contributed to the current state of low HE performance and some measures considered to address the poor HE performance.

Since democracy was achieved in SA 1994 there were efforts to converting HE policies recommended by the National Commission on Higher Education such as the massification of the system, planning for growth, improvement of throughput rates, the increasing of postgraduate enrolments and so on (Moja & Hayward, 2005).

As indicated in Chapter One, that transformation with regard to the demographics of student profiles in HEIs had started materialising in several universities. However, the expected high levels of efficiency in the DoE policies in regard to HEI's output of undergraduate to postgraduate levels had not been realised by the end of the 1990s. The following sub-sections has discussions on the contributory factors towards the National HE poor performance.

#### **2.4 Financial strains in some HEIs**

The previous chapter has discussed the student profile of the South African system in 1994 which was characterised by a number of imbalances. Besides these imbalances mentioned, there were other major problems in the HE. One of the legacies of apartheid was the downgrading of the vast majority of South Africans to the role of low-skilled manual workers. This has led to the majority of South Africa not being equipped with the skills it needs for economic and employment growth and social development. South Africa faces specific shortages of professional managers and technicians and craft and skilled workers (du Pré, n.d.) Youth unemployment is aggravated by the inadequate provision of technical and vocational education and training opportunities. Just one per cent of secondary school students are enrolled in technical/vocational institutions. Therefore, HEIs have to play a major role in the reconstruction of the social, cultural and economic fabric of SA society (ibid, n.d).

By the end of 2000 the HEIs were experiencing severe financial constraints. One of the factors contributing to these strains were the continued South African Post Secondary Education (SAPSE) funding framework from the apartheid era, which remained in place throughout the 1990s and even by the beginning of 2001, the revised framework was not

yet implemented (Badat, 2007). The SAPSE funding framework had been detrimental to the HBIs. The 1997 Education White Paper 3 therefore, emphasised that funds for institutional redress would flow to these institutions under the provisions of a new funding framework. HBIs would receive funds for individual redress in the form of student financial aid payments.

The sum of R100 million per year was allocated for the ministry of education for redress for 1999-2001 (Moja & Hayward, 2005). However, most of the money was used by the department to pay for debts of HBIs and for audits of six HDIs. The commitment for institutional redress during this period shifted from HDIs to focusing on non-redress expenditure (ibid, 2005).

Badat (2007) stated HBIs believed that they would receive the major share of financial aid funds as they were registering the majority of disadvantaged students in South Africa, and that they would consequently be relieved of the almost impossible task of collecting substantial amounts in fees from impoverished students.

Unfortunately the HBIs were kept waiting for government to deliver on the White Paper commitment to institutional and individual redress funds. This strategy that did not materialise resulted in the loss of many thousands of actual and potential students to those Historically White Institutions (HWIs) which had adopted aggressive expansion strategies (Badat, 2007).

The Committee of Technikon Principals (CTP) decided to set up their own redress programme as a result of being frustrated by the failure of the government to provide funding. So, efforts were launched through the CPT for the transfer of funds from Historically Advantaged Technikons to Historically Disadvantaged Technikons. An amount of R20,847,000 was transferred between the years 1993-1998 (Moja & Hayward, 2005). This allowed Historically Disadvantaged Technikons to make improvements. Unfortunately this could not happen with the Committee of University Principals (CUP) as there were conflicts between the HWIs and HBIs (ibid, 2005).

By the end of 2000 the HBIs were experiencing severe financial strains as inadequate government funding to financially and academically support students was one likely reason for the very high failure rate and drop outs (Moja & Hayward, 2007). Besides severe funding strains for many SA students, other reasons for poor HE performance arising especially from high failure rates, were social strains:

## **2.5 Social Strains**

As discussed in chapter one, since transformations in the HE sector took place, social strains experienced by students have been on the increase. This could have contributed to the low student academic achievement. Many students who have enrolled from the majority sector of the SA population were coming from socially disadvantaged backgrounds such as low-income, less educated families, poorly resourced secondary schooling, as well as first generation HE students in the family. Macgregor (2007, p. 1) reported that “in a survey that traced a 2000-02 cohort of students from seven different universities in South Africa and from the 34,000 respondents, 20,000 had abandoned their studies and 14,000 had graduated. An average of 70% of dropouts came from low-income families (73% of this were African students) and this proportion rose to 82% at the HDU of Fort Hare”. Macgregor (2007) stated that some causes for the high failure rate in South Africa are poor career choices, domestic problems, pregnancy and excessive entertainment. Macgregor also cited in this article that financial difficulties among the country’s large pool of poor African students are largely to blame as well as the fact that many black students are first generation students from low-income and less educated families (ibid, 2007).

Taylor and Harris (2002) conducted research on ten prominent universities and found that the root causes for student failure and dropout rates are multi fold such as; social, academic and inadequately equipped school systems. These three aspects also appear to be the common factors contributing towards declining tertiary performance in most universities across the world.

Some of the social aspects from the above information include the following: student's attitudes as cited by Cedrone (2008) that students are not used to thinking about the material and that students are not doing the readings or the completion of assignments as in the past. McGregor (2007) stated that pregnancies are another problem that is experienced by many students in South Africa that hinders career progress. Then, there is the lack of financial and educational capacity in the home. Draper (2008) found in his study that non-traditional students who are from low economic category families with lower pre-higher education qualifications and parents who did not do higher education have special needs when studying at universities.

Taylor and Harris (2002) also indicated that the inadequately equipped school systems are a contributor for poor performance in HEIs. Taylor and Harris listed several points in this area as problematic such as: lack of libraries at schools, lack of laboratories for practicals in Science, lack of good teachers, lack of motivation from teachers, lack of group study or group work, lack of educated family members to help and lack of financial support for books (ibid, 2002).

## **2.6 Excessive performativity**

During the 1990s major transformations happened in the country to redress past imbalances that marginalised the majority of the society (Moja & Hayward, 2005). With these transformations was the need to transform HE as well. For transformation numerous policies were issued by the DoE for HEIs to implement. For example, National Educational Policy Act No. 27 of 1996, HE Amendment Act 55 of 1999, HE Amendment Act 54 of 2000, HE Amendment Act 23 of 2000, Constitution of the Republic of South African Act 108 of 1996, HE Act 101 of 1977 and so on. In turn the HEIs strived on implementing these numerous policies within given timeframes in order to achieve performance indicators. Achievement of these performances indicated the potential for educational transformation. During this eventful period focus on student performance such as pass rates, throughput rates and so on may not have received the amount of attention it required.

In an article on performativity in HE transformation in South Africa, Van Wyk (2005) explored the constitutive meanings of HE transformation, such as equity and redress, critical enquiry, communicative praxis on three South African universities in the Western Cape (namely, University of Cape Town, Stellenbosch and the University of Western Cape). He observed that these universities have strived to achieve performance indicators in order to be on track with their institutional plans (ibid, 2005).

Van Wyk (2005) argues that achievement of performance indicators at these universities has the potential to produce educational transformation, however if there are lesser emphasis on these performance indicators, there is possibility of deeper educational transformation. His contention is that “performativity” merely focused on the exclusive achievement of indicators such as quality, efficiency and standards of excellence, and accountability. He believes that that such transformation at these three universities will be thin unless ‘performativity’ allows for imagination and creativity (ibid, 2005).

Van Wyk (2005) argues that pressure has been placed on institutions to comply with national policy. Firstly, there were tight timeframes for the first planning phase to allow for stakeholder participation and to meet the requirements of the formal decision-making process within institutions. This led to institutions providing optimistic projections. Secondly, three year rolling plans were linked to funding and funding is crucial for the survival of institutions. As a result of these two factors, van Wyk (2005) believes that these institutions have made a mistake as they wanted to comply with policy requirements. Thus, he says that institutions were guilty of excessive performativity exercises and this was encouraged by the South African National Educational Policies.

So, “the concerns about equity, accessibility, autonomy or the contribution of HE to social transformation have been overshadowed by concerns about excellence, efficiency, expenditures and rates of return” (van Wyk, 2005, p. 5). In other words performativity has overtaken the quest for equity, which is so vital to the transformation of HE in South Africa.

Van Wyk (2005) states that performativity focuses on the achievement of performance indicators. The numerous policy documents that were produced since 1994, such as producing three-year rolling plans, employment equity plans, strategic plans (all these with data, projections, and so on) together with the issue of mergers placed many demands on institutions. To add to these challenges, there has been decreasing student numbers, which meant decreasing state subsidies.

For transformation to take place it required more than just achieving performance indicators. While HEIs were engrossed with achieving performance indicators for the SA HE transformation, needs of the changing and diverse student population may have been overlooked (van Wyk, 2005). Pandor (2006) mentioned that it is insufficient to just have increased intake of a population of the majority sector without also creating circumstances conducive to them.

## **2.7 Mergers in the higher education sector**

Despite attempts for educational transformation by HEIs in the late 1990s it was found that the HBIs were still viewed as substandard relics and so the then Education Minister in 2001 recommended the reduction of HEIs by way of mergers (Moja & Hayward, 2005). With mergers came other strains that may have impacted on student performances. Some outcomes of mergers by the various HEIs are discussed below:

Reddy (2007) conducted a study of staff perceptions of the merger between two South African regional technikons as staff was considered to be the cornerstone of educational institutions and they have an important role to play for the institutional existence. In his survey he investigated various employee issues such as communication and participation, motivation, job satisfaction and loyalty as well as staff's perception on the impact of the merger on quality and standards of education. The study concluded that there was poor communication, a lack of participative decision making, very little staff involvement, little extrinsic motivation, which led to job dissatisfaction and decreasing employee loyalty (ibid, 2007).

Mapasela (2002) also found a similar attitude from her study of academics at the University of Free State (UFS). Mapasela states that the historically White Afrikaans Universities had in the past served a cohort of White learners only through a medium of one language only. Currently such types of universities are having mass enrolments of students from disadvantaged groups and this has had implications on academic staff satisfaction where academics were found to be burdened by increased enrolments and the offering of parallel medium of instructions (ibid, 2002)). The findings in this study revealed that satisfaction of academics from UFS suffered due to this increased student access and redress.

From the above discussion on the outcomes of mergers, it is observed that the mergers were initially not received very well and it did impact negatively on staff and students as highlighted in the previous discussion.

## **2.8 Continued traditional paradigms**

HEI performance has been a concern by the DoE for the past many years. The goals of the Education White Paper 3 of 1997 with regard to its expected improvement even when policies were implemented was not being realised in the setting and continuance of the traditional paradigm.

In her address at the HELTASA Conference, Pandor (2006), the Minister of Education stated that Professor Ian Scott of UCT researched into student patterns in HE sector, which traced first time entering students intake of the year 2000 into the HE for the period of four years. Some of the findings revealed were:

- low completion rates.
- Low levels of efficiency. Only 20% of the students in the 2000 cohort graduated in the minimum time. Even after four years of study under one-third of the intake had graduated. Success rates varied greatly between Black and White students (Scott by Pandor, 2006).

Scott (cited Pandor, 2006) said that a range of factors that influence student performance exist. He said possible causes for poor student performance could be attributed to the level of preparedness of school leavers and financial aid. But, he believes that there are other factors that are within the control of the HE that can determine success or failure. He went on to say that traditional structures and provisions for the majority of students leads to the need for innovations (ibid, 2006).

Pandor's (2006) speech may well be associated with the thinking of Schuyler (1997, p. 1) who says:

Advocates of change see the present structures as inadequate to meet changes in work, knowledge, and citizenship while serving a greater number of students with diverse background and educational objectives. In the traditional paradigm, many students are 'weeded out' of higher education, and those who do graduate many are lacking important skills.

Another American college president, has the following to say about American HEIs:

The college student of the early 1900s do not have a lot in common with today's students, yet classroom practices are probably not much different ... Every year the student population is becoming more diverse bringing into question whether traditional instructional methods still work – if they ever really did. (Boggs, 1998, p. 1).

Boggs (1998) says with time HEIs have increased the diversity of the student body and gives the following few examples that has led to such diversity:

There are many student's home language is not English, thus creating unfavourable HE environments for such students. Some students have part time or full time jobs and arrive tired to lectures. Many have family responsibilities and physical disabilities. Many

students are not academically prepared to succeed at universities. It is not only that the student population has changed, there are social and political pressures and so on.

Bogg (1998) says that America's most respected leaders have urged colleges to improve institutional effectiveness, to institute Total Quality Management, a more customer-responsible institution. However, Bogg believe that such ways of improvement are not likely to have a lasting impact unless institutions shift to a paradigm in which colleges and universities accept responsibility for student learning. He says that these institutions need to be re-defined as learning institutions and therefore institutional leaders need not only be concerned about access to diverse students but also about their success. Bogg (1998) says "Rather than focusing on the quality of entering students, these institutions should be concerned about the quality of exiting students and how much those students have learned".

It is very possible that the paradigm that defined SA HE no longer fits as so much has changed since the inception of HEIs in South Africa. To mention some of the changes to HEIs are the wide ranging student diversity, student massification, technological advancements and so on. Schuyler (1997) says that consideration must be given for paradigm shifts when difficulties begin to appear in the functioning of the existing paradigm. He also said that there are increasingly considerations for outcomes and to refocus institutional missions onto student learning.

When institutions move towards a learner paradigm, the system among other considerations, would take into account the present problematic conditions being experienced by the diverse learners as discussed above such as financial strains, and social strains and develop the learning HE environment accordingly. Thus, it appears from the above nationally and internationally that the HE performance are challenged by experiences in the areas of finance, social, mergers and continued traditional paradigms.

## **2.9 Measures considered to address the poor HE performance**

Poor HE performance nationally and internationally has been met with much concern. Stakeholders of such HEIs have conducted studies searching for contributory factors of the poor student performance. Results from these studies informed them of the kind of measures that can hopefully address such problems as follows:

HEIs and educational ministers have attempted to address some of these problems as indicated. The Associate Dean, Professor Loucks of the University of Waterloo indicated that amongst other strategies, promotion rules are being considered (Cedrone 2008). Valerie Pecresse, the French Higher Education Minister proposes to help school leavers choose their career appropriately, move specialised courses to later years than the first year and to increase the number of teaching hours (Marshall, 2007). Meyer-Guckel of Stifterverband in Germany indicated that institutions will be rewarded for efforts to support students' successful studying without lowering exam standards and is also encouraging national qualifications initiative to boost teaching (Gardner, 2007). Locally, some South African HEIs, have merged for the sharing of resources and improving of quality of education (Moja & Hayward, 2005). Pandor (2006) stated at the HELTASA conference (2006) that there is renewed attention in the use of postgraduate students in tutoring and mentoring undergraduates. MacGregor (2007) in the University World News reported that the distance University of South Africa (UNISA) would be spending R500m to establish a comprehensive network of tutors and academic support personnel across the country, in an effort to decrease drop-out and failure rates.

Hay and Marais (2004) had assessed an access programme that was already established for ten years. It was noted that this programme when conducted in an innovative way has a place in HE. The programme is able to meet the HE obligations of national goals in terms of access and increased pass rates. It is capable of dealing with ill prepared school leavers to meet HE requirements.

## **2.10 Conclusion**

Having reviewed the above national and international literature regarding declining performance at higher educational institutions, its statistics, reasons for high failure rates and strategies for improvements, the researcher has identified some information and ideas that relates to her study and hope to build on this platform.

In the following chapter, an analysis of the research methods employed in this study will be discussed as well as the theoretical framework that guided this study.

## **CHAPTER THREE: RESEARCH METHODOLOGY AND THEORETICAL FRAMEWORK**

### **3.1 Introduction**

This chapter comprises of two sections. Section A discusses the research methodology which describes the method employed to gain insight of the problem. Section B describes the various theories that provide a framework for the study.

### **SECTION A**

### **3.2 Research Methodology**

In this section an analysis of the research methods employed in this study will now be discussed with specific reference to the research aim, research questions, research design, data collection methods, facilitation and technical support, the research site, the process of data analysis, limitations, validity, reliability and trustworthiness as well as ethical issues.

#### **3.2.1 *Research Aim***

The primary aim of the research was to investigate the lecturers' and students' perceptions of contributory factors towards the high failure rate in the IA course at SUT. In order to achieve this aim, the researcher had to:

- collect data from the students and lecturers of the IA course.
- examine perspectives of the students' and lecturers' experiences of the IA course.
- analyse the perspectives of perceptions by students and lecturers.

### **3.2.2 *Research Questions***

The study attempted to answer the following two research questions:

- What are lecturers' and students' perceptions of the factors contributing to the high failure and dropout rate in the IA course at SUT?
- Why did these factors contribute to the high failure rate?

### **3.2.3 *Research design and data collection methods***

The qualitative approach was adopted as the study required 'understanding and indepth inquiry (Henning, 2005). As the researcher has limited knowledge of the factors contributing to the poor performance in the IA course, the focused group interview was the appropriate choice.

The facilitator asked the group for their experience on the subject of the IA course and this initiated much of the discussions/interactions that followed thereafter. Although most of the respondents had attended a focused group for the first time they were very interested and were soon participating. The respondents appeared comfortable at the knowledge of being with others with similar experience. There were data that may not have been extracted had it not been for one respondent who regularly did not fear to 'break the ice' of certain sensitive information (Casey & Krueger, 2000). This provided a mutual support by other respondents who also expressed their feelings that were common to their group.

The facilitator had the discussion progressing with questions of general in nature. Her display of enthusiasm was an added advantage as it served as encouragement and motivation for a group discussion session (Casey & Krueger, 2000).

Gathering of such a quantity of data in a short space of time is another advantage of focused group sessions (Morgan, 1988). Respondents reaction, insight, opinions and attitudes were well elicited (ibid,1988).

The researcher used the focused groups as a method of collecting data. The participants generated data by way of discussion, questions and comments on one another's experiences and points of view, which enabled the participants to explore and clarify their own views, and permitted the researcher to access what might well not be available in a one-on-one interview. There were two focused groups, one for students and the other one for lecturers. Recruitment was based on non-purposive sampling.

**Focused Group One:** The sample were randomly recruited from a list comprising of 100 students. The researcher recruited 20 students for the Focused Group One. Only eight students attended the focused group session. Focused Group One comprised of four males and four female participants and thus contributed to a good balance for the gender composition. There were seven Africans and one Indian participant. In this focused group, the performance of students in the IA course was as follows:

Six participants had failed the IA course and were currently repeating the course. The other two participants had not failed the IA 1 or IA 2 course and were in the third year of study.

This study was conducted after the year end examinations. The participants of Focused Group One comprised of participants that were students. These participants were generally local residents of the Durban suburb. Most students from outside this area had left for their home town. This may have impacted on the study by having lesser contribution of data from students that were non-residents of Durban. However, whilst many students had left, there were some students who remained for supplementary/special examinations.

For Focused Group Two, there were six lecturers who attended the focused group who participated in the research. There were three other lecturers, one was the facilitator, another was taking field notes, and the third was scribing. The researcher is a lecturer of the IA course. Therefore, the researcher was not present at both focused groups and therefore the facilitator (another lecturer) was appointed to conduct the focused groups. This department has only one male lecturer and the gender balance was therefore, compromised. There was an equal number of African and Indian participants. These lecturers have experiences of attaining high failure rates of their students in the IA course.

The researcher utilised the services of a lecturer in the same department to serve as the facilitator. This facilitator has had previous experience in interviewing groups in another department. Her bilingualism in both English and isiZulu was of value as Focused Group One consisted mainly of isiZulu-speaking students. This added comfort for eliciting responses from students whose language of choice is not English. The facilitator has knowledge of the IA course, in which she currently lectures.

A technician was asked to set up the video recorder and remained in the venue during the sessions to ensure that the device is working. A lecturer who did not participate in the research captured the participants' responses on a flipchart as a back up. Both the flipchart and video recorder were in full view of everyone.

### **3.3 The research field**

The research was conducted in the Office Management and Technology Department (OMTD) at the merged SUT. This merged institution comprised of two former technikons, where one was historically disadvantaged and the other being historically advantaged. Each institution had amongst other departments, the OMTD. Both departments also offered the OMTP with the IA course. When the merger happened (2002) at institutional level, some departments of similar programmes also merged. Both institutions had a department offering the OMTP and thus they merged. The staff of both institutions was combined in 2003. There were seven staff members from the HWI and comprised of five White staff and two Indian staff. There were five staff members from the HDI and comprised of three Africans and two Indians. Three lecturers were recruited. The resources of the OMTP of the Historically Advantaged Institution (HAI) had been moved to the physical site of the HDI for the merger. The movement was not too far as they were only a street away. The HAI adopted the continuous assessment policy while the disadvantaged institution had the traditional assessment policy, which comprised of tests and final examinations.

The focused groups were conducted at SUT in Durban where the IA course is offered. It was held in a seminar room where there was a circular seating arrangement specifically

done for this group discussion. Electrical points were conveniently placed for the setup of the PA system. This seminar room was equipped with a white vitreous board and a flipchart holder. This venue was on the third floor that is away from lecture venues and other departments. This meant that there was very little disturbance or noise. The recorders were set up in full view of all present (Babie, 2007). The facilitator led the interview with appropriate prompting. Respondents were very enthusiastic to engage with the interview. Recordings were made on recorders and on charts. Two sessions of recording was done. The first recording for students was approximately four hours and the second was about two and half hours.

### **3.4 Process of data analysis**

The researcher has chosen the focused group interview for data collection. As the study was to elicit perceptions of participants, this type of instrument was most appropriate. For the researcher to elicit perceptions from participants and exploration into participants reactions, insight, opinions and attitudes needed to be done. Therefore, the focused group interview was chosen. The facilitator was with the researcher when the focused group data was analysed as such processes require verifiable procedures (Casey & Krueger, 2000). The focused group was recorded and videotaped. The researcher listened to each recording of the session and edited the flipchart notations when necessary (ibid, 2000). An assistant processed/transcribed all the data into a Microsoft Word document. Respondents were at this stage contacted to verify the data. During open-coding a basic analysis was done that led to the creation of 28 categories. Further regrouping occurred for further analysis. During this process the categories were closely examined for similarities and differences, which led to further regrouping. Four major categories emerged as themes (ibid, 2000). The themes were underprepared staff and students, compliance to the institutional assessment policy and procedures, quality assurance and management measures and accessibility and utilisation of resources. The themes represented the constraints that were regarded as the contributory factors for the poor performance in the IA course. In all, the data has been very informative. The volume of data was more than expected.

### **3.5 Limitations**

The researcher was aware of her direct involvement with the field of study and the possibility of being subjective. She had at the time of the focused group 22 years experience in the IA course and may have had preconceived notions of the factors contributing to the high failure rate. Therefore, she did not facilitate the focused group (Morgan, 1988). Qualitative research is openly subjective. The researcher was aware of her being potentially biased and therefore tried to be objective. Therefore, the researcher verified the transcripts with respondents to limit possible subjectivity. The focused group interview is a qualitative study and like all such studies, the results cannot be generalised.

### **3.6 Delimitations**

Dusick (2001, p. 1) states that “delimitations are those characteristics selected by the researcher to define the boundaries of the study”. Therefore, the researcher makes a few conscious exclusionary and inclusionary decisions regarding the sample. The students in the focused group participants is delimited to residents of the Durban area and a few non-Durban residents who have remained in Durban for supplementary or special examinations. The lecturers in the focused group participants is delimited to currently employed lecturers in the OMTP department at SUT. The lecturers who lecture to the OMTP students for servicing subjects have been excluded from the study. The study is delimited to participants experience in the IA course only.

### **3.7 Validity, Reliability and Trustworthiness**

The data was collected from groups, where one participant is open to correction, as against questionnaires on paper (Seliger & Shohamy, 1989). In other words, data was extracted in the presence of other respondents in the focused group and such data, therefore, was verified, while data from questionnaires are extracted individually and, therefore, are not open to correction by other respondents. After the data had been collected, the draft reports were sent to respondents for member checks. Triangulation was done by having two

focused groups (students and staff) of participants who have experienced the course either through learning or teaching. Transcripts from both focused groups were analysed together. The researcher has made her findings in the report as truthfully as possible. Questions were developed with objectives as well as from theories of Goldratt (1990) and Boggs (1998). The researcher ensured that during recruitment, the samples selected were as proposed and liaised with the facilitator in an attempt to ensure congruence among question formulation during the focused groups (a linkage to the key research questions) (Seliger & Shohamy, 1989).

### **3.8 Ethical issues**

Data collection was done only after the researcher received the ethical clearance approval from the University Ethics Committee (see Appendix A). Before conducting focused group interviews, the researcher, obtained signed, informed consent forms (Cressell, 1994) from the participants (see Appendix D). Participants were informed in a letter that their consent may be withdrawn at any time during the focused group discussions should they wish to do so (See Appendix C) (ibid, 1994). In addition, the participants were informed and permission was obtained for the use of video tape during the focused group sessions. All persons recruited for facilitation and technical support were 'contractually bound not to disclose information of any kind' (Henning, 2005, p. 4). Other procedures (Cressell, 1994) for gaining entry into the research field involved gaining the permission of the Head of the Department of OMT at SUT for permission to collect data from lecturers and students (See Appendix E). In the analysis process, the researcher did protect the anonymity of individuals and roles in the project by using aliases or pseudonyms for individuals and places (ibid, 1994). The data collected was stored in a locked cupboard in the researcher's office. This data will be erased and the tapes will be disposed of with the use of a shredder after five years (ibid, 1994).

In this section the research aim, research questions, research design, data collection methods, facilitation and technical support, the research site, the process of data analysis, limitations, validity, reliability and trustworthiness as well as ethical issues were discussed.

The discussion showed that this research methodology used, the focused group interviews was successful in gaining data from respondents. The facilitator had successfully elicited responses by creating and leading appropriate interaction amongst all interviewees. The research site was suitable for facilitating the interview. The recordings were clear as there were minimum disturbances. The scribing and recordings had been appropriately captured for the researcher to continue with the processing of the data.

The next section of this chapter is a description of the theoretical framework that framed this study.

## **SECTION B**

### **3.8 Theoretical and Conceptual Framework**

The studies using Goldratt's theory on Constraints (Goldratt, 1990) confirm that problems in organisations must be observed and elements causing hindrances for throughput rates must be discussed and possibly eliminated. This subsection reports on: the views of Goldratt's Theory of Constraints; Perspectives on assessments by MacKellar (2002) and Gibson (1986) and information on Quality Assurance by Smout (2002) and Centre for Promotions and Quality Assurance (2010) at HEIs.

#### **3.8.1 *Goldratt's Theory of Constraints***

Basically the theory of constraints by Goldratt (1990) postulates that a researcher recognises a system's goal and its constraints. Goldratt's theory is on general systems or organisations and how to improve their throughput rates by identifying constraints and after observation of these, the need to change existing policies and rules in order to manage new constraints. Goldratt (1990, p. 5) describes constraints as "anything that limits a system from achieving higher performance, as against its goal". He says "in our reality any system has very few constraints and at the same time any system in reality must have at least one constraint". Goldratt (1990, p. 4-6) states that HE, like any other organisation, was created for the purpose and that 'every action taken by any organ – any part of the organisation – should be judged by its impact on the overall purpose'. Therefore, before one can deal with the improvement of any section of a system, one must first define the system's goal (ibid, 1990).

The goal in this study is to identify the factors contributing to the declining performance (low throughput rate) of SUT. The subsystem 'throughput rate' in this study is defined as the tracked record of a 'cohort of students registering for the first time at a tertiary institution and completing in minimum time' (SUT, 2004, p. 2). Goldratt (1990) also says

that the throughput of any system is limited by one constraint, and to increase the throughput one should identify and eliminate the constraint or bottleneck.

The first of the five steps in Goldratt's system is the identification of the important constraints and their impact on the organisation's goal and give priority accordingly. The second step is deciding how to exploit the system's constraints. This is done by first deciding on how to manage the constraints and then deciding on how to manage the huge quantity of the system's resources. His third step is to subordinate everything else to the decisions made in step two. Here, he advocates that priority be given to managing the system's resources creatively. He says 'that constraints are not acts of God and therefore as humans, people can do much more to limit the impact of the constraints.' His next suggestion therefore is that we focus on the constraints, perhaps by verbalising them, which will in time lead to breaking them. But, the system will in time generate further limiting constraints, so his fifth step is to review and possibly change the rules and policies pertaining to the system in question, as the old ones may not be useful in managing the new constraints.

Goldratt (1990) says that there is a tendency to utilise known actions and not to attend to the problem. In other words, there is little or no attention given to understanding the problem and the attempt to resolve the problem is by applying what has been done in the past. He therefore advocates 'that, if a process of ongoing improvement is to be effective, we must first of all find – what to change' (ibid, 1990, p. 9). He says that a manager should possess the ability to pinpoint the core problem, the correction of which will have a major impact. Change should not be an exception but rather a norm. He says that change produces emotional insecurity and, therefore, generates resistance to itself, which may be overcome, and thus induces people to see problems as their own and to invent their own solutions.

Dettmann (1997) says that Goldratt's theory has proved to be a milestone concept in process improvement. He goes on to describe Goldratt's notion of 'throughput' as 'the rate at which the entire system generates money through sales. In cases where an organisation's

throughput may not be easily expressed in monetary terms, it might be defined in terms of the delivery of a product or service.

Goldratt's Theory of Constraints provides a general framework for the entire study. His theory on constraints could well be linked with the element of contributory factors as expressed in one of the objectives for this study (that is "to investigate lecturers' and students' perceptions of contributory factors towards the high failure rate"). Hence, the appropriateness of such a theory for this study.

### **3.8.2 Assessments**

Assessment perspectives impact on our assessment practices in an educational context. There are various perspectives since early times. These perspectives have impact on student learning and their attitudes (McKellar, 2002). This sub-section discusses two aspects in assessments; the traditional (or Technical) and the Practical (or Hermeneutic).

#### *3.8.2.1 The traditional/technical perspective*

The first perspective historically was the traditional approach, which is also sometimes called the technical, or scientific view of the modern era. It draws on scientific concepts and beliefs, and applies to social settings, such as educational and sociological contexts (McKellar, 2002). McKellar (2002, p. 1) says "this view regards knowledge as an end product, which can be measured, as well as predicted and therefore controlled". The traditional approach was applied in order to prepare the youth to contribute to the well-being of the society. The degree to which the end product has been achieved was the purpose of the assessment.

Assessment is based on a limited range of relatively easily measurable competencies, such as fact, content knowledge and basic skills. A typical three hour examination might be set focusing on rote learning without understanding. Such examinations were formal and summative (McKellar, 2002). McKellar says the limitations of the traditional perspective are widely acknowledged where the student is regarded as a recipient of pre-existing

knowledge that is transmitted by the expert. Memorising without understanding and rote learning leads to surface learning.

### *3.8.2.2 The Practical Perspective*

In the practical perspective the students' learning is constructed with considerations of the historical, social and political context in which the student exists. Unlike the first perspective where the student is a recipient of pre-existing knowledge, here the students are actively involved in constructing their own knowledge as well. In this perspective students, including those with disabilities, are provided with support structures accordingly in order to achieve institutional standards in assessment practices (McKellar, 2002).

The formative assessment process allows for opportunities of drafting and redrafting their work in response to comments. Foundation courses aim to provide students who have gaps in knowledge with the basic skill which they will then be in a position to apply at a later stage to the context in which they are needed. McKellar (2002) says that in spite of the extra support provided in this approach, some students may not share the cultural capital of the institution and therefore continue to fail.

### *3.8.3 Quality Assurance in HE*

Quality Assurance have been in existence many decades before being introduced to SA HEIs. Initially HEIs, were concerned with producing high quality graduates and were complacent if it was first class but today there is monitoring for the existence of quality and its continuous improvement (Smout, 2002). Smout says that as HEIs nationally and internationally moved from elite to mass provision as new challenges in quality assurance developed and thus, in many parts of the world the past five years saw important changes in the relationships between HEIs and other stakeholders such as society and government. So HEI's are accountable to the broader society. This redefinition has been part of the democratic transitions of the 1990's to contribute to the reconstruction of a weakened society. Quality assurance (amongst other processes) is therefore an objective and a medium for transformation of HE in South Africa.

In SA the National Qualifications Framework (NQF) has its own definition of quality assurance, which is Quality as fitness for purpose. Thus, all SA HEIs quality assurance are guided by this definition. The discussion that follows comprises of descriptions of various definitions of quality assurance and how SA HE engages in the various aspects of quality assurance (such as structures, policies and processes, that is, internal and external to the HEIs).

Smout (2002) presents various definitions of quality, which are highlighted below:

**Quality as Excellence:** this view requires excelling or exceeding for the achievement of quality. For this quality performance there has to be others for comparison, thus excellence or quality cannot be attained by all. This view is not very appreciated as it can lead to exclusivity and elitism. Besides a university it may be appropriate in other systems.

**Quality as perfection:** this view would be appropriate in an industrial system where there is a 'quest for zero defect' for physically manufactured products. This view is seen as an ideal one for a manufacturer where measurement for perfection is possible but not in the system of a university. More so in the case of SA HEIs where some systems have sprung from disadvantageous backgrounds.

**Quality as value for money:** this is a very corporate and beauracritic view – one that is related to an investment and its reapings. While 'value for money' has a conception for quality, it may provide accreditation for products of low or inappropriate quality because of its cheap attainment. Therefore, this view is inappropriate in the context of a university system as there needs to be a certain standard of conformity and for the ultimate seeking of high quality.

**The International Standards Office (ISO) approach to quality:** the ISO defines quality as 'a complete set of features and characteristics of a product or service important to meet the required demand or natural need' (Smout, 2002, p. 4). Initially, the ISO standards were mainly with production and technical processes and recently with services as well. Few

universities have accepted this approach, but it is not very popular because it applies only to certain activities as in laboratories and not applicable to all elements in a university system.

**Quality as customer satisfaction:** this is related to the ISO approach where customer satisfaction is measured. In this approach goods and services provide the ultimate judge for quality by customer satisfaction surveys. In a university context the survey is applied through students and graduates. This approach is becoming popular but there needs to be caution in the planning of the surveys and the evaluation of results.

**Quality as fitness for purpose:** this is one of the most popularly used approach in HEIs today. It may be used singularly or in combination with other concepts. This is most appropriate in the SA HEIs where differentiation is a stated goal of the National Plan. This approach is far removed from the previous definitions described above. It has a democratic notion of quality and each institution decides its own vision and mission and is assessed accordingly. In this approach the ‘purpose’ must have appropriate standards for the ‘fitness’ to have quality. This approach can lead to complacency once achieved and therefore, needs to bear the concept of continuous improvement as well to aim for excellence, if not perfection.

**Quality as transformation:** in this approach quality is seen as the extent and depth of transformation of a student from the time of entry and upon graduation. Quality is measured in terms of development of the individual.

According to Smout (2002) SA educational qualifications are framed within the National Qualification Framework (NQF) and Higher Education Quality Framework (HEQF). The development and implementation of the NQF is set up and overseen by a body called the South African Qualifications Authority (SAQA), which was established in the 1980s. The NQF sees quality defined as fitness for purpose. In this approach quality assurance would thus mean ‘providing assurance that the university keeps its promises to its customers’.

The South African Council on Higher Education (CHE) established in 1998, which is represented by its committee, the Higher Education Quality Committee (HEQC), is statutorily responsible in advising the Minister of Education on quality assurance in HE and training amongst other HE policy issues. It is in the interest of HEIs to engage in quality assurance which, in SA is a statutory requirements by the HEQC.

There are various aspects of quality assurance that the HEQC looks at in HEIs, however, in the discussion below, only quality assurance, within programmes and modules is briefly discussed.

#### *3.8.3.1 Quality Assurance in Programmes and Modules*

The HEQC describes a programme as a planned combination of learning outcomes leading to a qualification registered on the NQF. A qualification is the formal recognition and certification of learning achievement awarded by the accredited provider. In South Africa programmes by HEIs (private or public) must be accredited by HEQC before being offered. To be accredited, a programme must be a full qualification complying with the rules and regulations stipulated by SAQA. Accreditation may be needed for a new or existing programme.

HEIs wanting to offer a new programme must submit an application for accreditation of the programme through the HEQC. Institutions are accredited for programmes per site of delivery and mode of delivery. Institutions may enrol students only on completion of all the regulatory requirements, including accreditation. The HEQC has a right to undertake a site visit to review a programme for accreditation purposes.

The HEQC may stipulate at any time that, the institution be required to submit a progress report for evaluation by HEQC secretariat. During the candidacy phase (within one year of offering the programme for the first cohort of students to be graduated) the institution must demonstrate that it has met the conditions set by the HEQC, which include conditions relating to the evaluation of the mid-term report from the institution.

The institution must also conduct a self-evaluation of the programme against the HEQC's criteria for the accreditation phase. On HEQC's approval of the institution's submission, the programme obtains full accreditation status. New one-and two-year programmes may be accredited for a maximum of three years. New programmes with a duration of three years and longer may be accredited for a maximum of six years.

Whilst institutional differentiation is vital, each internal HEI quality assurance system will still meet the HEQC's statutory obligations. In SA HEI's quality assurance is implemented and measured in the areas of programmes, staff and students. These elements will each be discussed in terms of which body is responsible for quality assurance.

The following descriptions of HEIs internal quality assurance has been extracted from the writings by Smout (2002). He says that essential pre-requisite to the development of an effective quality assurance system in a university is commitment from the very top. The University Council, Senate and Vice chancellor need to be formally committed to a high quality institution and the development of an effective quality assurance system. This commitment should by minimum be written in the institution's vision or mission statements. The Vice Chancellor's Quality Committee acts as the lead body for quality assurance and quality improvement within the university. As the specific quality assurance policy is developed within the institution's community, a formal acceptance is made in Senate and Council. Quality assurance details may vary across the university sector, but key elements of quality assurance structures are very much the same as follows:

There has to be a main quality assurance committee within a university. A member of the Senate Committee, usually acts as the quality assurance manager, given the importance of quality assurance. The quality assurance committee would also include faculty representatives, senior staff from support units such as the Academic Development Centre, students, quality assurance staff themselves and administrative support staff units. This committee is responsive to national imperatives and their scope embraces all sectors of the university and includes: quality promotion and enhancement, academic planning, monitoring and evaluation and preparation for national reviews accreditation and audit.

### **3.8.4 Significance of the Theoretical Framework**

The study investigated perceptions of contributory factors towards the high failure rate in an IA course. Therefore, Goldratt's (1990) theory of constraints is relevant in this study as his theory discusses constraints in an organisation that limits throughput rates. His theory system deals with five steps from identification to managing the constraints for the improvement of throughput rates. These throughput rates are applicable to both the corporate and the educational sector (as in this study).

In Goldratt's (1990) discussion in the first of the five-step process, he advises that there is a need to first identify the constraints and their impact on the organisation's goals. The reviewed literature informed the researcher on the various constraints and its impact on HEIs nationally and internationally.

The facilitator at both the focused group interviews attempted data collection by exploring participants' experiences on constraints that contributed to their failure of the IA course and how this contributed to its continuity.

### **3.9 Conclusion**

This chapter has discussed the research methods and the theoretical framework. All procedures for the research method has been conducted successfully in regard to gaining data for an insight into the problem. The theoretical framework of various theorists' perspectives has been discussed in detail such as constraints, assessments and quality assurance. The theory of constraints provides a perspective on constraints and improvements for throughput rates in a system. There has been a description of perspectives on assessments from early times to date. Included in the discussion on quality assurance are details of the various bodies responsible for the South African HE qualifications. This followed with a discussion on structures, policies and rules of South African quality assurance and then a specific account of quality assurance at SUT. The following chapter will describe the research findings.

## **CHAPTER FOUR: RESEARCH FINDINGS**

### **4.1 Introduction**

This chapter presents the research findings. Data sources that were analysed are transcripts from focused group interviews with lecturers and students and the researcher's field notes. The following four themes emerged from the analysis, which will be discussed below according to the research questions:

### **4.2 RESEARCH QUESTION 1: What are lecturers' and students' perceptions of the factors contributing to the high failure rate and dropout rate in the IA course?**

#### **4.2.1 Theme One: Underprepared Students and Staff**

As mentioned in chapter one HEIs have been pressurised into implementing policies since 1994. Some of the challenges made were racial transformation with equal education, accessibility to HE for students who come from disadvantaged backgrounds. HEIs have strived to achieve performance indicators but many have failed to sufficiently prepare for the full transformation. Also mentioned in chapter two is the competition that exists among universities for suitable candidates. This challenge leads to another pressure on HEIs, that is, meeting enrolment targets (for institutional and/or departmental sustainability). This pressurises HEIs into reviewing the enrolment criteria.

However, there is a school of thought arguing that underprepared students are doomed for failure as they are challenged to meet the quality of the programme. Such students are part of the diverse current student population. Such diversity has increased since the 1990's when HE transformation began (Moja & Hayward, 1995). So, with transformation, should come the accommodating of student diversity. So it should be acceptable to enroll underprepared students.

At SUT, the OMT Department enrolled students who met the institutional entrance criteria (a Senior Certificate or equivalent qualification with a pass in the English language (having attained a minimum “E” symbol on the Higher Grade or a “D” on the Standard Grade). Applicants for the OMTP needed to achieve a minimum aggregate of 25 points or more on their matric qualification certificate. Management had planned an intake of 200 students. As this target did not materialise (in the years of the cohort study 2003-2006) the entrance requirement was dropped from 25 to 23 points. Lowering the criteria enabled students who would not have qualified to enter into the programme to then qualify. Besides, students who had been declined access in other programmes got the opportunity to enter into this programme.

The above situations at the OMTD led to the acquisition of underprepared students for the OMTP. High failure rates for the IA I and II courses were recorded for the years (2003 – 2007). This failure rate was further exacerbated as inability to meet the challenges of the programme developed another problem such as the lack of interest. These students have been challenged with the OMTP, many to the extent of failure and some even to repeated failure.

*Mrs B: “I personally feel they were ill prepared when they came in. There was a huge gap from schooling to tertiary and that gap has not been bridged. We expect students to come in at a certain level but they don’t. The schooling career that they have does not seem to have prepared them for tertiary life and we are faced with the problem with getting them from first year through to third year and there is so much to complete within that three years and you possibly can’t do that because there is not enough time. So, therefore, I stated this before as well, that gap needs to be bridged. There has to be something done for students to be fully fledged first year students at the university. It either has to be the schooling but we don’t have control over that so we have to look at what we have control over.”*

The above response from a lecturer indicates that underprepared students had been enrolled. Such students experienced difficulties in attaining the standards of tertiary education. While this happened over the years the OMTD did not plan to implement ways to help bridge the gap between schooling and tertiary education. There is also evidence of a compromise in completing the syllabus.

In the province of KwaZulu-Natal of South Africa there is a one-stop handling applications office, called Central Applications Office (CAO) for Certificates, Undergraduate Diploma and Bachelor Degree programmes at HEIs. Students apply in the preceding year of study through the CAO for acceptance into University programmes. In a CAO form applicants will complete questions on personal, schooling and programme choices. There are six programme choices to be made in the order of preference. Choices regarding the OMTP varied with different respondents. Some chose it as their first, their last and some not at all. Some respondents indicated that the Engineering and Information Technology (IT) programmes were preferred over the OMTP. When administering CAO applications it was rare to find an application form with the OMTP as one of the first four (of the six) in the order of preferences.

Many students appear to choose this programme after being rejected for other courses. Students appeared to misunderstand the programme. Some of them thought that the OMTP was very similar to the Information Technology Programme (ITP) because both offered courses with computers.

*MUSA: "I did not choose OMT course, I went to electronic engineering department and I wrote a test there. I went home and discussed that I cannot do electronic engineering. I did a bit of computers at school. I came back looking for IT (Information Technology Department). It was too late. They were full. I came to this campus where the OMTP was offered. I met Mrs Fuller who said the OMTP was a good choice."*

*PETER: "I did not pass the interview for engineering, so, and then I chose the OMT course. I came late and there was no place at HR (Human Resource Management) and I heard that the OMT had place there."*

The responses above indicate that the programme was not appropriately marketed as many students preferred other programmes, such as Engineering, Human Resources, Information Technology, and so on. OMTP courses that appear to overlap with other programmes needed to have been clarified. It also appears that some students chose this course because of rejection from other courses, which meant the OMTP was also attracting low achievers and thus underprepared students.

Lack of interest experienced by most underprepared students in the OMTP stems from either demotivation from the challenges to meet the quality of the programme and/or the OMTP was not their preferred career choice. Students' attendance, their tendency for mind bending drugs and alcohol and too much entertainment, and their inefficiency in completing assigned work are an indication of the lack of interest. As highlighted in Chapter Two, MacGregor (2007) reported similar experiences in other institutions of South Africa. Another area where this attitude is observable was the disinterest in usage of the library. Also, students produced sloppy work during formative assessments despite requests for correction of edits.

*C: "Students leave the campus after Forum time (which is reserved for meetings on a Wednesday from 11:15 to 13:15) and do not return for the remaining lectures of the day. Many students of the OMTP have IA courses after Forum time."*

*E: "There is a low rate of attendance of students on the first day and last day of terms. Lectures are normal even on the last day of term."*

*E: "Besides allocating lecture periods for the practical component, there is a double period of non-contact time also allocated for students to conduct extra practice. Some students tend to treat these periods less seriously by not attending it."*

*B: “Work assigned during practicals is marked by lecturers and when editing is required, some students tend to ignore comments for editing and re-submit work with recurring errors.”*

*D: “Some students are easily influenced into drinking, drugs and too much partying.”*

*F: “Lecturers have reported some students being under the influence of alcohol during lecture periods.”*

The evidence of poor student attendance, irresponsibility and sloppy class work may well be translated as evidence of demotivated students. This could arise from the programme not being their first choice and the lack of lecturers promotion of the OMTP during lectures.

Enrolling of underprepared students delayed acquisition of the necessary knowledge and skills. The following evidence shows the effects of the delay in progress with the syllabus.

*PATRICIA: “It was after June, in August. We wrote the theory test for the year which had two sections. Later we were told that the test written with two sections were two tests. Section one and two became test 1 and 2. The test was given in August.”*

The above response indicates that there was a delay in completing the syllabus as a result of the underprepared learners. This eventually led to the delay and inappropriate form of testing. It is evident that the OMTD was lacking in supplementing lectures and providing additional instructional material for the diverse learners. This also indicates that lecturers themselves were underprepared for the more needy students. It is inevitable in transformational times to acquire diverse student populations, some of them being underprepared students. If transformation does not attend to changes of traditional paradigms (“instructional” in this case) where support mechanisms and competent staff are lacking, then a high failure rate is very likely to occur leading to low achievements of departmental and institutional goals, such as expected throughput rates.

#### 4.2.2 Theme Two: Compliance to the institutional assessment policy and procedures

Every HEI has its policy and procedures for assessment and each academic department needs to ensure that its practices are aligned accordingly. According to SUT's Assessments Policy as discussed in Chapter Three, its methodologies ought to have a balance of formative, diagnostic and summative approaches as described in detail in Chapter Three. When these methodologies are applied appropriately assessment data can be used diagnostically to inform teaching and improve the curriculum. These assessment data must also be received within an acceptable timeframe. This means that markers and moderators need to adhere to completing their assessment within timeframes. This would allow for appropriate feedback to students. It would enhance students' learning experiences and improve the quality of teaching and learning.

In the year 2007 when the OMTD recorded a high failure rate, it was also found that the department did not fully conform to the institutional assessment policy and procedures. There were various discrepancies that occurred where students became disadvantaged. Schedules for testing were not met on time. For example, students practised on computer programmes for long durations without their performance being assessed. This eventually led to numerous tests conducted towards the latter part of the year, with all testing done in a short space of time. This resulted in an insufficient time space for students to prepare adequately for forthcoming tests, and poorly performing students had late notification of their impending failure.

*LINDIWE: "We wrote two tests on the same day, both the theoretical and practical aspect. We were only informed of the second test on the day of the test. The theory test was challenging. They had hoped the theory test would help boost their low achieving practical marks."*

*PATRICIA: "It was after June, in August. We wrote a theory test with two sections. Later we were told that the test written with two sections"*

*were two tests. Section one and two became test 1 and 2. The test was given in August.”*

*NTOMBI: “Marked assignments done and handed in at the beginning of the year are often only received at the last term. Marked test scripts are returned to us well after a month or two.”*

*PATRICIA: “As I performed poorly in the speed section, my final test mark was lowered to 48% and therefore I failed the test.”*

Marking and feedback of tests and assignments were delayed by many weeks, which delayed adequate feedforward (advice for preparation especially for poor performers for forthcoming tests).

The above responses indicate that the policy for continuous assessment was not adhered to. It is evident that marking time frames are not adhered to, that examining was delayed and inappropriate, that tests schedules were unknown to students (meaning guides were not appropriate) and that the reassessment system was not in place.

Continuous assessment ought to be regular and formative in nature. Learners should be able to use feedback to resubmit work within constraints as stated in the (DUT Assessment policy, 2009) Learner guides ought to include information regarding submission besides syllabus information, test schedules, resubmission dates, and so on. It is evident that no provision was made for students to improve on their poorly performed tests.

The following response indicates that quality of the question papers usually leaves the students with uncertainty:

*MARY: “The practical test has surprises. The test is far too difficult than the exercises done in class. The document section is handwritten. The handwriting is not always legible. Not all primary schools teach cursive writing and this section is written in that way. We are told that assigned work in industry is often handwritten and therefore this format is followed in our tests. To add to this challenge is the content that is all juggled up.”*

*JOHN: When we receive the question papers for tests or assignments, there is usually no mark allocations nor comments for the various parts of the assessment.”*

It is evident that instructional material, lectures and formative assessments do not indicate the standard required in summative assessments, hence the disappointment and distress.

Departments need to monitor student progression, retention and throughput. Risk students would thus be identified and assistance could be applied to improve such students’ chance of success. Fluctuation in the success rates need to be investigated and be addressed. Reasons for drop out rates need to be investigated as well.

*Mr F: “After tests the examiner’s and moderator’s reports are completed and filed away. The reports are not discussed.”*

The above response indicates that no monitoring of student progression was done in the years of high failure rate.

Non-compliance with the Institutional Assessment Policy and procedures should have been observed by departmental quality reviews. The last review conducted in the OMTD was in 2003. Internal reviews have not been sufficiently conducted as indicated in the above response and thus management has not noticed the non-compliance.

### 4.2.3 Theme Three: Accessibility and utilisation of resources

Academic departments need to ensure that the library resources are adequate, up-to-date, relevant and readily available both during and outside of the normal student timetable. The department should from time to time obtain statistics of usage of the library by their students. There should also be constant liaison and consultation with relevant library staff and students regarding quality of library resources.

SUT has all the required resources for the learner available to students. According to the 2004 Review and Evaluation by Centre for Quality Promotion and Assurance the library resources reviewed were as follows: Library resources, such as journals, books, magazines, and so on are integrated into the programme curriculum, are sufficient in size and scope to complement the curriculum. They support appropriate professional and scholarly activities of the staff and students. There is a library orientation programme implemented. There is provision for continuous renewal and expansion of resources. On- and off-campus students have adequate library support and access to the library. Research and computing facilities are available on weekends and outside of normal working hours.

While the library resources have the necessary elements in place, there appears to be a need for more learners to utilise these resources. Librarians often complain of under usage of the OMTP resources in the library. Lecturers have also made the observation through students' outputs in tests and assignments that students have not utilised the library resources. Over time, it appears that some students are not attempting to access these resources, even when lecturers refer them to the library. So, when an observation is made that students are not utilising library resources, it may be that the quantity of library resources is lacking or due to attitudinal problems of students.

*MARY: "The problem with the quantity of library materials were that they were few in terms of the number of students that needed to use it at a given time. A few students are able to borrow the books at a time and these books usually get returned well after the due date of assignments."*

*MUSA: “We never search for recommended books because of our previous experience of insufficient stocks.”*

*SAM: “I would say the books in the library had the information we needed. The only thing that was problematic about it was that there was so few. Only a couple of students could get access to books and only returned them when the assignment was over. So students had to find other libraries to get their information.”*

It is evident from the above, despite the fact that the library does not have a sufficient number of similar materials, there has been no effort made to ease this situation by improving the accessibility of the current stock to many more users.

HE students need to have access to Information technological infrastructure during and after hours as well as at weekends. Infrastructure for each programme ought to be current, relevant and properly maintained. Programmes with courses related to IT ought to have dedicated and well established computer laboratories for the students during and after the course as well as at weekends.

At SUT, the OMT department has seven dedicated computer laboratories for the OMTP students as this technology is required for the practical component of the IA course. Besides these laboratories, the students who take such courses have access to IT infrastructure and it is available after hours and on weekends. The laboratories are situated at another campus which is across the road. Besides the six IA (practicals) lecture periods per week, there are two non-contact periods as well. Lecturers are not usually available outside those eight periods. Students are not allowed to use the laboratory without the presence of the technician or a lecturer. There is only one technician. The computer laboratories are locked at other times. Despite the availability of these resources, students lack sufficient practice in these laboratories. The practical nature of the subject requires students to have adequate practice, especially for those students coming from disadvantaged backgrounds who do not have such resources at home or in their residence.

The IT infrastructure also has the resources and adequate technicians, but these resources support the entire student population of the SUT. While this resource centre is open after hours and at weekends, students have little opportunity to gain entry as this centre supports the entire SUT student population, it has many students than it can serve.

*JOHN: "We are not given sufficient access to the departmental computer laboratory."*

*NTOMBI: "We do not have access to it for assignments, other than lecture periods and tutorials. Practical tests are challenging and therefore more access to these resources are required for sufficient practice to pass."*

*Lindiwe: "We have to go to other campuses for computer laboratories and follow a long queue to get access to a computer. This leads to problems to complete assignments on time which as mentioned earlier leads to a zero mark."*

*PETER: "I did not have understanding of a computer programme as little time for practice was given."*

*MUSA: "There was not sufficient internet access in the OMT laboratory nor at ML Campus or Steve Biko. There should be a dedicated lab to practice."*

*PATRICIA: "Lecturers do not allow us to sufficient internet access at the OMT labs. Maybe because of the things students viewed at the internet."*

*Miss D: “Students need more exposure to business technology as this is evident when final year students go on work integrated learning.”*

The above are some of the many responses of students feeling despondent at the lack of accessibility to the departments’ dedicated laboratory both during and after the students’ contact timetable.

### **4.3 RESEARCH QUESTION 2: Why did these factors contribute to the continuous high failure rate?**

#### **4.3.1 Theme Four: Quality Assurance Management Measures**

Every academic department in HEI ought to have and implement a system for managing the quality of the programme it offers. HEI usually has a centre for Quality Promotion and Assurance (CPQA). As mentioned in Chapter Three one of its main functions is quality monitoring. From the outset, the context for quality assurance at SUT, the merged institution, was complex with both partners bringing different historical approaches and associated practices (CPQA, 2007). Therefore, processes for review to ensure integrity of the core academic function of the newly merged institution was seen as being a priority and, therefore, formed the key focus for the activities of the Centre for Quality Promotion and Assurance..

The Centre for Quality Promotion and Assurance conducted a wide ranging thematic review in 2004 for the entire institution. The Centre for Quality Promotion and Assurance in the 2004 OMTP review had made several recommendations for improvement. Some of the main recommendations were to review the curriculum, improve the throughput rate. Quality reviews and evaluation at SUT are on five-year cycles. In years one to five of the cycle, departments ought to engage in the annual/semester review of lecture/subjects/modules and developing action plans for ongoing improvement.

The acting HOD (2004-2008) attempted several times to conduct planning of actions for improvements with staff, but to no avail. As the OMTP staff were in disharmony since the merger, attempts for the review process kept failing. In 2008 Centre for Quality Promotion and Assurance had conducted a preliminary check on the department to evaluate the progress with the 2004 quality review recommendations. Much to their disappointment, they learnt that barely any attention had been given to the recommendations. No internal curriculum review has been conducted since 2010. As a result of the delayed curriculum and evaluation review, many areas in the programme were deprived of improvement, such as curriculum development.

*NTOMBI: "Some of the content in this subject is irrelevant. Programme is in keeping with approximately 50% of industry's needs."*

*NTOMBI: "Class assessments emphasises on quantity rather than quality when allocating practical assignments to students. Thus production is met for the aim of quantity and not quality."*

*SAM: "The practical content is not linked to the theory."*

*SAM: "There is very little relationship between practical and theory."*

*NTOMBI: "Lecturers of practicals and theory are not necessarily the same."*

*Miss C: "Core syllabus needs to be upgraded."*

*Miss B: "There is a dire need to re-curriculate the course content. The practical component needs to be improved with current technological aspects and increase the content to meet industry's needs. At this stage many technical colleges offer the same practical components at the same level".*

*Miss D: "But, unfortunately reviewing the programme has been constantly hampered because of the poor relationship between staff since the merger."*

*G: "Subject evaluation questionnaires are completed by students every year. It is sent to Centre for Promotions and Quality Assurance for analysis. Its results are sent back to us. It is put into files and not discussed."*

Much of the responses above indicate the necessity for curriculum review, especially for the alignment of the theory and practical aspect and to overcome the different historical approaches and practices.

The lack of quality assurance management measures appears to be a critical issue hampering the performance of the OMTP.

#### **4.6 Conclusion**

In this chapter the researcher has described the four themes that emerged from the findings. The four themes could be viewed as the constraints that has contributed to the high failure rates in the IA course. Theoretical perspectives on assessments and quality assurance has no doubt had relevance on the emerged themes. In the following chapter the main findings will be analysed and this will be followed by recommendations.

## **CHAPTER FIVE: ANALYSIS OF FINDINGS, RECOMMENDATIONS AND CONCLUSION**

### **5.1 Introduction**

This chapter discusses the analysis of the main findings of the study. The findings are discussed and organised according to the research questions that are presented in chapter one. This is followed by recommendations that can be used to facilitate success rates in the IA course.

### **5.2 Analysis of the main findings**

The research attempted to explore, through the focused group interviews, which served to access the lecturers' and students' perceptions of factors contributing to the high failure rate in the IA course of the OMTP. The main findings of the research will now be summarised according to the research questions of the focused group interviews.

Question 1 of the research question explored perceptions of the factors that contributed to the high failure rate and dropout rate in the IA course. Various concepts were explored as the interviews progressed.

The first concept explored on students experience of the IA course revealed the following:

That there were some underprepared students enrolled for the OMTP. Underprepared lecturers and students with lack of interest emerged on further exploring.

Interviews with lecturers' revealed that the enrollment criteria that was lowered to meet administrative targets had resulted in enrolling underprepared students. Despite the many enrolled students having inappropriate qualifications, it was revealed that they were also underprepared for tertiary education by secondary schools. This compromised the quality of

the programme in areas such as: syllabus completion, quality of students' tests and assignments and assessment schedules. These themes were explored in the literature reviews where Taylor and Harris (2002) discussed the root causes for national high failure rates and one of them being the poor quality resources of secondary schools. This was further explored by Cedrone (2008) on international high failure rates and mentioned that another cause is the misleading high school formats. Critical theorists believe that students should be seen as different and not deficient, and that "diversity needs to be maintained, recognised, accepted, accommodated and celebrated by the educational system" (Gibson, 1986). Such theorist approach would translate into curriculum reform and learner-centred teaching to create in HEIs a learning environment that meets the needs of individual students whatever their origin or background are (ibid, 1986).

The problem of underprepared students were exacerbated by the students' seemingly lack of interest. Interviews with students revealed that the OMTP was not often their most preferred career choice. The exploring of this theme revealed that this led to demotivation on the part of the students to meet the challenges of the OMTP. This was evident in students' poor quality of work and low attendance rates as discussed in chapter two. National Reporter McGregor (2007) and International Reporter Marshall (2007) also revealed that poor or incorrect career choices are a contributory factor to high failure rate.

Findings also revealed underprepared staff. Staff encountered problems with underprepared students. Staff found it problematic to get students to progress from first year to final year. Students were not motivated sufficiently to attend lectures regularly and produce quality assignments. Staff development is one of the requirements for quality assurance (CPQA, 2010). Gibson (1988) states that in the critical theorist approach there is a shift from supporting students to developing the staff. In order to achieve curriculum reform the focus of Academic Development Centre shifts from supporting students to staff development in order to provide academic staff with the rationale and skills for institutional transformation.

The second concept for question 1 explored on course materials and recommended books revealed the following:

While the library resources have the necessary materials in place, there appears to be a need for more learners to utilise these resources. Librarians often complain of under usage of the OMTP resources in the library. Lecturers have also made the observation through students outputs in tests and assignments that students have not utilised the library resources. Respondents also complained that there is insufficient quantity of materials in the library.

Findings also revealed that while the library is well resourced in terms of book material access to technology resources was limited. This pertained to the dedicated computer laboratory of the OMTP students. It appears that there is insufficient laboratory technicians to remain in the venues for students to access the computers. While there are also institutional laboratories, there was insufficient computer workstations as these resource centres supports the entire institution. Under resourced support services is not coherent with the quality assurance requirements from the Centre for Promotions and Quality Assurance at SUT and thus the HEQC as well.

The explored concepts revealed underprepared students and staff, limited accessibility of resources at the library and technology services. These contributory factors to the poor performance in the IA course can be described as constraints that is “anything that limited a system from achieving higher performance, as against the goal ...” (Goldratt, 1990, p. 5). Recognising the goal of a system (the throughput rate) and identification of its constraints is a theory postulated by Goldratt (1990). Such identification of these constraints and their impact on the organisation’s goal is the first of five steps in Goldratt’s system for the improvement of throughput rates.

Question 2 of the research question explored perceptions of staff and students as to possible reasons (for the contributory factors elicited from question 1) that led to the high failure rate and dropout rate in the IA course. Various concepts were explored as the interviews progressed.

The first concept for question 2 explored the compliance (of the IA course) to the institutional assessment policy and procedures:

Responses from staff and students reflected non-compliance to the institutional assessment policy and procedures to an extent. From the findings it was revealed that there was a compromise in the assessment schedules, quality and feedback to the extent that students became disadvantaged. Markers and moderators completion of the assessment within timeframes was not adhered to. This problem was further exacerbated by the delayed curriculum review of the OMTD. The academic departments need to align practices according to policy and procedures for assessment as laid out in guidelines by CPQA (2010). Continuous assessment practices were not monitored as revealed by students' response on delayed and inappropriate testing. Methodologies of assessments did not have a balance regarding diagnostic, formative and summative assessments. In the Practical perspective on assessments, McKellar (2002) states that the students learning is constructed with considerations of the historical, social and political context in which the student exists.

The second concept for question 2 explored the quality assurance and management measures for the OMTP.

Responses from staff elicited disharmony within staff which delayed the curriculum review. It was revealed that this problem originated from the beginning of the merger. As a result of the delayed curriculum and evaluation review, many areas in the programme suffered from maintaining quality and standards. While evaluation of academic programme is conducted every six years for each department at SUT, the OMTD did not conduct regular internal monitoring and evaluation of the programme. As mentioned earlier of the critical theorists approach by Gibson (1988) that staff development is needed to provide staff with the rationale and skill for institutional transformation.

### **5.3 Recommendations**

In the light of the findings and the conclusions inferred thereof the following recommendations are recorded. The efforts made by students, staff and administration is of paramount importance towards “reducing constraints that limit a system from achieving higher performance and eventually its primary goal” (Goldratt, 1990). In the case of tertiary institutions, is to reduce the contributory factors towards the high failure rate. From the research study the constraints revealed itself from the following themes explored: underprepared staff and students, compliance to the institutional assessment policy and procedures, quality assurance and management measures, accessibility and utilisation of resources.

#### ***5.3.1 Underprepared staff and students***

It is important for institutions to change their mindset that that underprepared students are doomed for failure. This thinking does not align itself with transformation. Transformation is not complete if such enrolled students’ success needs are not addressed. So there comes the need for changes of the current paradigm (traditional instructional methods) to go hand in hand with transformation.

Then for the OMTP to be successful in this challenging environment it must also change in paradigm from ”Instructional Paradigm” to a “Learning Paradigm (that was discussed in chapter two). In the “Instructional Paradigm” success can be at hand when identifying goals for learning and students’ success outcomes. Thus, under the “Learning Paradigm” universities ought to be responsible for student learning and obviously students will remain responsible for their own learning. The following are recommendations for processes and systems that should be in place for achieving students success outcomes, especially in the case of underprepared students and lecturers:

- Provision of augmented programmes

The department offering the IA course needs to provide for augmented programmes where the number of years in a programme are extended so as to groom the underprepared learner. Such a programme is usually extended from three to four years, where the first year has fewer courses with learning support courses. When such a learner has achieved success, s/he is brought into the mainstream programme.

- Identifying and monitoring of risk students and the provision of tutors

In another instance where underprepared students are brought into the mainstream immediately, tracking devices need to be in place to identify risk students. This monitoring process is usually dealt with after the results of the first assessment. Examiners and lecturers need to conduct analysis of the results and risk students are identified and are provided with learning support. Learning support may be in the way of extended lectures, revised lecturing methods, tutors, added learning material, added library assignments, counseling and so on. Such students progress should be monitored throughout the year.

- Changes to instructional methodology  
(from instructional paradigm to learner paradigm)

Along with underprepared students may come underprepared lecturers who need to be competent to provide the kind of tuition that suits such diverse student population. Academic supporting departments need to develop lecturers in the areas of instructional methodology.

- Marketing of programme

With regard to the problems faced by students who indicated less preference for the OMTP the representative for marketing the programmes need to ensure that before enrolment there

is appropriate description of the programme to prevent misunderstanding that might occur or lack of interest for the programme. This aspect needs to be given attention when preparing advertisements, handouts, road shows, school presentations and at the institution's career fairs.

- After enrolment

The 'after enrolment' marketing strategy needs to be developed for the programme. This pertains to enrolled OMTP students who were initially denied access to other preferred programmes and end up enrolling for the OMTP because they have no other options. Such students usually show lack of interest. Interest could be developed for such students if lecturers market the programme during the delivery of the programme, for example, during lectures.

### ***5.3.2 Compliance to the institutional assessment policy and procedures***

- Assessment and its methodologies

Assessment methodologies need to have a balance of diagnostic, formative and summative approaches. Respondents indicated that all marks are derived from summative approaches while continuous assessments need to be regular and formative in nature. Stress also needs to be placed on relevance of the formative assessments as respondents indicated the poor attitudes towards class exercises. Formative assessment data can be used diagnostically to inform teaching and improve the curriculum. Formative assessments need to be aligned with summative assessments in order for learners to understand assessment criteria and not meet the final tests with ignorance on assessment criteria.

- Assessment schedules

Assessment schedules need to be included in the learner guides. All assessments should be conducted according to schedules given in the learner guide. This would enable learners to prepare adequately for the assessments. This would also enforce lecturers to adhere to schedules, not to delay testing and cramming of many tests in a short period of time.

- Re-assessment opportunities

A re-assessment system should be in place to allow for the development of students with diverse abilities. Outcomes not achieved should be re-assessed after students have been given time for development.

- Assessment analysis

The department need to use the Examiners' and Moderators' Reports to monitor students' progression, retention and throughput rates. Risk students need to be identified and provided with assistance to improve chances of success. An investigation needs to be conducted for fluctuations in success rates and drop out rates.

- Marking timeframes

Examiners or markers need to adhere to marking timeframes in order to allow for timeous feedback to students and feedforward for lecturers to plan instructional material and lectures accordingly. This would enhance students' learning experiences and improve the quality of teaching and learning.

- Marking rubrics

Assessments, like projects, assignments, and so on need to have rubrics, which would be a working guide for students and teachers, and the marking rubrics should be handed out to students before the assignment begins in order to get students to think about the criteria on which their work will be judged.

### 5.3.3 *Quality assurance and management measures*

As a result of the disharmony existing among the OMTP staff, team building workshops need to be conducted as a priority as any process, such as quality management will be compromised by such relationships. Thereafter, the department needs to review the roles and responsibilities of the programme and module co-ordinators. The most urgent matters that need to be reviewed would be related to the three other themes explored. They can be dealt at the following levels:

At a programme level, the programme co-ordinator should facilitate the:

- development of augmented courses for underprepared students.
- development of capacity building programmes for lecturers who are underprepared to teach diverse ability students. Capacity development for lecturers should include the instructional methodologies.
- alignment of assessment in the IA course to institutional policy and procedures.
- provision of opportunities for re-assessments.
- provision for clear processes for assessment appeals by students.

On a module level, the module co-ordinator should attend to the following:

- For assessments ensure: adherence to schedules, analysis of test results, identification of risk students and ensuring assistance for increasing chances for

success. Concentration on the relationships between content, outcomes, and assessment strategy in the course.

- Reassessing and revising instructional material for accessibility by diverse student population.
- Reviewing syllabus for aligning of theory and practicals.
- Reviewing of guides for: appropriate assessment criteria, methodology and schedules according to institutional policy, learning materials, providing sufficient understanding for appeals procedure.

The Centre for Promotions and Quality Assurance should ensure that the reviews at programme and module level are regularly conducted and that standards and quality are maintained. If such is not the case then this centre should timeously alert the relevant co-ordinators.

#### ***5.3.4 Accessibility and utilisation of resources***

To encourage usage of the library resources, greater accessibility to existing materials and increased students' sufficient accessibility to technology, the following is recommended:

- Students are restricted to use the dedicated computer laboratories for security purposes and therefore the department needs to have security facilities at these venues in place in order for students to have more access to these resources.
- The department needs to request the library to place recommended books in the reference section so as to prevent such books leaving the library. This would allow for more students to utilise available resources.
- The module co-ordinators need to reassess the existing resources in the library and ascertain whether they are suitable for accessibility by diverse student population. Assessibility in this case would refer to students' ability to relate to the language, culture and so on.

#### **5.4 Assumptions to the Dissertations**

This research assumes that all data collected represents the general perceptions of the wider student community of the IA course.

#### **5.5 Conclusion**

The first of the five focusing steps of Goldratts theory is the identification of the systems constraints. The research conducted at this institution has identified some of the constraints. The researcher is of the opinion that priority lies in the programme to ensure that the department engages in quality management urgently and regularly. The move forward is for the Head of Department and the Programme Team Leader of the OMTP to recognise the lack of appropriate and sufficient quality assurance and management measures regarding quality assurance for the OMTP, more so in transformational times. If the constraints in the theme on quality assurance and management measures are appropriately addressed the constraints in the other three themes will inevitably be addressed as well. The other three themes fall under the ambit of quality assurance and management measures. With this the staff, students and programme will benefit and go from strength to strength.

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## APPENDIX A

January 2009

Faculty Research Committee  
Faculty of Education  
Durban Campus  
University of KwaZulu-Natal



Dr Buthelezi,

**Consideration of Ethical Clearance for student:**

Padiachee, Ragani - 825822309

The student's ethical clearance application has met with approval in terms of the internal review process of the Faculty of Education.

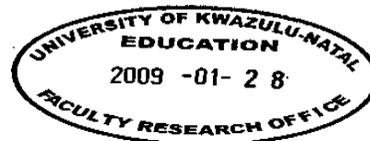
Approval has been obtained from the Faculty Research Committee, and the application will be forwarded for ratification (MEd) or recommended in the case of Academic Staff applications, to the Ethics Sub-Committee of the University of KwaZulu-Natal. All Masters applications approved by Faculty Research Committee commence with research.

You and the student will be advised as to whether ethical clearance has been granted for the research thesis (PhD), once the Ethics Sub-Committee has considered the application. An ethical clearance certificate will be issued which you should retain with your records. The student should include the ethical clearance certificate in the final dissertation (appendixes).

If you have any queries please contact the Faculty Research Officer on (031) 260-1524 or on the email [buchler@ukzn.ac.za](mailto:buchler@ukzn.ac.za)

Yours faithfully

Professor D. Bhana  
Deputy Dean Postgraduate Studies and Research



**APPENDIX B****THE INTERVIEW SCHEDULE**

The instrument will be in the form of questions.

**CRITICAL QUESTION 1:  
WHAT ARE LECTURERS' AND STUDENTS' PERCEPTIONS OF THE FACTORS  
CONTRIBUTING TO THE HIGH FAILURE RATE IN THE INFORMATION  
ADMINISTRATION COURSE?**

Questions for the focused group interview

- |   |
|---|
| <p>1.1      FOCUSED GROUP 1 – THE STUDENTS</p> <p>1.1.1    How did you experience the subject, Information Administration?</p> <p>1.1.2    How did you find the course content?</p> <p>1.1.3    How did you find the course materials and recommended books?</p> <p>1.1.4    Where the supporting departments / resources effective?</p> <p>1.1.5    How did you perceive the delivery of lectures?</p> <p>1.1.6    How did you perceive your lecturer's accessibility to students?</p> <p>1.2      FOCUSED GROUP 2 – THE LECTURERS</p> <p>1.2.1    How do you experience the Information Administration course?</p> <p>1.2.2    What are your perceptions of the course content, materials and recommended books?</p> <p>1.2.3    How did you perceive the University's environment in terms of supporting the needs of students for academic success?</p> |
|---|

**CRITICAL QUESTION 2:  
TO INVESTIGATE REASONS FOR SUCH FACTORS CONTRIBUTING TO THE  
CONTINUED HIGH FAILURE RATE**

Questions for both focused group interviews

- |   |
|---|
| <p>FOCUSED GROUP 1 – THE STUDENTS</p> <p>FOCUSED GROUP 2 – THE LECTURERS</p> <p>2.1      Were the constraints for success the same over the years from 2003 to 2006?</p> <p>2.2      What led to the continuity of the constraints for success?</p> <p>2.3      How did you address the failure?</p> <p>2.4      What suggestions can you make to improve the performance in the IA course.</p> |
|---|

*APPENDIX C***LETTER OF TO RESPONDENT**

.....  
 .....  
 .....  
 .....

**Date:** .....

**Dear** .....

**REQUEST FOR YOUR PARTICIPATION IN FOCUSED GROUP INTERVIEW**

I am a registered student doing Master in Education at the University of KwaZulu –Natal. As part of my research, I would like to do a group discussion with students that are currently enrolled for the Information Administration course. You have been selected as one of the relevant people who can participate in the focused group discussion.

The focused group will take approximately 160 minutes and will be video taped. Information obtained during the group discussion will only be used for research purposes and will not be used for any other purpose without your consent. You will not be obliged to answer all the questions that will be asked during the discussions and you are free to withdraw from the discussion at any time. This will not cause any harm to you or your institution. However, your participation will be valuable as the findings of this study will assist the institution to improve their pass rates of students.

Please know that your real name will not be used in any of the reports or thesis that I will write about the study and every attempt will be made to keep all the information confidential.

Thank you for your assistance. If you require any further information please feel free to contact my course supervisor, Dr Thabisile Buthelezi at 2603471 or you can contact me. My contact details are: 082 326 0521. If you agree to participate, please complete and sign the attached page 2.

Yours sincerely

R Padiachee (Mrs)

**APPENDIX D**

**If you agree to participate in the study, please sign below:**

I ..... agree to participate in group discussion for this study. I understand that my real name will not be used in any reports that will be written about this study and that all my responses will be treated confidentially. I also understand that I am free to withdraw from the study at any time, should I feel to do so and that will not cause any harm to me or my institution.

Name ..... Date .....

**If you agree to be taped, please sign below.**

I ..... agree to be (video) taped during group discussions. I understand that my real name will not be used in any reports that will be written about this study and that all my responses will be treated confidentially. I also understand that I am free to switch off the recording at any time during the discussion should I feel to do so and that will not cause any harm to me or my institution.

Name ..... Date .....

**I thank you in anticipation of your agreement.**

*APPENDIX E*

TO: DR N SENTOO  
HOD: INFORMATION & CORPORATE MANAGEMENT

FROM: MRS R PADIACHEE  
LECTURER

DATE: 28 AUGUST 2008

SUBJECT: PERMISSION OF COLLECT DATA FOR RESEARCH PURPOSES  
FROM STUDENTS AND LECTURERS

---

As part of my Masters degree at University of KwaZulu-Natal I am doing a study on the high failure rate for the Information Administration I & II. I will be investigating lecturer's and students' perception of contributory factors towards the high failure rate in the Information Administration course of the Office Management and Technology Programme in your department.

The methodology I will use is the focused group discussion.. There will be two focused groups. One will comprise of eight lecturers who have lectured in this course for the 1<sup>st</sup> and 2<sup>nd</sup> levels and the other being 12 students who experienced failures in the same course on either or both levels. No sensitive questions will be asked.

I need your approval for me to have access to study participants from our department and to use official lecture time for the focused group discussion.

If you agree to permit me, then a signature in the box below would be appreciated.

Thanking you in anticipation of a favourable response.

|  |
|--|
|  |
|--|

## APPENDIX F

02 December 2009

Student No: 825822309

Mrs R Padiachee  
47 Becton Drive  
Malvern  
Queensburgh  
4093

Dear Mrs Padiachee

**Change in Title: Master of Education**

The Faculty Higher Degrees committee at its meeting held on 30 November 2009 recommended a change in title as follows:

**From:**  
*Lecturers' and students' perceptions of contributory factors towards high failure rate in Information Administration course at a merged University of Technology.*

**To:**  
*Lecturers' and students' perceptions of contributory factors towards the high failure rate in an Information Administration course at a merged University of Technology.*

Yours sincerely,

Nomsa Ndlovu  
Postgraduate Administration

cc: Professor T Buthelezi, Deputy Dean, Initial Teacher Education

**Faculty of Education**  
**Deputy Dean (Postgraduate Studies and Research)**

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■ Howard College

■ Medical School

■ Pietermaritzburg

■ Westville