SYNTONY APPLIED TO CAPE TECHNIKON

STUDENT RECRUITMENT

BY

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Abstract

The pressing need at tertiary institutions in South Africa and, it is believed internationally, is to apply creative ways of recruiting students. The purpose of this research was to explore the effectiveness of social messaging in a multimedia recruitment tool designed for secondary school learners being recruited at a technikon in the greater Cape Town area. The proposed research was not designed to evaluate current recruitment methods, but rather to investigate the potential of an alternative method to recruit both the traditional and nontraditional student at a tertiary institution.

A sample of five schools in the Cape Town Metropolitan area were used for this study. These schools represented a cultural and academic mix, looking at learners from both advantaged and disadvantaged backgrounds. The method used for this research was firstly a presentation of the CD-ROM at the Media Laboratory in the then School of Management, Cape Technikon, which was followed by focus group interviews two weeks later at the same schools.

An interactive CD-ROM – *The Cape Technikon – Tools to empower your future* was created to recruit a multicultural student population, but more specifically to recruit the traditional and nontraditional student to the Cape Technikon. The CD-ROM, being both educational and entertaining, addressed aspects of creating a bond, an affiliation between the student and the institution and to enhance the notion of observational learning through role models in order to encourage decision-making.

The data was codified according to the various categories of the Syntony Filter Matrix Grid. The results suggest that there is a need for student recruitment to be conducted sensitively, taking cognisance of cultural backgrounds and identities, mother tongue, and role modeling. The notion of syntony ought to play an important role in student recruitment at the Cape Technikon.

Abstrak

Daar het by tersiêre instansies in Suid-Afrika, asook internasionaal, 'n toenemende behoefte ontstaan om metodes van studentewerwing te implimenteer. Hierdie studie ondersoek die effektiwiteit van sosiale boodskapgewing in 'n multimedia formaat vir hoërskoolleerders by die Kaapse Technikon. Die studie het nie gepoog om huidige studentewerwingsmetodes te evalueer nie, maar om eerder na kreatiewe, alternatiewe metodes te kyk om die tradisionele en nie-tradisionele student te werf by 'n tersiêre instansie.

Die studie het bestaan uit deelnemers van 5 skole, verteenwoordigend van alle kulture, en beide die tradisionele en nie-tradisionele opvoedkundige sektor. Die metodologie van die navorsing het bestaan uit twee dele: erstend 'n aanbieding van die CD-ROM by die Medialaboratorium, die eertydse Skool vir Bestuurswese, Kaapse Technikon en twee weke later fokusgroeponderhoude met dieselfde leerders by hulle onderskeie skole.

'n Interaktiewe CD-ROM – *The Cape Technikon – Tools to empower your future* is ontwerp om 'n multikulturele studente-groep te werf, en meer spesifiek die tradisionele en nie-tradisionele studente by die Kaapse Technikon. Die CD-ROM, wat beide opvoedkundig en vermaaklik is, adresseer aspekte soos die skep van 'n "geestelike" band, 'n affiliasie tussen student en tersiêre instansie, en stel homself ten doel om deur middel van waarneming te leer en daardeur besluitneming aan te wakker.

Die data was gekodifeer volgens die onderskeie kategorieë van die "Syntony Filter Matrix Grid". Die bevindings het getoon dat daar wel 'n behoefte is by voornemende studente dat die studentewerwingsboodskap

gesensitiseer moet word, inaggenome studente se kulturele agtergronde, hulle moedertaal, en die gebruik van rolmodelle. Die dinamika van sintoniese boodskapgewing in studentewerwingsmetodes behoort in die toekoms 'n belangrike rol by die Kaapse Technikon te speel.

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Chapter 1

1.   Introduction and defining the research

The shortage of skilled manpower in South Africa with specific emphasis on technological skills has been a widespread problem. Industrialisation and technological advancement have been instrumental in bringing about this increasing demand for skilled manpower. Many tertiary institutions in South Africa have responded to socio-political, economic and demographic changes and challenges and the insatiable demands that generate from technology and science for more dynamic, better educated and skilled people. Technology has become a driving force in all countries with technological innovations stimulating most countries' economies (Hamelink, 1977). In South Africa, the present technological revolution requires the 're-skilling' of academic students, in order to cope with changing technology (Reddy, 1996a). Presently it is this academic niche that the Technikons fill in South Africa.

Technikons have been put under extreme pressure to develop skills. Besides this challenge, technikons currently have another challenge, namely their ability to accommodate a multicultural student population, and more specifically the recruitment of the traditional and the nontraditional student. Well-devised and clearly planned policies and procedures for student recruitment and admission are priorities in the recruitment strategy of tertiary institutions.

Institutional research needs to be conducted to better understand the needs

of prospective students as they prepare to train at technikons. In this light the purpose of this research was to explore the effectiveness of social messaging in a multimedia recruitment tool designed for secondary school students being recruited at a technikon in the greater Cape Town area. The research should be seen as an attempt to arrive at responsible answers to questions arising from the means whereby tertiary institutions, in this case, a technikon, could respond to new recruitment demands and pressures stemming from a new student base consisting of both traditional and nontraditional students.

1.1   Formulation of research problems

This study addressed an aspect of research previously ignored at the Cape Technikon, a tertiary level institution in Cape Town; that being to explore the viability of an alternative recruitment tool using interactive multimedia. The proposed research was not designed to evaluate current recruitment methods, but rather to investigate the potential of an alternative.

Prior to the finalisation of the research problems, the definition of a traditional and nontraditional student needed to be clarified. A traditional student is characterised by the high school learner who enrols at a university, college or technikon, or an adult person who was previously involved in an established work environment and required further education at a tertiary institution. This includes the international student needing additional formal qualifications.

In the context of tertiary institutions in South Africa the traditional student

came from historically white universities and technikons (Reddy, 1996 a,b). The picture changed gradually. In 1996 the Cape Technikon represented an intake of 49,8% of black freshmen, as opposed to 19,8% in 1992 (Kok, 1996). Representing all levels of study at the Cape Technikon, the percentage of black students increased from 16,4% in 1992 to 37,2% in 1996. Whilst the largest representation of the traditional student at the Cape Technikon is still the white student, nearly 50% of the new intake in 1996 was black. This showed a sustained increase of black students at the Technikon (Kok, 1996).

The nontraditional student in South Africa has been characterised as financially and educationally deprived, the minority student, the disabled, disadvantaged student and the student with limited resources (Brown, 1991; Sagaria and Johnsrud, 1991; Robertson and Frier, 1994; Opp and Smith, 1994; Scott, 1993; Gares and Delco, 1991; Zook, 1994; Bents and Haugen, 1992). The National Commission of Higher Education, also referred to as the NCHE, defined the nontraditional student as the politically deprived student, the student from a low-income group, someone from a low educational and occupational status, the disabled and disadvantaged student (Reddy, 1996 a, b). For the purpose of this study reference is made to the disadvantaged student as the non-traditional component prior to a non-democratic South Africa (Reddy, 1996 a, b).

American literature also refers to the nontraditional student as the 'minority student' (Zook, 1994; Bents and Haugen, 1992). The nontraditional student includes the adult student returning to a tertiary institution or entering a college, university, technikon, for the first time to pursue a second career. This adult learner typified

being financially secure, offering some years of productivity to society.

The term student recruitment is used in this study as it has been defined by Collins (1982), meaning 'to enlist, to enrol or obtain members'. According to Wanat and Bowles (1992) recruitment means 'to attract high school learners to attend a college for tertiary academic education'. Williams and Cox (1991:41) defined recruitment as a multifaceted campaign to make individuals aware of the community tertiary institution.

The South African education system acknowledges the Standard 10 (Ten) level education as Matriculants, or Grade 12. In 1997 the education system substituted 'pupil' with *learner*.

Throughout the research recruitment was inherently viewed as a process to encourage an appropriate 'student-institution fit'. This process allowed the prospective student to feel attracted or not attracted to a specific institution and a specific course, and have a clear understanding of this process. Wanat and Bowles (1992) highlighted certain determining factors that do attract students, namely the institution's reputation, financial constraints, influence of scholarship, honorary awards, recruitment tactics, campus qualities, the role of the family, friends and school personnel.

McDonough (1994) believed that recruitment was the result of interacting processes in which student college choice and institutional recruitment of individuals were regarded as separate but interacting phenomena. Previous studies (Brown, 1991; Sagaria and Johnsrud, 1991; Robertson and Frier, 1994; Opp and Smith, 1994; Scott, 1993; Gares and Delco, 1991; Zook, 1994; Bents and Haugen, 1992)

proved that politics and socio-economic status were the driving forces with regard to recruiting the ethnic and minority student in the USA. This was similarly found in research done in South Africa (De Boer, 1992; Prinsloo, 1995; Arthur, 1992; Janse van Rensburg and Prior, 1993).

In the past, the tertiary institution was basically interested in the recruitment process *per se,* the dropout rates of students and the retention of students (Sagaria and Johnsrud, 1999, Harris *et al.,* 1995). Emphasis was placed on marketing the institution (Kempen, 1991). The assumption could be made that if the prospective student and the tertiary institution were a good 'match', the drop-out rate of students would be minimised, and *ipso facto* the government subsidy to students would be unaffected.

It was hoped that this research could contribute to recruitment strategies at a South African technikon by achieving the following: namely, to provide both the student and Technikon recruitment personnel with a clear understanding of the impact of an interactive multimedia recruitment tool, and suggest areas for future research, in which the broad dynamics of social messaging could be analysed and documented for use in the recruitment process.

An interactive CD-ROM multimedia recruitment tool was made by Cape Town based communication specialists in consultation with this researcher. It was tested in the research process. It provided an alternative recruitment method in which the students' cultural backgrounds were acknowledged and interactive technology was used to influence information retrieval and decision-making. It provided the basis for information gathering used in this study.

Against this brief discussion, the two research questions addressed in this study were:

1.   What kind of social message could address the needs of the traditional and nontraditional student within the South African context?

2.   How does recruitment information in a multimedia format assist a prospective student in making a decision about a tertiary level education programme?

1.2   A need to sensitise student recruitment tools

In South Africa, edutainment has been incorporated into a number of programmes to assist in voter education and Aids education programmes. The successful soap opera known as 'Soul City' has dealt with social issues ranging from child and spouse abuse to alcoholism and racial concerns.

Edutainment is the symbiosis of education and entertainment. Singhal and Rogers (1994) emphasised that mass media programmes fulfil the need of entertainment and education, of which the soap opera is a good example. Edutainment is aimed at targeted audiences, at the various societies, and through edutainment social learning takes place. Edutainment, engages the audience on all levels and it is through this that messages empower the audience, allowing self-growth and personal change.

Social change is a process that occurs over time. Social change intends to change attitudes and behaviour of people, and ultimately affect their decision-making processes. Social learning and social change are well represented in the

works of Albert Bandura (1977) and Evert Rogers (1995), and a later stage the works of Miguel Sabido (Singhal, 1990).

It is argued that social messaging is a key method of recruiting prospective students to tertiary institutions. The method constitutes a form of organised communication campaigns that influences decision-making among its target audiences.

Miguel Sabido, a Mexican television producer of successful edutainment programming, is credited with the re-defining of a key word associated with social messaging. Syntony is derived from the Greek word *suntonus,* which according to Collins Dictionary (1982) means to be 'in harmony with'. The Chambers Dictionary (1975) explains the meaning, namely 'tuning, or agreement in resonance frequency of wireless apparatus'. Syntony was originally used in the field of electronics, more specifically radio communications where the reception of the message required a clear signal link between the transmitter and the receiving device (Fenzel, 1989). Sabido (Singhal, 1990) defined syntony in his Tonal Theory, namely to fine-tune the messaging to meet cultural linkages within defined settings. The analogy learnt from radio electronics, namely fine-tuning has been applied in this research to the prospective student at the Cape Technikon. The prospective students were provided information determined to be ' fine-tuned' to meet their decision-making needs about whether a particular School of Management course would fit their interests.

1.3   A meta-theoretical approach to Syntony

The research was also based on the underpinnings of theories; namely

Bandura's Social Learning Theory (Bandura, 1977), Rogers's theory on Diffusion

(Rogers, 1995) and Maclean's theory on the Triune Brain (Nariman, 1993). Each of

these theories contributed in specific ways. Social Learning Theory implied that man

learns from direct experiences as well as from observation and modelling. It was

important to foster the acquisition of a mimetic behaviour (Bandura, 1989, Lee and

Robbins, 1995), to imitate role models used in this research. The latter served as the

'glue' between the students and the tertiary institution. In harnessing this social

connectedness, another creative force, diffusion needed to happen.

In order to measure the effectiveness of this novelty, the innovation being the

multimedia tool, had to 'live' through various stages and be diffused to the various

levels of the target audiences. While viewing the CD-ROM, certain participants were

early adopters, some were late adopters, some were even laggards. This meant that

some students immediately accepted the Cape Technikon courses as the 'right fit',

while others took longer.

Maclean's theory on the Triune Brain (Nariman, 1993) was applied in order to

see whether the contents of the CD-ROM were understood in three levels of

perception, namely cognitively, affectively and predispositionally. The first level

determined an intellectual understanding of the contents of the CD-ROM. The

second level determined whether the viewer was affected by the contents or not.

The third level of perception, namely predisposition determined the viewer's

tendency or inclination to receive social messaging that assisted with decision-making (or not) on future careers and tertiary institutions. Ultimately the theoretical tenets provided a foundation for the structure and design of messages. The selection of role players and overall conceptualisation of the multimedia were then incorporated in an edutainment form as the driving force within the multimedia recruitment tool for the Cape Technikon.

One of the aims of this research was to contribute towards the recruitment process at the Cape Technikon and to illustrate that a multimedia recruitment tool could serve as a vehicle to obtain the 'right' student for the 'right' course. This attempt acknowledged the students' background and culture so as to create a sense of belongingness and social connectedness to a tertiary level education institution. The contents of the multimedia recruitment tool addressed both a South African interpretation of a traditional and nontraditional student.

In Chapter One attention was given, in broad terms, to the need for the research. The terminology and related concepts used in the research have been defined and discussed. Chapter Two is a review of the literature relating to the research. Chapter Three outlines the methodology used to conduct the research. In Chapter Four the results of the research are presented and the research questions are addressed. Chapter Five is a brief discussion of the recommendations for future research.

Chapter 2

Literature review

The literature review to follow has shaped this research in five main areas, namely the role of tertiary institutions, the role of students, the role of student recruitment *per se*, the cultural messaging of recruitment tools, and lastly the necessity of syntony, a shaping process in the recruitment process.

The American literature is particularly rich in studies involving the recruitment process at various colleges, universities and businesses. Valuable work had been done in specific schools at tertiary institutions, such as special recruitment efforts in social work (Berger, 1991; Fellin, 1983; Oliver and Brown, 1988), and teacher preparation programmes at the Florida State University (Jones, 1991), as well as the recruiting and retraining in special education teacher preparation programmes at the University of Cincinnati, Ohio (Franklin and James, 1990) were noted. Technology education showed widespread growth in the United States and to sustain the need for technology graduates special recruitment programmes were regarded as a necessity (Daugherty and Boser, 1993:31).

Recruitment literature also indicated factors that negatively influenced the enrolment by reducing promotional outreach to minorities. Views that education was regarded as totally 'out of their reach' and 'not worthy of pursuing' (Oliver and Brown, 1988) contributed to this negativity. Bender and Carter (1994:55) posed a collaborative effort of recruitment between community partnerships, businesses and tertiary institutions. However, they warned that all information should be kept

extremely confidential, as it dealt with ethical issues. Any leaks about student/client

information, plans or intentions would be detrimental. Another ethical issue was

negative selling, which was 'pointing out negatives of a competing community...to

knock the other guy' (Bender and Carter, 1994:55).

2.1.   The importance of tertiary institutions: political, socio-economic determinants

The literature relating recruitment to socio-economic and political factors was

characterised by work from theorists within the disciplines of education, economics

and sociology. Blakemore and Cooksey (1981) considered education, economics

and sociology as closely bound together. An interdisciplinary link with relation to

recruitment of students at tertiary institutions should exist. To establish an affiliation

with the institution, sensitivity and selectivity to the variety of cultures should be

analysed, only because the recruitment package or recruitment tool was

acknowledging the different cultures and backgrounds.

Political, economical and educational determinants have shaped student

recruitment nationally and internationally. In South Africa, the establishment of

technical education occurred as a result of changing economic needs at the turn of

the century. Restructuring took place. Acts concerning education were revised and

rewritten.

In terms of the Act for Advanced Technical Education (Act No.40 of 1967)

technical colleges were declared 'Tertiary Education Institutions' with the specific

purpose of providing advanced technical education and training. Technical colleges

of the Cape, Natal, Pretoria and Witwatersrand were from the status of colleges to

stimulate advanced technical education (CATE).

In 1979 the Advanced Technical Education Amendment Act (Act No.43 of 1979) was adopted and these CATEs were allowed to change the name to Technikon. (The existing CATEs were then known as technikons.) To these institutions other colleges were added, like colleges at Vanderbijlpark, Port Elizabeth and M L Sultan. New technikons were established, of which there were presently fifteen in South Africa (Reddy, 1996; Sidiropoulos et al., 1995).

In 1986 the Certification Council for Technikon Education Act (Act No.88 of 1986) came to pass in the Parliament, and established the Certification Council. Technikons spearheaded the technological developments, which stimulated the economy and growing needs of commerce and industry. The Technikons Act (Act No.125 of 1993) was passed in July 1993 and made it possible for technikons to award degrees. Since 1994 technikons awarded degrees and contributed to a better balance between career and academic education (Cooper et al., 1994).

In February 1995, the National Commission on Higher Education (NCHE) declared in the South African Government Gazette Number 5460 (Appendix 1) the necessity of restructuring South African higher education to ensure development of an integrated, high quality system of higher education (Reddy, 1996).

South African technikons became technical-orientated domains as opposed to pure academic-related domains. The implementation of certain B Tech, M Tech and D Tech degrees at technikons were regarded as drawing cards to technikon institutions. The question arose: in which way does technikon recruitment fulfil their role as gatekeeper in order to recruit the prospective, appropriate student and retain their student population?

The focus was on developing skilled professionals, which was supplied by technikons as opposed to universities. Technikons in South Africa became autonomous institutions (Reddy, 1996). They have councils fully responsible for their own management. The Government does not prescribe the determination of the conditions of service for these educators.

The eradication of apartheid permitted all people represented in South Africa participate in the building of a democratic future. The Government of National Unity's Reconstruction and Development Programme (RDP) constituted an integrated, coherent socio-economic policy framework. The key principles, if they were linked together, provided the empowerment, security and happiness for all citizens in South Africa. The six principles are: an integrated and sustainable programme, a people-driven process, peace and security for all, nation-building, the link of reconstruction and development in order to acquire democratisation of South Africa (Western Cape, 1996). Reddy (1996) reiterated that above-mentioned qualities of the RDP were interrelated and would bring about desired social change if put into practise.

The Reconstruction and Development Programme (RDP) (1995) captured and contextualised the essence of the National Government's agenda for development and sustainable human development. The underpinnings of the RDP, if linked together, would provide the security and happiness all South Africans were searching for. (The Reconstruction and Development Programme, 1994).

South Africans' wellbeing relies on stable political, economic, socio-cultural environments (Human Resource Development in the RDP, 1995). The vision and objectives of the

RDP are:

- the RDP links reconstruction and development in a process that will lead to growth in all parts of the economy, greater equity through redistribution, and sustainability

- attacking poverty and deprivation as a priority, where the RDP facilitates and addresses issues of social, institutional, environmental and macro-economic sustainability in an integrated manner

- improve the quality of life of all South Africans, and in particular the most poor and marginalised sections of our communities which can be acquired by a process of empowerment

- the basic needs rest in four areas, namely creating opportunities to develop to their full potential, the boosting of production and household by means of job creation, productivity and efficiency, employment, better access to basic physical and social services, health care and education and establishing a social security system to protect the poor, the disabled, the elderly and other vulnerable groups (The Reconstruction and Development Programme, 1994:15,16).

The government expected to have the RDP principles applied in all spheres, as well as in an educational environment. These principles are interrelated and would hopefully bring about desired social change. Education is an instrument of fulfilling a better personal experience, productivity, job opportunities and social mobility providing equal opportunities to all. A relationship between education and economy was the answer. The latter meant a marriage between economical,

political and cultural factors which would lead to a higher standard of living,

prosperity and success, a growth and a larger enquiry to manpower which will

function in skilled, trained positions. Without highly skilled manpower, especially in

technology, South Africa's economy would not achieve substantial growth (Steyn,

1991).

Nelmapius (1994) cited that SA Technikon was striving to develop policies to

support and implement the RDP policy statement to redress imbalances of the past.

The institution was working towards a goal to empower the community to make

distance education accessible to all, keeping within market requirements and

collaborating with industries and through community partnerships. The mission of

the technikons in South Africa was to promote and provide affordable, cost-effective,

quality career education and research for the needs of the developing South Africa.

Garson (1994a) stated that education and training form a vital part of human

resource development, which interrelated with the principles of the RDP. People

development needs urgent priority to ensure South Africans broaden their

knowledge, skills and competencies. This integration of education and training was

to become the driving force of the RDP, because learning occurred at the

workplace, tertiary institutions and at home as a lifelong learning experience.

An initiative between the university and technikon, Utec (University

Technikon Educational Co-operation) envisaged co-operative ventures to bring

education to disadvantaged rural areas in Mpumalanga. The emphasis was to bring

low cost education into rural areas without removing the people from the economy.

Distance education was made possible with additional learning centres situated in

the province. Previous imbalances in education of the past were redressed (Garson,

1994b).

The South African government had sharpened its focus on all people's needs in order to experience the awareness towards sensitivity of a personal experience and better economic conditions. A transformation period was inevitable. It involved a 'restructuring, reviewing and redirecting of existing programmes, institutions, and a reallocation of resources according to new priorities' (Human Resource Development in the RDP, 1995:9). Higher education systems moved from a closed to an open dynamic interactive intellectual system - a notion of moving from privileged middle class constituencies of elite institutions to non-elite communities. Academic qualifications were allowed to all people, which in turn created greater social accountability. This required a dynamic interaction between higher education and society (Reddy, 1996:48,49).

The National Commission on Higher Education (NCHE) (1996) was established by the government to investigate the restructuring of higher education to ensure development of a well-planned, integrated, high quality system of higher education (Reddy, 1996). This discussion document, also called A Framework for Transformation contained 49 proposals, in order to address all inefficiencies and inequalities practised during the apartheid existence. A transformation period had to bring about focus on equity, democratisation, development, quality, academic freedom, institutional autonomy, effectiveness and efficiency within the structure of higher education in South Africa (Reddy, 1996a).

To understand the impact of the NCHE one had to view the situation prior to this Commission. The position of the South African higher education during apartheid was one of inability, ineffectiveness, restriction, unevenness and disparity,

if one considered the following facts, that:

- there was stark racial disparity in student access. In 1993 Africans had a participation rate of 6,3 percent which was below that of whites, who was 54,4 percent, and Indians whose participation rate was 62 percent (Reddy, 1996a,12)

- the historically black universities and distance institutions attracted the majority of Africans. In 1991 less than 35 percent black students enrolled for professional degrees in business, computer science, agriculture and engineering. More than 70 percent were white students. The denial of adequate access to science, engineering and technology at tertiary institutions of the historically black student's choice effected this position. Not less than 80 percent of South Africa's human resources in above-mentioned fields were white. A severe shortage of graduates in these disciplines was evident. Business, computer science, agriculture and engineering basically formed the driving force of South African economic development (Reddy, 1996a:13)

- it also elucidated the inability of higher education to provide the human resource needs of South Africa. In 1993 the enrolment in sciences was 67 white students to one African student, and specifically in the field of engineering the enrolment was 148 white students to a single black student.

- the apartheid schooling system restricted black students to enter particular disciplines in the natural sciences. This was proven by the fact that one black school learner to 60 white school learners obtained matriculation exemption in physical science and mathematics, which resulted in a disadvantaged

schooling system for black learners by entrance requirements for higher education. Black students were therefore disqualified and these facts reflected uneven, unequal and inefficient evidences of a South African education system.

- a concern of a low throughput rate indicated a high drop-out rate and/or a high failure rate. At technikons the throughput rate was worse than universities. Historically white universities had a more efficient throughput rate, while historically black universities were experiencing high drop out and failure rates. In 1990 the throughput rate for white technikons for three-year diplomas was 15 percent as opposed to black technikons' rate of 9 percent. The low student output was due to the high drop-out rate and this increased with particular levels of education, namely at masters and doctoral levels.

- gender inequalities at technikons were also evident. In 1993 33 percent of students were female, which was significantly under-represented in scientific and technological domains, and more specifically at postgraduate levels. In undergraduate levels of engineering there were 12 males for every female.

- disparity also took its toll in the field of staffing. At both technikon and university, Africans were at the bottom of the ladder. In 1990, 92 percent of staff were white at universities.

- the apartheid structure was imposed on universities, technikons and teacher training colleges. It was benchmarked by no single overruling department but by various departments functioning independently. For example: three separate departments of education were responsible for the three sub-sectors of higher education for whites, coloureds and Indians, and six

departments of education were responsible for some technikons and some colleges for Africans. This was directly the result of fragmentation in the education system causing conflict, irregularities, ineffective functioning and inequalities.

• funding from the government became a major concern. In 1983 a new funding formula was introduced to white universities, while the black universities were funded by a mixture of budget funding. In 1985 all universities, excluding the TBVC universities, were granted the same formula as white universities. This formula did not take accelerated growth in student enrolments at black tertiary institutions into consideration. This brought about inconsistencies, distortions and inequalities in the university and technikon sectors. The fragmented and divided government administration of institutions in the 1980s and 1990s contributed to the inability in government to target funding efficiently and brought about financial inequalities between white and black institutions (Reddy, 1996:2-24).

These changes envisaged by the NCHE had to permeate the broader communities and become the hallmark of healthy educational change in South Africa. An environment was created for the technikon to play a prominent role. Nelmapius (1994:28) confirmed that the technikon had a 'commitment to socio-political change and the kind of corrective action that would redress the imbalances of the past, liberate the potential for growth and empower the community for the future'.

A major criticism of the RDP was that it focused on development and distribution,

and not growth, macro-economics and investment. By early 1996 RDP objectives were restated, and a macro-economic plan was published, focusing on growth. In June 1996 Gear (Growth, Employment & Redistribution) framework was introduced by the Minister of Finance, Trevor Manuel. It was envisaged that Gear would complement the role of the RDP. Gear's focus was to create sustainable employment growth, job creation, job enhancement and full employment (Financial Mail, 1998:22, 27 February). In turn, according to Hazelhurst (1998), job requirements have become more sophisticated, while skills training and education have not. Since 1996 it is evident, that instead of a student completing his/her studies with the hope of being appointed in a new job, he/she is faced with the possibility of unemployment. Osborn (1997:26-36) mentioned that during 1996 there had been about 64 000 job losses. This showed the fallibility of Gear, even if the Government meant well.

The previous scenarios all lead to the making of The White Paper on Higher Education which was released on 24 July 1997. Governing bodies and structures began to set the agenda for transformation, eventually legislated by the Minister of Education. Focus was put on interpreting the new education policy, a language policy, resolving conflict, setting the agenda on change and improving the institutional culture (South Africa Yearbook 1998:324).

These changes were permeated in the broader communities. The technikon was committed 'to socio-political change and the kind of corrective action that would redress the imbalances of the past, liberate the potential for growth and empower the community for the future' (Nelmapius, 1994:28). By early 1996 the RDP objectives were restated. A macro-economic plan that focused on growth was

published, namely *Growth, Employment and Redistribution (Gear)*. This plan was

announced in May 1996. According to *Gear* projections 126 000 new jobs were to

be created in 1996, 252 000 in 1997, 246 000 in 1998 and 320 000 and 409 000 in

the following two years. However, job opportunities continued to fall, jobs had

disappeared (Hazelhurst, 1998).

Another force to reckon with is the effect of technology on work practices.

According to Hazelhurst (1998) the discovery of the computer chip has brought a

decline in the cost of capital equipment and human beings have to compete with

cheap chips and other hi-tech equipment. She emphasised that the dynamics of

technology had changed the composition of the work force, namely that

> in 1981 about 15% of the work force was made up of skilled artisans,
> 17% of middle-skilled workers and 69% of lower-skilled workers. Now 17%
> are skilled, 55% middle-skilled and only 28% lower-skilled...job requirements
> have become more sophisticated, education and skills training not.

To understand the changing face of South Africa, one had to value the

strategic position of South Africa on the African continent and the leading roles it

plays in various fields. South Africa now became a developing country in a

developing subcontinent and could contribute to bring about change. Since 1994

South Africa had been openly re-introduced to the international community. An

open door policy was possible - financially, diplomatically, politically, socially,

educationally and demographically. After the 1994 elections South Africa was

given exciting challenges. Schools, universities, colleges and technikons became

'open' markets for obtaining education, without discrimination against race, creed

and colour.

2.1.1 Technology in tertiary institutions

A recognised educational qualification at a tertiary institution, and more

specifically technikons and universities would fulfil the academic and technological

needs of South Africa. It was stated in the publication *A research philosophy for*

Technikon Education (CTP002 1989) that the task of the technikon 'revolves around

the practice of technology (rather than science development). Technology

comprises the application of existing scientific knowledge in commerce and industry.

The practice of technology therefore has its origin in the application for existing

scientific knowledge. The practice of technology covers not only the natural

sciences and engineering fields, but is also applicable in the areas of the humanities

and management.'

The South African economy thrives on the surplus of technical skill-related

professions. Qualified skilled-trained manpower was dependent on students

studying, acquiring more knowledge. The education at the technikon related

positively to technological development, which was 'indispensable for economic

growth and sociopolitical stability'. Economic growth and educational systems were

to produce skilled manpower as a requisite for technological advancement and

economic growth. Our country required a sound economic infrastructure (Steyn,

1991).

Events occurring in South Africa after 1993 painted a different picture. The

Technikon Act was passed in July 1993 that allowed technikons to award degrees

from 1994 (Cooper *et al.*, 1994). Apartheid was finally eradicated in 1994. In

February 1995 the National Commission on Higher Education declared the

necessity of restructuring South African higher education needs (Reddy, 1996a).

The changes that were about to occur were that Africans and Indians were given

access to all universities and technikons. The total enrolment of blacks rose from 32

percent in 1993 to 53 percent of the total enrolment in 1995. Degrees were offered

at technikons from 1993 and the same university staff categories, such as

professors, were appointed. There was an influx of international academics filling

academic and management positions at tertiary institutions, specifically those who

had returned from exile. One single Ministry of Education was appointed over all

education systems in South Africa. This Ministry would foster the reconstruction and

development principles. The financial crises were rectified by means of the shift

from the budget funding to one of formula funding. In some cases extra funding was

made available to address irregularities of previous years. International funding was

also made possible to assist the development of universities and technikons

(Reddy, 1996a: 24-26).

Despite the changes, Smith (1994) refuted the stable condition of education in

South Africa in an article in *Finance Week* of 22 September 1994. He stated that

although the reconstruction and development white paper implied hope to an

education situation, national education was in a sorrowful state. He emphasised that

human resource development, education and training had to become key inputs into

policies aimed at higher employment. More advanced technologies had to be

introduced in order to reduce inequalities.

Tertiary institutions were affected by the provision of governmental budgeting.

The report on 'Public expenditure on education in South Africa, 1987/8 to 1991/2'

by Peter Buckland and John Fielden of the Centre for Education Policy

Development in Johannesburg, expressed its concern about an unfair slice of the budget allocated to primary schools, a 70 percent, as opposed to 10 percent for universities, 2,4 percent to technikons, and 1,5 percent to technical colleges. Smith (1994) reiterated that these allotments were pathetic, taking into consideration that South Africa hosted nearly 12 million students at 27 500 educational institutions which was served by 470 000 staff of whom 370 000 were educators. The budget allotments did not correspond with the numbers and needs of educational assessments in South Africa at that point in time.

According to Reddy (1996b), in South Africa this has become alarming if one takes into account the distribution of resources between historically white and historically disadvantaged institutions. A mismatch was created between the educated and trained and what commerce and industry require (Reddy, 1996b). However, faced with a severe shortage in technically educated students in South Africa, struggling economy, unemployment, South Africa needs students who can contribute only by receiving the right training and skills. Those students from disadvantaged communities often lack adequate career guidance to make informed choices regarding the nature of their tertiary studies. It would be very difficult to fill that need without more young students from a broader base of prospective students.

This led to certain restrictions, such as, the historically black tertiary institutions showed an inability to generate income from investments, donations, grants and contracts to that of historically white institutions. There was an absence of a rational student financial aid scheme. Large numbers of students from economically deprived backgrounds could not pay their tuition fees and access would be denied. Inefficiencies in the tertiary system arose from the application of

the subsidy formula and the fragmented and divided government administration of

institutions in the 1980s and early 1990s contributed to an inability in government

funding for technikons and universities. The failure of students to meet rising costs

of higher education left students with accumalated debts that were owed to

institutions. These factors all affected the funding of students at tertiary institutions

(Reddy, 1996a: 21-26).

Reddy (1996b) stated in a proposal in *A Framework for Transformation* of the

NCHE that funding should encourage the principles of equity, development,

democratisation, efficiency, effectiveness and financial sustainability, financial

resources, and proper governance and that shared costs should be practised. They

hoped to place the students from socio-economical disadvantaged backgrounds in

favour. Funding had to be made available for instruction, research, institutional

support, student support and development activities. Although the total state funding

of universities and technikons had increased by 23 percent between 1992 and 1993

to R2,3bn (Cooper *et al.,* 1994:732). A national student funding aid scheme for

universities and technikons was to form 'the basis of a more comprehensive, long-

term policy on aid by the department of education with appropriate higher education

interest groups' (Reddy, 1996b: 8,9).

The role of the technikons fulfils specific needs in the marketplace. Commerce

and industry become vital partners with technikons. The policy of co-operative

training with industry is important, and vice versa, the industry has an important say

in the curricula presented at technikons. This ensures that the student has both

knowledge and skills that are work-related. In order to be competitive in the new

technical global market, all workers would have to acquire higher order skills, such

as, according to Robertson and Frier (1994), 'problem-solving skills', to be 'creative thinkers, able to respond quickly to changing technologies'. Technikons are traditionally known for practical career-orientated education and promote an important interdisciplinary policy of co-operative training with the industry (Van Zyl, 1994).

The future of technology at technikons was critically linked to the future of technology in South Africa. The role and contribution of technikons in South Africa and the central stakeholders (students, staff and management) involved, became more profound than ever. Tertiary institutions would provide education in order to supply 'the labour market with people who have particular skills, adequate technological and practical knowledge, and the necessary qualities to play a leading role in a working community' (South Africa Yearbook, 1998). Steyn (1991) defined the role of technikons to fulfil 'technocratic and pragmatic societal needs rather than to purely disciplinary needs'.

Daugherty and Boser (1993) cited in their study that technology education in the USA had experienced widespread growth only after a decade of curricular and programmatic change in their syllabi at schools. The shift was from a base of academic to skill development to a further dimension based on exploration and problem solving in a broad spectrum of technologies (Daugherty and Boser, 1993).

The accelarating technological change in the world and the impact it has on society, forced South African governmental authorities to address this matter and re-examine the curricula of high schools and tertiary institutions. This was posed in the document 'A Framework for Transformation', addressing all inefficiencies and inequalities within the structure of higher education in South Africa (Reddy, 1996a).

This later led to the White Paper on Higher Education (24 July 1997). All governing

bodies and structures in the educational field were to set the agenda for

transformation (South Africa Yearbook 1998). Syllabi of schools, including technical,

commercial high schools and governmental schools had to be changed.

By comparison, in 1995 eight of the ten fastest growing occupations in the

United States were science or engineering based. Demand for employees would

increase by 28 percent, and by the year 2010 America could face a shortage of a

half a million technically trained professionals. These statistics were relevant to the

United States. Denbo and Fenster (1991:9) reiterated the importance that American

academic institutions urgently need to increase enrolments in the field of technically

trained professionals. This need should be made aware at a very young age, as

early as in primary school. This would force schools to train more school teachers in

handling mathematics and science in an expert manner.

Reddy (1996:15) stated that black South African women were

underrepresented in the professions that require scientific and technological

training. A significant proportion of African women was enrolled for part-time studies

in education, languages, the social sciences and humanities at Vista University and

Unisa.

2.2   Role of students

Students were categorised into two groups, namely the traditional and

nontraditional students. The traditional student was characterised by the matric

learner needing further tertiary studies. The nontraditional student was

comparatively different, namely the disadvantaged, the minority student, the disabled student, the mature adult learner and the alumnus.

The disadvantaged student or the minority student in South Africa represents the historically black and coloured student, who çomes 'from economically deprived backgrounds' (Reddy, 1996a). Levin (1989) defined this group in an American context, namely as 'disadvantaged' - those 'who are likely to experience low educational achievement and years of schooling completed because of a lack of appropriate resources in their homes and communities'. The 'majority students' pointed at white students from historically white universities, technikons and colleges (Reddy, 1996a). The disadvantaged student constituted the nontraditional student for the study.

The National Manpower Commission (1994) indicated that between 1987 and 1992 there was an increase from 56 446 to 113 870 student enrolments at technikons in South Africa. This was a rise of 113 percent. The 1993 student enrolment breakdown showed that 20 percent were African, 6 percent were coloured people, 11 percent were Indian and 63 percent were white. The greatest proportional increase occurred in the black enrolment (Cooper et al., 1994).

It could be assumed that any projections made for students and student recruitment in the future should increase. The reasons being: due to a higher raise in governmental subsidies towards studying at tertiary institutions, a perplexed and turmoiled situation of the Ministry of Education which would be stabilised in the near future, an inherent desire and tendency to further one's education to a higher level (which was not always possible for minority and disadvantaged students), and the fact that tertiary education was made accessible to all with available bursaries,

stipends or financial aid.

The following table indicated the technikon enrolment which was made possible by the Development Bank of Southern Africa (DBSA).

Table 2-1   Technikon enrolment by race from 1985-1994, as stated by

Sidiropoulos *et al.* (1995)

	African	Coloured	Indian	White	TOTAL
1985	1 604	2 765	3 680	51 069	59 118
1986	3 150	811	3 467	36 062	43 490
1987	6 390	4 570	3 941	41 545	56 446
1988	6 635	4 928	4 695	40 557	56 815
1989	11 625	6 291	6 624	51 257	75 797
1990	17 452	7 941	7 243	60 085	92 721
1991	25 298	8 946	6 743	64 735	105 722
1992	28 699	9 783	6 847	68 541	113 870
1993	43 949	11 820	7 787	74 887	138 443
1994	65 150	13 662	8 917	80 156	167 885

Derived from above information from the table, the following was to be noted:

• the total number of students who enrolled at technikons increased by 184 percent during the ten year period from 1985 to 1994

• the largest increase was experienced among the Africans, namely 3 962 percent

• the smallest increase was among the whites, namely 57 percent

• coloured enrolments increased by 394 percent, while Indians increased by 142 percent

• white students were among the most who registered at South African

technikons, namely 86 percent, while Africans were the lowest, namely 3

percent in 1985

- in 1994 the whites represented 48 percent, while only39 percent African

    students , 8% coloured students and 5% Indian students were registered in

    total

- the coloured students increased to 8 percent of the total in 1994 and Indians

    dropped to 5 percent

- the ratio of white students to African students in 1985 was 32:1, and by 1994

    the ratio increased significantly to 1,2:1

- the ratio of white students to Indian students in 1985 was 14:1, and by 1994

    the ratio was 9:1

- the ratio of white students to coloured students in 1985 was 18:1, and by

    1994 it was 6:1 (Sidiropoulos et al., 1995).

According to the Profiles of the Cape Technikon (Kok, 1996) the student

profiles for the first semester 1996 looked as follows: the African students

represented 12%, the coloured students were 23%, the Asian students were 2% and

the white student represented 63%. Tertiary institutions in South Africa should

envisage to expand their commitment to recruit the disadvantaged students. A

process of change would be required to address the minority populations, the

disabled student, gender-related issues on the campuses The NCHE and later the

White Papers on Education (Reddy, 1996a: 9-26) sought to address through its

policy proposals all disparities and inequalities of the past.

According to the census of the Cape Technikon for 1998 the representation

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of all registered students per academic school looked as follows (Wessels, Richter

and Kok, 2000):

Table 2-2   All registered students ethnic composition per academic school for

census taken on 15 March 1998

Students	BUS	MAN	ELEC	MECH	CIVIL	ARCH	LIFE	DESIGN	EDUC	HOTEL
Totals	2340	2210	879	1297	842	345	836	565	508	279
African	313	496	130	259	165	29	116	27	307	10
Indian	75	39	36	39	16	5	4	14	3	1
Coloured	877	657	195	315	262	53	163	74	111	21
White	1075	1018	518	684	399	258	553	440	87	248

The total registered students for 1998 at the Cape Technikon was 10 091.

The representation for students at the School of Management for 1998 was in total

2 210 students, of which the African student represented 496 (22%), the Indian

student was 39 in total (2%), the coloured student was 657 (30%) and the white

student represented 1 018 (46%).

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Table 2-3　All registered students ethnic composition per academic school for

census taken on 15 March 1999

Students	BUS	MAN	ELEC	MECH	CIVIL	ARCH	LIFE	DESIGN	EDUC	HOTEL
TOTALS	2319	2142	835	1174	825	353	854	557	472	286
African	377	545	154	255	177	32	143	27	310	15
Indian	82	43	27	30	16	3	4	14	4	1
Coloured	871	641	197	298	245	59	187	58	88	29
White	989	913	457	591	387	259	520	458	70	241

The total registered students for 1999 at the Cape Technikon was 9 817. The

representation for students at the School of Management for 1999 was in total 2 142

students, of which the African student represented 545 (25%), the Indian student

was 43 in total (2%), the coloured student was 641 (30%) and the white student

represented 913 (43%).

Table 2-4　Comparison between student headcount of 1998 and 1999 at the

School of Management, Cape Technikon (Wessels, Richter and Kok,

2000)

Student Headcount Registrations – First Census 15/3/1998 vs 15/3/1999	SCHOOL OF MANAGEMENT
1998 : 10 091	2210
1999 : 9817	2142

A comparison between School of Management in 1998 and 1999 were as follows:

- The year 1999 brought about a decline in student registrations at the School of Management, namely 68 students less than the previous year

- For the totals for the Cape Technikon in 1999 the decline in student registrations was 274 students

- white students were among the most who registered at the Cape Technikon, namely 52 percent in 1998 and 50 percent in 1999, while the African students represented 19 percent in 1998 and 20 percent in 1999

- the representation of the coloured student was 27% for both years

- the Indians rose from 2 percent in 1998 to 3 percent in 1999

- the ratio of white students in the Cape Technikon to African students in 1998 was 2,9:1, and by 1999 the ratio was 2,4:1.

2.2.1   Prototypes of nontraditional students

2.2.1.1   Focus on the prototype of nontraditional students

There was a need for few but innovative approaches to technikon student recruitment and even more so in approaches to students from the nontraditional sector. Although tertiary education in South Africa was facing an identity crisis due to recent educational changes, instability in the Ministry of Education, changes in curriculum and proposed implementation of degrees at technikons as confirmed by the Technikon Act of 1993 (Reddy, 1996a, b, c), it became a matter of urgency to recruit all types of students, more specifically students from nontraditional

backgrounds (Reddy, 1996a).

2.2.1.2   Focus on disabled students

Although this research does not focus on disabled students *per se,* it is

necessary to note that any student base needed to accommodate a variety of

disabled students. Students in wheelchairs needed to be taken care of, those with

certain learning disabilities, students who are deaf and dumb, blind, those with other

handicaps not mentioned here.

It was only recently that new emphasis was put on human rights and that

various state and social institutions invested in special efforts to promote the

rehabilitation of physically disabled people. Unfortunately the contrary also existed.

So many negative social attitudes towards disabled people became a major

hindrance in social rehabilitation and reintegration (Kennedy and Itkonen, 1993;

Florian and Kehat, 1987; Martin and Bowman, 1985; Evenson and Evenson, 1983).

In order to accommodate disabled students at tertiary institutions, it was vitally

important to require changes in attitudes and therefore develop unique designed

programmes in which they could excel.

There had been many appeals to greater acceptance by the general public.

Acceptance could be shown by hosting them in classes, build a ramp for

wheelchairs or special lifts in buildings, plan development of rehabilitation

programmes that reflect the disabled student's potential academic success (Martin

and Bowman, 1985). Legislation should authorise discretionary programmes to

assist the disabled, from dependent to independent living situations (*CQ Weekly*

Report, 1990).

Evenson and Evenson (1983) created innovative approaches that dealt with unmet needs of disabled college students in the field of career development in the USA. Several factors suggested that this group were in greater need than the traditional student. For example, the disabled student was often delayed as a result of missing out on opportunities, their choices of jobs were often the wrong choices because of limited exposure to the business world. They were also influenced by attitudinal variables, like lowered expectations. Fortunately, higher education for disabled students in the USA was supported by the state vocational rehabilitation programme. Evenson and Evenson (1983) suggested and created opportunities and means to assist disabled students on campus with their career choices. The students could identify ways of maximising their investments in an educational process that would eventually prepare them for a future career.

Research elucidated that people with disabilities receive negative social attitudes in a community. They needed to be incorporated socially and intellectually. One study, a special programme for learning-disabled students at the University of Arkansas for Medical Sciences (UAMS) was done from 1976 to 1982. The recipients of the research showed signs of poor language and arithmetic skills, or showing signs of excessive passivity. It was far more important for a tertiary institution to encourage and foster a social learning disability on campus or in the class, and accommodate this group (Ackerman *et al.*, 1987). Research done by Richards and Gaston (1995), and Saddler and Buckland (1995), showed that learning-disabled students tended to show mood problems and severe depression, and that the interpretations of the association of learning disabilities and depression were often

neuropsychological or motivational. There had been an urgent cry that disabled

people, despite their shortcomings, were to be integrated in their tertiary domains

and communities.

A study by Florian and Kehat (1987) attempted to address different methods

of influencing high school students' attitudes towards the disabled. The results

suggested a variety of methods, namely to create positive attitudes towards the

disabled by removing or reducing the 'discomfort, uneasiness or uncertainty that the

nondisabled individual may feel about the disabled by using real-life role simulation

as a means of evoking emotional and behavioural understanding of the condition of

being disabled' (Florian and Kehat, 1987).

2.2.1.3   Focus on disadvantaged students

The disadvantaged students represent students with limited resources,

including an underrepresented group of students, a low-income group, or a group

with a low educational and occupational status, or even those who live in an

unhealthy community (Clark, 1990). Various current studies in the USA showed the

importance of recruiting minority students (Harris *et al.*, 1995; Opp and Smith, 1994;

Robertson and Frier, 1994; Scott, 1993; Brown, 1991; Sagaria and Johnsrud, 1991;

Clark, 1990; Williams and Cox, 199; Gares and Delco, 1991; Franklin and James,

1990; Oliver and Brown, 1988; Singh, 1984). Special assistance to poorer,

underprepared minority students could assist them to graduate. Harris *et al.*(1995)

suggested financial support offering scholarships, fellowships, grants and stipends

to students who were in need for it.

In the 1980s, the cost of higher education in the USA had increased by 126 percent, making it twice as much as the country's inflation. This necessitated financial aid to increase by 41 percent after adjustments for inflation were made. The growing gap between tuition and family resources was a major challenge which colleges in the USA had to deal with (Weems, 1995). Merit aid, an incentive, was implemented by many universities and colleges in the USA. The merit aid was granted in the form of scholarships to a fair number of minority students (Weems, 1995).

The tertiary institution looked at collaborative approaches with community businesses. Tertiary institutions made partnerships with businesses and industries (Bender and Carter, 1994). In a South African context, Ismail (1993) highlighted in her Master of Education dissertation the urgent need for collaborative methods to assist with a partnership in the Langa Enrichment Programme (LEP). This programme aimed to bridge the gap between DET schools and tertiary institutions, by making bursaries available to black students during the crisis period in black education. The programme was established in 1982. Since 1982 to 1991, (the year the study was launched by Ismail) 1 495 students from Guguletu, Khayelitsha, Langa, some as far as Ceres, Stellenbosch and Mbekweni in Paarl attended this programme. The programme offered a broader knowledge in mathematics and science, and introduced commercial subjects as well. This programme in turn created a sense of achievement in an existing educational domain of high failure rates, as this programme was the only education they were receiving. Ismail (1993) referred to another study, an Adult Night School Movement Programme, which was presented by Daphne Wilson (1990). It offered classes for individual success and

social advancement amongst black adults. The success of these programmes

reflected the commitment of both students and teachers who offered their assistance

voluntarily. The participants of this programme showed a high level of determination,

enthusiasm and motivation, despite an education that was influenced by political

constraints. Bursaries and career guidance were then offered to black Standard 10s,

strengthening their links with tertiary institutions and educational programmes

(Ismail, 1993).

In a Ph D dissertation on 'Academical support based on an assessment of

needs for the Technikon Northern Transvaal' De Boer (1992) emphasised that,

because many students were unprepared for tertiary study requirements, tertiary

institutions encountered very high drop-out rates of first year students. At that time

the research showed that very little was done in addressing the needs and problems

of the disadvantaged student base. He suggested academic support programmes.

2.2.1.4   Focus on the alumni

As students complete their studies at institutions, the involvement, bond and

commitment a student builds with his/her tertiary institution, carries on. The alumni

become the" 'walking, talking' ambassadors" of the institution or the programme that

was followed by students (Harris *et al.*, 1995).

The alumni were in the position to sell the academic programmes to their

peers. Martindale (1990) suggested that alumni act instrumentally to recruit other

students. They can serve as consultants for the recruiting programme or visit

schools.

It is equally important to recruit the older, mature student for further studies.

Mark and Dewees (1984) mentioned that adult educational programmes in higher

education were normally associated with correspondence programmes and

continuing education activities while serving the community. Interesting statistics

came from students participating in the Ohio University Experiential Learning

Programme at the Ohio University, USA. More than three quarters of the enrolled

students had earned college qualifications prior to their enrolment in the

programme. Mark and Dewees (1984) cited that the adult learner found this specific

programme attractive for three reasons, namely, that success in the assessment

programme accelerated the student's degree plan by as much as one year at most

institutions with established programmes. Secondly, the programme was designed

to accommodate the busy adult student with a correspondence course for those who

lived too far away from campus. Thirdly, the assessment programme recognised the

adult learner's prior learning not to repeat 'old learning'. Many students maintained

their allegiance to their former tertiary institution. Retention and persistence

contributed to students' positive attitude towards completion of their studies.

2.2.1.5   Need to recruit nontraditional students

In the past student recruitment mainly focused on the need to recruit the

traditional student, being a Standard 10 learner wanting to further his/her studies at

a tertiary institution. A paradigm shift was needed - to recruit the nontraditional

student required a more creative approach to that of the traditional student. Opp and

Smith (1994:34) experienced that after completing two surveys at community

colleges in the USA, certain attitudinal and structural barriers firstly had to be removed before improvements could be made to recruit minority students.

The minority students (in an USA context) needed to identify with positive role models in order to increase their educational aspirations. These role models were minority students who had achieved high levels of academic success. White students were encouraged to overcome their prejudices about intellectual capabilities of students of colour. This particular study (Opp and Smith, 1994) elucidated that the role of academic administrators was one of the reasons causing the barrier to minority faculty recruitment and retention. From this study positive predictors included: minority academic advisors could serve as advocates setting the stage for diversity on campuses; minority students could apply for faculty positions at academic institutions; and minorities could serve on boards of trustees (Opp and Smith, 1994:34).

Charles Brown (1991); Gares and Delco, Jr.(1991); Martindale (1990); and Isaac (1985) made a number of compelling points in their various studies, namely that the recruitment, retention and graduation of minority students were dependent on the availability of financial aid packages to help students attain their goals quickly, creating a multicultural academic environment to increase the number of minority students on the campus, and black and other minority administrators being appointed in professional positions. Academic retention programmes were supported by a solid institutional commitment, supporting the students academically and personally so that they could function independently, successfully with self-assurance in their academic ambitions.

A plethora of different approaches were recommended: sensitising the

faculty, creating a collaborative approach and communication with guidance counsellors in predominantly black and minority represented high schools, allowing a multicultural social climate to stimulate academic success and diverse activities on the campus, a commitment to increase minority students' needs were to be communicated from the top of the institution downwards. The academic and governing board should be the leading party in practising this principle. Gares and Delco, Jr. (1991) stated in their research that the successful recruiting of minority students mainly depended on the commitment of the board of trustees. Affirmative action and a successful affirmative action policy were to be passed by them, as well as the provision of the necessary budgetary support to allow such implementation.

Other marketing tools suggested endorsements from students and the alumni bond. Students often spoke about the course they took or the job opportunities the courses offered. Selling the course by word of mouth had always been regarded as a dynamic recruitment tool (McDonough, 1994; Brown, 1991). Successful advertising would reach the necessary audiences. Recruiting the minority communities, throughout the nation, region and state, was to be addressed in various publications (Gares and Delco, Jr.,1991). Financial support, such as scholarship, fellowships, grants and stipends were drawing cards to an institution, especially to those from racial, ethnic minority backgrounds, although bursaries do not always cover the whole spectrum of educational and personal needs of a student (Harris et al., 1995; Robertson and Frier, 1994; Bents and Haugen, 1992; Williams and Cox, 1991; Brown, 1991; Rainsford, 1990).

Vocational education cannot create jobs, neither can vocational guidance make great numbers of different jobs available. Counsellors often sit with this

dilemma. Harley (1983) saw the role of career counsellors as 'being that of structuring the aspirations of learners according to their abilities and personal circumstances'. Study required effective work habits and study skills and the importance of educational support, namely counsellors and mentors played a pivotal role (Harris *et al.*, 1995), and Zook (1994) suggested that counselling and emotional support be offered to those students who receive financial and educational support. Skills development and remediation had to be addressed at an early stage of students' academic pursuits. Often students underestimated the immense rigour of tertiary education. An example of such a support programme, the Black Male Initiative programme, was created at Texas Southern University. It focused on an academic and personal support programme. African Americans were often the victims of racism, which eroded them of all self-confidence and led to academic failure (Harris *et al.*, 1995). Other support was the provision of mentors, who were in the same academic discipline (McDonough, 1994; Williams and Cox, 1991; Gares and Delco, 1991). Other incentives, like specific honours programmes specifically aimed at the minority student, gave them a feeling of pride and self-esteem that promoted student retention.

Diversification reflected a commitment from the institution as opposed to a mandate from a state. Affirmative action efforts were needed to recruit and retain culturally diverse students (Scott, 1993; Hernandez, Jr., 1992; Bents and Haugen, 1992).

Affirmative action took its rightful place in all spheres of student recruitment. It was important to increase the numbers of racial/ethnic disadvantaged/minority students (Hernadez, 1992; Ponterotto, 1990). Secondly, it was equally important to

maintain the students enrolled until they had graduated (Ponterotto, 1990).

Ponterotto addressed the question of why students from the racial/ethnic minority

groups quit their studies more easily than other groups? Ponterotto (1990:53) cited

possible reasons why drop-out rates of students were so high in the United States.

He suggested declining financial aid, a lack of definitive relationship between a

college degree or diploma and a good job, inadequate high school guidance

programmes, nonexistent hospitality, institutional racism, increased racial tension on

campus, or a shortage of ethnic role models and minorities' isolation on campuses.

Ponterotto (1990) suggested a few ideas as to encourage a positive campus

climate, namely that one should appreciate the cultural diversity of the campus and

it should be evident in one's nonverbal behaviour and sensitisation of competition

amongst the students represented in the lecturing halls. However, polarisation

would still occur if white males continued to see racial minorities and women

students in certain fields of study as a problem.

South African studies that addressed issues of student retention were

Prinsloo (1995), Ismail (1993), Janse van Rensburg and Prior (1993), Arthur (1992)

and De Boer (1992). De Boer (1992) addressed the high failure rate of first year

students at a technikon. Although academic support programmes were offered,

(most of the times these bridging courses were experienced negatively) it was found

that the students had not yet required a level of preparedness for tertiary studies.

This had a negative effect on the retention of students. This research aimed to

identify specific deficiencies and needs specifically first year students encountered.

America was also experiencing a demographic shift. It was estimated that by

the year 2020 the population in the USA would be made up of a 20 percent

representation of racial/ethnic minority of the total population and the percentage

would escalate to 34 percent. It became important to focus on a happy campus

climate and also look at the disparity of women students in so called men's career

domains (Ponterotto, 1990). A study by the American Association for the

Advancement of Science reported that although women comprised 45 percent of the

USA labour force, only 16 percent was employed scientists and engineers (Borman,

1991). The participation of women specially in the field of science and engineering

needed to be prioritised.

Innovative recruitment approaches were suggested by Stewart *et al.* (1993),

namely utilising their own enrolled African-American students to organise off-

campus recruitment events as well as visitation days on campus and phone-a-thons.

The Presidential Ambassadors was the volunteer group at Northern Kentucky

University who assisted with tours on campuses, seminars, phone follow-up,

mailings, college nights, college fairs, career days and various other areas where

needed. These activities ensured students would form a positive relationship with

high school learners as well as acquainting them with healthy study habits and new

information on the proposed fields of study. Discussions at these contact sessions

allowed for a spontaneous relationship, discussing academic and social life on

campus, advice on securing financial aid, housing, the scheduling of classes. The

Alpha Outreach on Denison University campus allowed potential students to make

use of the residences with current students and attend a presentation and session

on campus. Their main aim was to build a bridge – to ensure dialogues. Once the

'match' had been done, the challenge remained and the recruited students had to be

retained. This 'match' would ensure a coalition and commitment among newly

recruited and current students. Phone-a-thons were utilised in a very effective way to recruit students (Stewart *et al.*, 1993).

Scott (1993:74) pointed out some possible reasons if a decline in student enrolment was apt to show. Reasons being, there could be a decrease in financial support, nationally and locally; there were better job opportunities for minority students and minority high school learners in the private sector; fewer minority students graduated at tertiary institutions, and the fact that minority students experienced negative attitudes at predominantly white institutions.

Scott (1993:75) argued in favour of diversity on the campus in order to enhance a nation's readiness to benefit from the minorities and nonminorities with role models, to prepare minority students to accept leadership roles, to support minority-related scholarship and expose nonminorities to individuals of minority groups about their intellect and cultural differences and inferiorities. Scott (1993:76) recommended other creative recruitment strategies. Mentioning a few ideas, were:

- to create a minority visiting scholar programme
- to create postdoctoral fellowships to minority students for permanent faculty positions
- set up exchange programmes with historically black institutions
- advertise positions in professional journals that emphasised minority matters
- and to create minority graduate internships.

2.3   Role of student recruitment

Student recruitment is regarded as a powerful vehicle to increase student

numbers at an institution. Student recruitment is not only aiming at recruiting

proportionally from South Africa's population in the demographic sense of equity,

etc, but is now recruiting competitively to maintain viability in a shrinking market.

The need to recruit both the traditional and nontraditional students was

influenced by underlying factors. Reasons were: the South African economy

required skilled professionals; educational and social upliftment needs were to be

diffused into the broader society; demographics affected students' choices of tertiary

academic institutions; political determinants like racial injustices, gender issues, the

disabled, disadvantaged student needed to be reckoned with as part of an analysis

of recruitment practices. Effective new approaches and methods to recruitment were

looked at, such as elements of printed matter (Young *et al.,* 1990; Cooksey 1988),

audio-visual material (Connan, 1996), visitations by staff (Wanat and Bowles, 1992),

expositions (Martindale, 1990), advertisements (Gares and Delco, Jr., 1990),

electronic recruiting (Cannings and Finkel, 1993; Miles, 1996) or by word of mouth

(Wanat and Bowles, 1992) in attracting potential students to a institution, became

part of the preparation phase of the research.

Both nationally and internationally the traditional student was identified by

being the high school learner needing further education, the more mature person

who had been in a working environment, and the international student needing

additional formal qualifications. The nontraditional student was characterised by

being educationally and politically deprived, the minority student with limited

resources, the disabled and the disadvantaged student (Opp and Smith, 1994;

McDaniel and Moreland, 1994; Bents and Haugen, 1992; Williams and Cox, 1991;

Gares and Delco, Jr., 1991; Sagaria and Johnsrud, 1991; Franklin and James,

1990).

Daugherty and Boser (1993:32) advised the following steps to successful recruitment:

- the institution should develop a collaboration between universities, colleges and high schools, as well as businesses and industries

- to conduct studies of various disciplines that were successful at recruiting

- the parents and students must be assisted in making career-decision choices

- develop current programmes of a very high standard that peaked the interest of both students and parents

- a comprehensive information bureau on campus should be provided to students as well as the assistance of an advisory committee

- community groups were encouraged to use the institution's facilities to enhance community involvement and participation of the public in consortiums of local programmes.

The following studies elucidated different approaches for both the recruitment of the traditional and nontraditional student. Zolezzi (1992) stated in his study that there was a need to address and discern the merits of disadvantaged students from deprived educational backgrounds. The focus was on their potential and learning processes, rather than abilities.

Researchers had developed different models and approaches to recruit and retain minority students in tertiary institutions in the USA (Opp and Smith, 1994; McDaniel and Moreland, 1994; Bents and Haugen, 1992; Williams and Cox, 1991; Gares and Delco, Jr., 1991; Sagaria and Johnsrud, 1991; Franklin and James,

1990). A clear systematic public relations activity and a marketing strategy would help in achieving a high percentage minority student population for the chosen institution and field of study (Daugherty and Boser, 1993). Opp and Smith (1994) suggested qualified individuals represented from the minority population who could serve as chief academic administrators or serve on the board of trustees by a mechanism of formality. They could be placed in a position to recruit minority students, even serve in the faculty for ethnic studies. In South Africa the primary emphasis is on black advancement, with, in many tertiary institutions, the emphasis is falling on black African recruitment as the leading priority.

Examples of South African studies that address black African recruitment can be found in the field of nursing. The M Cur. research by Kirby (1992) addressed a dynamic recruitment strategy for student nurses. The purpose of the study by Mthethwa (1995) was to compile descriptive information concerning the nurse educators and student nurses' views regarding recruitment and selection techniques used to attract school leavers for nurse training at Ngwelezana College of Nursing and how they perceived its effectiveness.

Sagaria and Johnsrud (1991:105) emphasised that in order to increase and maintain minority participation in student affairs it was advisable to place minority students as the incumbents as student administrators. This would help develop a more racially and culturally diverse campus.

The study by Janse van Rensburg and Prior (1993) researched the possibilities, implications and methods for the maintenance of academic standards in the Technikon system. With reference to policies and procedures to student recruitment, this research used questions as a form of survey related to the

Technikon's ability to accommodate a multi-cultural student population. It was
important for policies and procedures for student recruitment and admission to be
streamlined as to ensure a match between academic preparation and the demands
of high-level tertiary education.

2.3.1 The impact of demographics on student recruitment

Rainsford (1990) mentioned that between the years 2000 and 2020 one out
of every three Americans would not be white. This demographic shift posed an
opportunity and a challenge to higher education in the USA. By the year 2000 it was
estimated that 75 percent of all workers in the USA will be in professions requiring
mental, rather than physical, exertion. Workers in professional and technical
occupations such as management, information processing, health care and law
would show the greatest growth (Roberston and Frier, 1994).

Rainsford (1990:99) circumscribed efforts that addressed the demographic
imperative, namely to

> radically change structures, values, hiring practices, and treatment
> of students if they are to meet the demographic shift and attract more
> minority students, faculty members, and staff personnel. Considerations
> of social equity, national economic efficiency, and - as minority
> population growth continues while the relative supply of white students
> falls - institutional survival argue strongly for change.

The enrolment at the Cape Technikon in 1994 was represented by 670
Africans, 1 288 coloureds, 112 Indians and 5 937 white students, adding up to a
total of 7 954 students (Sidiropoulos et al., 1995). A reason for this representation of

the disadvantaged students pointed to a demographic notion. Students were recruited from all heterogeneous societies, all spheres, including both urban and rural areas in the Cape.

Here follows a more detailed breakdown of technikon enrolment : 1989 and 1994.

Table 2-5   Technikon enrolment: 1989 and 1994 - increase/decrease

CAPE	1989	1994	Increase – decrease
African	102	617	Increase
Coloured	670	1 288	Increase
Indian	57	112	Increase
White	7 913	5 937	Decrease

The table below indicated the expenditure on technikons and universities in South Africa (Cooper *et al.,* 1993).

Table 2-6   Education expenditures - 1989/90 to 1993/94

Allocations to technikons and universities in order to draw a comparison

	1989/90 Rm	1991/92 Rm	1993/94 Rm
Technikons	335	478	686
Universities	1 425	1 775	2 306

The Education Renewal Strategy (ERS) stated that between 1987 and 1992 the total education budget had increased by 119 percent, because of the increasing cost of education and the growth of students (Cooper *et al.,* 1994:687; Sidiropoulos *et al.,* 1995). Here follows the technikon enrolment for the years 1989 and 1994.

The real impact of demographics on choices of a tertiary institution was more complex than one might imagine. The most important factor determining the student's choice was the location of the tertiary institution and the possibility of transport to and fro. The majority of the students, especially the students from a disadvantaged background need to walk long distances, and then commute by taxis. Besides this form of transport as being the one and only, it was costly, time consuming and not always the safest measure of transport during the times of riots and violence. A railway service was made possible between Mitchells Plain and to Cape Town in 1980 and from Khayelitsha to Cape Town in 1987. This relieved some transport problems (Cooper *et al.,* 1994:687 and Sidiropoulos *et al.,* 1995).

Although there was an urgent need for highly qualified managers in South Africa, it was predicted that the year 2000 would show a potential shortage of 600 000 high-level manpower (Strydom, 1991). Above-mentioned information must be seen in the concurrent contents of the dramatic shift in demographics that helped change the face of a new South Africa.

2.3.2   Recruitment in South Africa

In South Africa too, the recruitment of students at tertiary institutions had

been focused in various divisions. The nursing profession was addressed by a study done by Kirby (1992), who focused on a recruitment programme to attract trainees to a profession that showed an increasing shortage of nurses. Her research identified a recruitment tool to market the nursing profession.

A number of valuable studies, notable amongst other areas of tertiary education and recruitment were those of Harley (1983), with his thesis on 'The relationship between educational attainment and patterns of recruitment'; Mayo (1978) with 'An investigation into a valid selection criterion for the admission of students to a college of education'; Kempen's (1991) Ph D dissertation on the 'Planning for the marketing of Technikons in the Republic of South Africa' in which he focused on marketing as a strategy to the recruitment programme at technikons; 'Die werwing, keuring en opleiding van onderwysers vir tegniese en beroepsonderwys - 'n vergelykende studie tussen Suid-Afrika, Engeland en Wallis' by Els (1985). He addressed the importance of improving recruitment procedures in the technical and professional teaching domains, to recruit specialised teachers in a specific profession, and emphasised the seriousness of recruiting the appropriate person to be attracted to the technical college in order to find the 'right' student-institution fit.

Wanat and Bowles (1992:23) cited that the reputations of tertiary institutions were equally important to the recruitment procedures, financial constraints and campus qualities, and therefore believed that 'Academically talented students are most influenced by institutional reputation, quality, and prestige in selecting a college. They were especially attracted to available special majors, degrees, and honours programmes as well as career, and graduate and professional school

opportunities'. A parallel could be drawn to the courses given at the technikon. Once that the Technikon Act of 1993 was passed and in full implementation, new suggestions and amendments were made by the NCHE. The technikon became an important drawing card to attract appropriate students. Breytenbach (1996) stated that Prof Bernard Lategan and Dr Ludolph Botha from the University of Stellenbosch regretted the NCHE suggestions, because universities, and specifically the University of Stellenbosch, now became the opposition party to technikons. Universities had to compete with technikons who offered 'allerlei ongespesifiseerde grade' (Die Burger, 8 Junie 1996).

Arthur (1992) focused her dissertation for the Master of Education on the importance of a multicultural educational approach at tertiary institutions in South Africa. She denoted a specific section of the dissertation to key issues and training outcomes of minority students, different modes of communication and participation, and how it was the ideal to create a social cohesiveness

> within cultural groups or subgroups, while at the same time acknowledging the uniqueness and individuality of the individuals comprising these groups. A finely tuned balance between the differences in and between groups and the similarities in and between individuals emerged (Arthur, 1992).

Arthur (1992) stated that her research revealed that multicultural education was feasible on grounds of the commonality of culture experience of man's humanness. Her approach had relevance in acknowledging the uniqueness of all cultural groups represented in the student corps at a tertiary institution. This 'finely tuned balance' indicated a means of social messaging in the recruitment

programme.

The NCHE emphatically stated the necessity to accommodate all people for tuition at both schools and tertiary institutions. This elucidated the need to recruit learners/students from disadvantaged groups and less fortunate communities. However, many lacked the required academic background, as well as the leadership qualities to maintain their commitment to their tertiary institution (Reddy, 1996a). A study by Prinsloo (1995) was launched at the Rand Afrikaans University College, promoting Learning and Leadership (RAUCALL) which targeted learners from secondary schools to prepare them academically for tertiary studies. Prinsloo (1995) focused on an improved Human Resources selection model that elucidated an improved recruitment procedure with the object of targeting a wider group of potential candidates. Recruitment tools that proved to be more successful were brochures and school visitations.

2.3.3 Driving forces behind student recruitment

The theoretical implications of evaluating the research problems were socio-economically and politically based. Previous studies (Brown, 1991; Sagaria and Johnsrud, 1991; Robertson and Frier, 1994; Opp and Smith, 1994; Scott, 1993; Gares and Delco, 1991; Zook, 1994; Bents and Haugen, 1992) showed that politics and socio-economic status had been the driving forces with regard to recruiting the ethnic and minority student in the USA.

In South Africa, since the implementation of the National Commission of Higher Education (NCHE) (Reddy, 1996), the focus was on the potential of all

students in South Africa (with specific emphasis on the politically deprived student, the student from a low-income group, or someone from a low educational and occupational status).

The economic game was being determined by the interaction of changing political forces in rapidly changing times (Reddy, 1996a). It was important that every South African should be happy and content. Happiness and satisfaction perceived by members of a society were true reflections of a healthy state of government and national affairs that brought us to the link between life satisfaction and socio-economic conditions. This link epitomised the process of fine-tuning, the harmony of the people in South Africa to political, economical and social determinants.

2.3.4 A global perspective of recruitment

It is internationally accepted that there are two basic categories of students, the traditional student and the nontraditional student. For each of these groups a recruitment package is offered. The recruitment process consists of a process of interaction between the recruitment staff of the tertiary institution, the high school counsellor and the student.

The latter group, the nontraditional student needed a different approach of recruiting. Studies concerning the latter group were rich, as proven by Harris *et al.* (1995), Opp and Smith (1994), Zook (1994), Robertson and Frier (1994), McDaniel and Moreland (1994), Smith (1994), Scott (1993), Hernandez, Jr. (1992), Bents and Haugen (1992), Brown (1991), Gares and Delco, Jr. (1991), Williams and Cox (1991), Carpenter (1991), Berger (1991), Sagaria and Johnsrud (1991), Franklin

and James, 1990), Rainsford (1990), Oliver and Brown (1988).

A support programme, the Black Male Initiative, was launched at the Texas Southern University in 1991. This programme was an academic and personal support programme to inspire Black college students to attend college and pursue professional careers (Zook, 1994:A34). This programme proved to be successful - it stressed

> the value of an education, the satisfaction of good citizenship, the importance of exercising personal responsibility...The overarching objective was to get young African-American males into Texas Southern University and get them out with a degree.

This programme provided a support network amongst the African-American males. It facilitated academic and social development, it involved students to empower themselves in a proactive manner and therefore reflected high levels of self-competence (Zook, 1994).

Recruitment programmes often take on special devised methods to recruit and retain their minority students. Opp and Smith (1994) paid special attention to ways of recruiting and retaining students at two-year colleges in the USA. They found that two-year colleges were reported to enroll a disproportionately large share of minority students, while minority students among full-time faculty members remained very low. The study revealed that attitudinal and structural barriers had to be eliminated within the institution's recruitment package before recruiting minority students. Attitudinal barriers included an unwillingness to actively recruit minority candidates, or minority students recruited were rejected as threats to their faculty prerogatives, or they found that the minority student did not fit in socially with the

community. Structural barriers included the absence of a minority population in the local community as a major barrier to retaining minority students, as well as the lack of a social network in the community.

Scott (1993) elucidated faculty diversity and successful recruitment as synonymous, and stated that the presence and involvement of faculties populated by minorities on campuses helped to create a balanced social and academic environment conducive to the needs of minority students. The multicultural approach provided minorities and nonminorities with role models, prepared the minority youth with leadership roles, and importantly, exposed nonminorities to members of minority groups to 'dispel myths about the intellect and cultural inferiority of minority groups' (Scott, 1993:75).

Bents and Haugen (1992) also advocated 'a total collegiate commitment to help remove barriers for students of colour and enhance opportunities for success'. Multiculturism encompassed the commitment of tolerance towards diversity, a total respect for and understanding of cultural differences within all the represented population student groups. This allowed students to find their niche in their tertiary institution and deliver their academic goals.

The University of Hartford provided the Hartford Half Tuition Program. This programme accommodated, since its inception in 1990, 80 percent African-American, Hispanic, and Asian-American graduate students in a predominantly white campus. The percentage of increased minority student attendance had since increased every year. McDaniel and Moreland (1994:125) stated that the Hartford Half Tuition Program had a remarkable impact on racial and ethnic diversity of the

student population on campus.

> Institutions of higher education across the country are increasingly
> committed to diversifying their student bodies, their faculties, and staff.
> Diversity adds richness to the campus and benefits everyone by
> providing students with opportunities for learning about the contributions
> of people of different genders, races, religions, ethnic backgrounds,
> nationalities, or sexual orientations (McDaniel and Moreland, 1994).

Students learnt about themselves and expanded their vision while learning about and from those who were 'different'. This programme offered a mentoring programme, workshops and lectures, which included multicultural issues.

Oliver and Brown's (1988) research identified and discussed the planning process of a three year recruitment programme. The programme consisted of six phases: gauging the environment, pre-initiation, programme planning and development, implementation, evaluation, and institutionalisation. This was successful once a total commitment and collaboration was made by all the role players, and all negative barriers were removed from within the infrastructure of the tertiary institution.

Currently South Africa shows a similar notion of student growth amongst the African and coloured population groups. Carpenter (1991) argued that too little was done for students, especially for female, minority and disabled students in the field of science and engineering. Smith (1994) supported this view and observed a paucity in attempts to attract well-qualified minority high school students and graduates at management and executive levels.

The college application surge in America took place in the early 1980s.

The best marketing techniques were used. The college market experienced

competition, from a traditional market to one that was focusing on admissions

assistance. McDonough (1994) stated that the selling point of recruitment and

admission to a college lay in 'the ability of these counsellors to offer individualised

attention'. Private consultants, also called 'independent entrepreneurs', offered a

structured, disciplined college recruitment and application process, in which 'they

search for the widest possible range of college options for the student, counsel the

family, and relieve some pressure generated by stiff competition'.

Smith (1994) regarded admissions management as a

> constellation of behaviours which include buying services to help
> mostly high-SES (socioeconomic status), college-bound students
> maximise their college prospects, package themselves, and anchor
> themselves emotionally as they navigate the troubled waters of college
> admissions.

She reiterated the necessity of good marketing techniques for successful

student admissions, namely 'focus groups for prospective students, marketing and

public relations consultants, institutional repositioning, and enrolment management',

because for

> ...upper-middle class students who view college as a pivotal career
> investment, choosing the right college has become pressure-filled. An
> industry has grown up to help college-bound students: guidebooks and
> software for SAT coaching; consortia offering paid trips for high school
> counsellors to obscure college campuses; and slick magazines selling
> private college educations marketed to students stratified by SAT scores
> and socioeconomic status (Smith, 1994).

Recruitment demanded the highest courtesy and etiquette procedure in order to make the recruitment successful. Recruitment was a negotiating process. Basic skills and virtues like politeness, honesty, appreciation and grace in a personal interview or a telephone conversation should be practised at all times. Student recruitment needed to be fine-tuned.

2.3.5 Rectifying recruitment shortcomings

If true educational excellence is to be achieved, tertiary institutions must make a greater effort with the actual recruitment process. Firstly, the recruitment programme should address the minority or educationally disadvantaged student. This is both a national and international problem.

Racial and ethnic diversity of student populations needed to be diffused on campuses. To change the faculty and institutional environments is not easy. McDaniel and Moreland (1994), Bents and Haugen (1992), Williams and Cox (1991) and Ponterotto (1990) confirmed the necessity of a diversified student base. Once the barriers for students of colour were removed, the college's environment became acceptable. Diversity on campus added to everybody benefiting from opportunities for learning. Urban students contributed to the diversity of the institution.

An office for the Multicultural Programme at the University of Hartford, USA, was implemented to serve all students. This office shared collaborative activities with Hartford public schools. They started a mentoring programme, providing a support network during the transition period of the first year students while they

seek their academic pursuits.

Recruitment did not stop after the students' arrival at the college or university. Orientation and support followed. Orientation exposed them to the college's culture, operations and organisations. A faculty mentor was appointed, who would help students through their first year. Personal communication and direct contact had great value in the recruitment programme of a tertiary institution. Trips and visitations to schools only encouraged prospective candidates to apply (Gares and Delco, Jr., 1991).

Bargerstock and Swanson (1991) suggested networking as a way of addressing their shortcomings they had with recruitment. A co-operative and collaboration with community-based organisations proved to be effective.

Zook (1994) made the point that partnerships and a network of black businesses and community leaders committed themselves to a recruitment project in which black males were enrolled at Texas Southern University, USA. This initiative emphasised social virtues, namely value of an education, good citizenship, conflict resolution, responsible sexuality and exercising personal responsibility of black male students. Bent and Haugen (1992) regarded schools as important change agents. They were instrumental for personal empowerment and social equalisation for all individuals in a society.

It was found by Borman (1991) that the participation of women, minorities and the physically disabled in specifically science studies at colleges should be mainstreamed in and on campuses. Evenson et al. (1983) addressed approaches to recruit disabled students at North Texas State University. Florian and Kehat (1987:57,62) suggested that in order to remove 'negative social attitudes that exist

in almost every community toward people with disabilities remain a major obstacle to the social integration and rehabilitation of those who are disabled' and to 'reduce the discomfort, uneasiness, or uncertainty that the nondisabled individual may feel about the disabled ...'.

Mark and Dewees (1984) focused on the alumni as an important body of the recruitment process. Correspondence programmes and continuing education activities at Ohio University were offered in order to recruit and retain their adult learners. Harris *et al.* (1995) recognised the value of the alumni. They 'can sell the programme to their acquaintances. Endorsements from students ... are strong marketing tools.'

In the light of above-mentioned studies, it was relevant to query whether the South African student recruitment packages/recruitment tools were in the process of sensitising their recruitment programmes to accommodate a new student base and culture. Light needed to be shed whether South African tertiary institutions focused on the right student-institution fit, and/or whether we were willing to rectify our shortcomings.

2.3.6 The actual recruitment process

Student recruitment at the Cape Technikon has made use of traditional materials. These materials include the use of recruitment brochures, videos, the usual visitations by staff members to various schools and expositions. This practice follows similar traditions internationally.

2.3.6.1   Recruitment brochure

The most influential factor of a recruitment package is the content of the

brochure (Young et al., 1990; Cooksey, 1988). It had to be informative. The student

needs to identify with the matter he/she was reading. The ultimate objective was

persuasion. Ideally the reader of the brochure had to apply. The message in the

recruitment brochure needed to be consistent with reality, it had to address a variety

of careers, courses, their disciplines, training facilities as well as promotional

prospects. If the messages were not in line with reality and the messages were

inconsistent, it was doomed to fail. Potential applicants would reject their

application. The recruitment attempts would be aborted (Young et al., 1990;

Cooksey, 1988).

If the academic institution were utilising its recruitment brochure in the most

effective way, it would be important to analyse the effectiveness of the brochure.

Lorna Cooksey (1988:75) conducted an exploratory investigation at the Aston

University Management Centre in Birmingham, England. She came to the

assumption that glossy brochures were the answer. It had to be attractive in order to

persuade students to read it. Whether it fulfilled the ultimate need of the student to

apply was the critical question.

Many tertiary institutions regarded a mail campaign as an important

recruitment strategy. The mailed materials would include an informative brochure

describing the courses offered. Harris et al. (1995:55) suggested that the written

copy should be attractive and include photographs of the tertiary institution, and

reflect the recruitment programme's objectives and initiatives to recruit all

prospective students. It included funding and special programmes. A postage-paid self-addressed envelope could be included, if a prospective student requested additional information. Follow-up correspondence and/or telephone calls would ensure the student that the institution was interested in him/her. This would encourage and motivate the prospective student to react, either positively or negatively.

2.3.6.2   Audio-visual material - videos

Research showed that audio-visual aids had great impact on the viewer. The Cape Technikon has a video as a recruitment tool, but does not necessarily focus on the needs of the students. Connan (1996) stated that the video was shown only to an exclusive audience, not necessarily to prospective students. Unfortunately it did not address the issues often raised by students. Another video was made by the School of Electrical Engineering (Connan, 1996). This video focused on the disadvantaged student and the role of women in the field of engineering.

Audio-visual aids as recruitment tool can be effective. However Lorna Cooksey (1988) found that only a minority believed that an institution's video presentation affected their decision to apply. If the messaging was interesting, the visual sensory senses and auditory senses would be stimulated, and convince the viewer to enquire about the institution (Grossman, 1991).

2.3.6.3   Visitations by staff

Technikons, universities and colleges should have an open door communication policy with high schools and *vice versa*. Personalised recruitment through high school visits and campus visits were viewed as a useful source of information. An effective recruiting activity was administered by admission officers at the college or university and high school counsellors (Wanat and Bowles, 1992). Personalised tours of the campus and its facilities should be made possible. These visits should highlight positive features of the campus and the faculty, programmes and its graduates.

2.3.6.4   Expositions

Martindale (1990) suggested an educational fair with exhibits to be organised at schools or at tertiary institutions. Having done this, a series of brochures and audio-visuals could be available for recruiters' use. Some of the material was geared at giving background to the courses offered at the institution, while some was aimed at students from any background. Schools and colleges within the area could collaborate.

An interrelationship with community groups could enhance the expositions or 'Open Days'. Besides utilising the staff of the technikon, outside speakers in the industry could address the potential students on specific topics concerning their field of studies.

Martindale (1990) stressed that workshops offered at colleges and

universities attracted potential students. Every year universities drew thousands of students to their institutions. Summer Schools, Winter Schools, Maths and Science Olympiads, and exhibitions were offered.

2.3.6.5   Workshops

Workshops for Standard 10 learners are often held at the Cape Technikon. Issues on subjects like Mathematics, Science and Languages were offered. Current Cape Technikon staff and students are used for this purpose. The workshops are normally held during the school vacations.

2.3.6.6   Career exhibitions

Career exhibitions coincide with regional events, such as the False Bay Expositions, school exhibitions and career evenings organised for the learners at high schools. The Cape Technikon was requested to partake in such events. Places like George, Paarl, Worcester have been targeted, as well as southern and northern peninsula venues. Field trips were undertaken to the North West Province, as far as Upington and Vredendal. The field trips became expensive, and could not be done annually (Connan, 1996).

The school liaison officers of the Cape Technikon offered their duties with exhibitions at schools and gave presentations. They address both the learners and parents, as to assist them with their choices of careers and subjects.

2.3.6.7   Visitations

According to Connan (1996) visitations had strong merit in their student

recruitment attempts. The recruitment staff and school liaison officers of the Cape

Technikon, the school counsellors and principals encourage visitations in order to

address all the Standard 10 learners. This normally happens during March to June

of the specific year, in order to encourage the prospective student to apply before

the closing date. Courses and admission requirements were discussed with the

learners.

Connan (1996) encouraged interaction to take place between the learners

and herself (a Public Relations practitioner at the Cape Technikon) while addressing

the learners. This interactivity gave them the freedom and spontaneity to ask

questions and raise important issues concerning themselves.

2.3.6.8   Special events

Connan (1996) stated that the Schools Liaison Officers of the Cape

Technikon took infinite trouble to offer other special events, like 'Open Days' and

'Technology Day'. All the faculties participated, the Directors, lecturers and

students. Another successful event was the 'Campus Tour'. Schools were invited to

attend these events, in order to experience the 'real' field of all the different faculties

represented at the Cape Technikon. More than seven thousand learners attended

these successful events.

Another special event was presenting the Technology Olympiad every year.

The purpose was to stimulate an awareness and interest in technology among a selected group of gifted learners who excel in their specific domains. Learners presented individual solutions to one of six tasks from which they chose themselves. The Cape Technikon offered their expertise and facilities to the learners for the design and construction of their solutions. A written presentation and a working model, plan or poster assisted their presentation. This stimulating event addressed the urgent need for a growing economy and future in South Africa that depended directly on the level of technology training and expertise available to develop new products. Each year the Olympiad focused on another theme. For example, the theme for 1996 was 'Technology innovation to benefit education'.

High schools publishing their annuals/year books contacted the recruitment staff of the Cape Technikon to sponsor advertisements. This way of advertising was a positive way of attracting prospective students to the Cape Technikon. The Cape Technikon also advertised their current courses, degrees and diplomas, as well as current short courses, like photography, in local newspapers. Available bursaries for M Tech and D Tech degrees were also advertised in newspapers for post-graduate research.

Gateway Discovery was one of the Western Cape Tertiary Institutions Trust projects with which Cape Technikon had been involved since 1992, opening its doors to social responsibility. Although Eskom provided the funding, *Gateway Discovery* was initiated by the Cape Town City Council in 1992. This project raised funds to establish four interrelated projects, namely a community outreach programme, a mobile exhibition unit, a satellite Discovery Centre at the Capricorn Science Park due for construction in Muizenberg, and a larger Discovery Centre and

tourist attraction in central Cape Town which were built in December 1997. The

community outreach programme attracted more than 100 000 Cape primary school

learners who experienced a wonderful opportunity to 'live' science and engineering

in the true sense of the word. The exhibits sought to explain everyday concepts of

engineering and science in a simple way (Said, 1996).

As a gesture of reciprocation the School Liaison Officers of the Cape

Technikon organised evening functions for school principals and school counsellors

to thank them for their assistance in promoting the Cape Technikon.

The alumni form an important part of the student population at Cape

Technikon. Special events are organised and all past students are invited.

Interaction is the newsletter compiled by the Cape Technikon's Bureau of Public

Relations and Development, and is distributed to Technikon staff, past and present,

present students, alumni and interested parties in the private and public sectors.

2.3.6.9   Advertising and publicity in the press and television

Tertiary institutions have successfully made use of this medium (Gares and

Delco. Jr.,1991). The Cape Technikon has made use of advertising and publicity in

local newspapers, be it current diplomas, degrees, short courses offered at the

Cape Technikon, or be it application incentives for bursaries for post-graduate

levels, M Tech and D Tech degrees.

The Cape Technikon also reached out to social responsible duties in local

communities and informative coverage was published in newspapers (The Sunday

Independent: Higher Education Review, 30 June 1996), as well as involvement with

community-based activities (Cape Times:Career Times, 5 May 1997,1).

2.3.6.10   Incorporating multimedia within an edutainment approach

Recruitment packages from tertiary institutions can literally be described as

organised multifaceted communication campaigns (Williams and Cox, 1991;

Bettinghaus and Cody, 1994)) to bring about social change. The choice of effective

mass media channels play an important role by getting the receivers exposed to the

messages, as well as having them change their attitudes towards the message.

Singhal and Rogers (1998) studied social change as constant interaction between

people and their environment. This process of social change subsequently brought

about alterations within the structure and function of social systems. This resulted

from many individual-level changes and the powerplay between mass persuasion

and social change.

Research in the field of edutainment has revealed that educational material

used in a positive manner helps the individual to develop a skill to achieve a

particular end by boosting his/her mental, mortal, or physical powers'. Entertainment

simultaneously encourages the 'interest or attention of an individual, giving them

pleasure, amusement, or gratification' (Singhal, 1990; Nariman, 1993).

The trend for the 1990s was to combine multimedia with teaching, focusing

on educational technology. This was very successful in educational institutions

worldwide, for example the Alhambra Model Technology Schools Project in

Alhambra, California, and Chiron Middle School in Minneapolis, United States of

America (Cannings and Finkel, 1993).

New developments and opportunities were created to use computers

(Sakamura, 1999) to manipulate a videodisc player or interfacing with video

cassette recorders or video editors (Cannings and Finkel, 1993), or using CD-ROM

players, LCD projection devices (Matray and Proulx, 1995), optical scanners and

videodisc (O'Connor, 1988) and audio digitisers in the classroom for teaching and

learning that previously might had been educationally unattainable (Cannings and

Finkel, 1993). Other multimedia inventors included musical soundtracks with special

sound effects, using a musical keyboard, a tape recorder or record player directly to

the video cassette recorder (Cannings and Finkel, 1993).

The reasons for using a development tool, namely an interactive CD-ROM to

be diffused amongst the targeted audiences were the following:

- CDs are interactive and can be multimedia in format

- prospective and current students could feel empowered by using this tool

- it simplified information access and retrieval

- the market growth internationally for CDs was escalating and underpinned

  the necessity for this electronic tool

- an advantage of the CD included low cost and high information storage

- it was inexpensive to update with more current information

- had a strong network capability (Ley, 1989; Gudema, 1995; Matray and

  Proulx, 1995; Berger and Kinell, 1994; Conkling and Osif, 1994; Roberts,

  1990).

Miles (1996) stated that the first CD-ROM multimedia novel, *Myst,* became

the world's first genuine bestseller during 1994 and 1995, which signaled both the

breakthrough of a new art form. *Myst* is largely child-rather than adult-oriented but

distinguishes itself as 'edutainment', according to Miles (1996), therefore making

this an exciting tool for development. The 'reader' of *Myst*, as Miles put it, 'becomes

a quasi-codirector of the work, coacting and coauthoring the novel...from moment to

moment'. The CD-ROM necessitated interactivity and brought about a purposeful

involvement between the tool and the reader. In this regard this tool fulfilled a

strategic place in the field of development and edutainment.

Miles (1996:15) categorically emphasised that *Myst,* as an edutainment tool

presented

communication theorists with an interesting new mode of communication, one
that must be acknowledged and dealt with. Less related to the world of hard print
than the dynamic and ever-changing world of oral communication, the interactive
novel tends to subvert the ideological and epistemological paradigms, namely
deconstruction, post-structuralism, or post-modernism, that currently reign on
campuses. For each of these methods of discourse still rests on the hypothesis that
we harbour unexamined beliefs in rigid constructs, structures, and hierarchies, both
in the text and in the world, that the academically adept proceeds dismantle, laying
bare the traces in the abyss, the sheer chameleon-like nature of any supposedly
solid worldview or preconceived "text".

In 1995 Gudema envisaged the potential of a multimedia CD-ROM as a

recruitment tool in the USA. The dynamics of the CD-ROM was pervasive and the

user was responsible to answer his/her own information he/she required online

(O'Connor, 1988). Fortunately, information on the CD-ROM was relatively

inexpensive to distribute (Gudema, 1995).

2.3.6.11   Recruitment tools used at tertiary institutions

Institutional reputation, quality and prestige were important variables in selecting a tertiary institution. Students were especially attracted to available special majors, like degrees, honours programmes and post-graduate qualifications. However, the qualifying factor for a student's decision to be attracted to a tertiary institution had always been mobilised by recruitment tools.

A tertiary institution should make an effort to personalise recruitment strategies, like campus visits, high school visits and exhibitions. A recruitment programme was built on the beliefs that the tertiary institution has an excellent reputation, it provides a wide range of majors, it supplies good education at a relatively low cost and lastly, it offers a cosmopolitan environment. Focus should be on direct marketing efforts, communication with high schools on a regular basis and individualisation of initial contact with the prospective student. It was necessary to collaborate between high schools and tertiary institutions, businesses and industries.

As a result of the deeper insights into the concept of the dynamics of social messaging and the notion of creating harmony, the forces of syntony came into play, and elucidated the research questions raised in the beginning of Chapter One. This led to the correlative interwoveness and relation between the system of student recruitment at tertiary institutions and the milieu in which it existed and functioned, each exerting a reciprocal influence on the other.

Recruitment packages and recruitment tools were regarded as the most influential factor in a prospective student's decision-making process by either

choosing the right institution and/or the right career, or not deciding on it. It became

important to arrive at a clear understanding of the meaning of the concept of social

messaging within the recruitment programme in order to attract the prospective

student.

2.4   Recruitment messaging: contents and message analysis of recruitment

       packages

       This present study did not focus on contents and message analysis of

recruitment packages. However, a study by Young *et al.* (1990) researched contents

and message analyses of recruitment brochures for Doctoral Programmes at the

Universities of Ohio, Wisconsin, Vanderbilt and Georgia. In essence, this study

provided directions to departments for designing recruitment brochures. Brochures

should comply with general information, but need to address specific critera for

admission, expectations for satisfactory progress, and detailed requirements for

graduation (Young *et al.*, 1990).

       The messaging of the recruitment programme ideally addressed the target

groups. The development of messages in the recruitment package, be it the printed

brochure, how one wrote or even spoke to others, the interpretation and the

generation of meaning, the message structure, in both writing and the spoken word,

the interactional dynamics and relationships which created the joint discourse,

would finally lead to the understanding of institutional and societal dynamics at a

tertiary institution (Cooksey, 1988; Young *et al.*, 1990). One had to understand the

dyadic process of communication, in its wholeness as well as the different parts, and

how the thought, ideas and language were interrelated with one another. Only then

could one evaluate the impact and contents of a recruitment package. Because

recruitment costs money, it became important to 'fine-tune' the messaging.

2.4.1 Different sections of the recruitment messaging

Very briefly focus was placed on the various sections of recruitment

messaging, namely language used for the recruitment message, the intensity of the

contents, and lastly the format of the messaging.

2.4.1.1 Language(s)

Du Plessis (1983) stated at the Conference on Technical Communication that

English was undoubtedly the language for communication in South Africa. He

mentioned that before South Africa could attain full status as a technologically

advanced country, it was important that all technically educated people were fluent

in English. Harley (1983:78) reaffirmed that industries required their workers to

speak English, as management in South Africa was largely English speaking. In

certain areas key posts were filled by British immigrants. English is regarded as the

technical language of production.

According to Sidiropoulous *et al.* (1995:12), it was recorded in the last

population census that Zulu was the most widely spoken home language, namely

22,4% of the population (9 105 702). Xhosa followed with 18,3%: (7 443 661), and

Afrikaans represented 14,5% of the population, namely 5 919 112 people.

Tertiary institutions in South Africa needed to take cognisance of these statistics in order to sensitise the language preferences and demands made upon the student corps in various regions of South Africa.

Presently English is regarded as one of the 11 official languages in South Africa, as well as a universal language. A large proportion of the population speaks English. The Department of Education and Training (DET) conducted a research and found that English was spoken the most (48 percent) by scholars, followed by Zulu (13 percent) (Cooper et al., 1993). To accommodate all prospective students at tertiary institutions, it would be advisable to have the recruitment programmes spoken and printed in the most popular language of the specific region of the tertiary institution. In both educational and business environments English is spoken the most widely. The three mostly spoken languages in the Western Cape Province, and at the Cape Technikon were English, Afrikaans and Xhosa.

2.4.1.2   Contents intensity

Cooksey (1988) emphasised the importance of consistent messaging in a recruitment brochure. The information provided particularly in career options, training facilities and promotional prospects, necessitated that the messages were consistent at all times with the other stages in the recruitment process. She elucidated the danger that 'inconsistent "messages" led to rejection by the job applicant and aborted the recruitment process'. Information given had to reflect the culture, norms, values and expectations of the institution.

2.4.1.3   Format

The format and design of the brochure were often a personal choice. The trend was towards generalised statements, but the need for specific details was regarded as a priority by readers of brochures (Cooksey, 1988).

2.5   Syntony - the shaping process

Music serves as a common bond and within music one tried to find the common ground of understanding. What was missing, more often than not, were the feelings, the emotions and full understanding that actually determined the course of one's actions and behaviours. Therefore, music used, as sound transitions or as an introduction or conclusions to sections, was deemed necessary.

Miguel Sabido's interpretation of syntony is expressed in his 'Tonal Theory' (Nariman, 1993:58,69). Sabido developed an integrated, multidisciplinary framework that he called his theory of 'tones'. Tonal Theory provided rules for orchestrating several communication elements in such a way to have the desired effect on the audience (Singhal, 1990:253), namely to bring his audience 'in harmony with' the contents of the soap opera, through the identification with socially desirable behaviours. Music or sounds, in general provided this harmony in the multimedia tool.

Miguel Sabido, creator of the genre *telenovelas* in Mexico, drew his strengths from his personal experience of theatre and television. His views refuted the findings of research done about limitations of the mass media in the 1960s.

Underlying Sabido's methodology were five other doctrines, namely Bentley's theory

and the structure of melodrama, using the latter as a basis for character and plot

development, Carl Jung's ideologies of biological and psychological archetypes that

conformed to audiences' norms, the Stanford University psychologist Professor

Albert Bandura's social learning theory as to understand how one was taught

socially desirable behaviours by means of reinforcement and the use of a role

model, and the physiologist, Paul Maclean, who taught Sabido the concept of the

triune brain (Singhal, 1990; Nariman, 1993). Closely related to Sabido's strategy,

Everett M. Rogers (1995) gave an account of using this methodology and expanding

the notion of diffusion and the social impacts diffusion had on life. Rogers (1995)

cited that the dynamics of diffusion occurred within the context of relative

advantage, compatibility, complexity, trialability and observability of this innovation

in a variety of television contents.

One of the key elements underlying Sabido's concept of syntony was

accepting the 'who' and working with the 'what' we are. Based on Bandura' s social

learning theory, Sabido asserted that humans learned social behaviours through the

observation of role models, and therefore making the process of social engineering

a possible task to fulfil (Nariman, 1993).

Syntony became the shaping process and this occurred within the following

parameters:

- syntony acknowledged the important role culture plays in bringing about
  'communication harmony' and in shaping cognitive understanding and social
  reality (Bandura, 1989),

- syntony created a 'social connectedness', a state of belongingness that provided

the structure and motivation for self-expression, a process of fine- tuning

(Bandura, 1989),

- to have syntony effectively explored, it was necessary to advocate the requirement of skills to develop the balance between cognitive understanding and self-efficacy (Bandura, 1989),

- syntony emphasised the importance of cultural identity (Bandura, 1989)

- syntony served as a common bond which found the common ground of understanding.process that enhanced harmony or depleted it. Syntony can be created, as syntony is the 'fine-tuning process' that brings the targeted audience into harmony with the decoded messaging.

The strategies of education–entertainment (edutainment) play a pivotal role in acknowledging this sensitive process (Nariman, 1993:2). Audiences are attracted to these fast-moving, emotionally charged soap operas, also called *telenovelas* and see them primarily as entertainment (Rogers and Antola, 1985). In Latin America the audience perceived the *telenovelas* as a way of escape and oppression. A shift in interpretation of the soap operas in the United States and England was evident. Researchers like Hobson (1982), Radway (1984), Allen (1985), Ang (1991), Liebes and Katz (1990) and Trotter (1992) all contributed to their different interpretations of the values and audiences of *telenovelas*. For example, Hobson (1982) focused on the role of the woman as an audience member. Radway (1984) focused on techniques utilised to gain insight into women's use of popular fiction to understand their repressive social situation in a soap opera. Liebes and Katz (1990) and several other researchers explored the meaning of *Dallas* for audiences outside the USA

(McAnany and La Pastina, 1994). Morello (1993) cited that soap operas created an art of persuasion. This happened in China and addressed a potential audience of five hundred million viewers to pursue change socially, addressing population control in the country.

Miguel Sabido, a television producer and director at the Mexican television network, Televisa, created the first TV soap opera 'Simplemente Maria' using elements of Social Learning Theory and Diffusion Theory. Sabido's *telenovelas* resulted in successful widespread ratings for Televisa, bringing about behavioural changes by audience members (Nariman, 1993). Single messages were repeated, and the repeated exposure was more likely to affect the intended audiences (Singhal and Rogers, 1994).

Miguel Sabido's strategies incorporated 'popular and lucrative forms of mass entertainment and is designed according to theoretical and social research to conform to the audience's reality frame and to communicate emotively as well as cognitively, establishing the conditions for social learning to take place' (Nariman, 1993:3). The ultimate goal was to bring about social change amongst the viewers.

'Simplemente Maria' (1969), told the story of Maria gaining financial success through sheer hard work and sewing proficiency, as well as wanting to take literacy lessons. She had emulated a socially desirable character and a great deal of the audience followed her as a model in deciding whether they should purchase and use a Singer sewing machine. In effect, the sales of Singer sewing machines escalated, but in essence, 'Simplemente Maria' provided entertainment and simultaneously promoted national development and social integrational values. The Latin American audience could identify with the character of Maria and unaware,

created a mimetic behaviour (Singhal and Rogers, 1983). 'Simplemente Maria'

encouraged Sabido's ambition to develop a formula for the production of other

contemporary soap operas that were entertaining, commercially viable and socially

very useful. Sabido's pioneering methodology led to other successful soap operas

dealing with social issues like adult literacy, family planning and equality for women

(Nariman, 1993).

Sabido emphasised five components of an effective pro-development of a

soap opera, namely the importance of attracting a large audience, to emphasise

cultural archetypes and stereotypes, to represent emotions, to promote socially

desirable values and to provide a vehicle for social learning (Singhal and Rogers,

1989). In later years, international diffusion of the genre was shown across the

globe. Other soap operas followed: ' Ven Conmigo', 'Acompàñame', 'Vamos Juntos',

Tushauriane' and 'Ushikwapo Shikimana', (1987-1989) were broadcast in Kenya;

'Hum Log' (We people) (1984-1985) and 'Hum Raahi' (1992) were shown in India

(Nariman, 1993; 3). Promoting pro-development social values the same time as

entertainment was implemented by producers worldwide in a variety of ways, such

as in filming, comics, books, the printed media and the use of rock music (Singhal

and Rogers, 1994:382-383).

Everett Rogers, who developed the notion of diffusion of innovations in 1983

(Rogers, 1995), set the stage for himself and his protégé, Arvind Singhal. Their

combined effort of technology and science demonstrated the dynamics of soap

operas in India. The messages conveyed, were portrayed to correspond to viewers'

status in the social hierarchy, and had the potential and dynamics to be addressed

to each individual in a large audience and to a whole audience (Singhal and

Rogers, 1994).

The most basic areas of impact were the *information societies* (Singhal and

Rogers, 1989:49-52). Within this information society edutainment has a mandate of

planned change. The impact was done 'emotively as well as cognitively,

establishing the conditions for social learning to take place' (Nariman, 1993). In a

South African context, 'Isidingo'and 'Soul City' were examples of soap operas,

addressing social issues in South Africa.

Amidst a complex society one is living in, the quest at the level of the

individual was to attempt to create a balance, to be in harmony with the decoded

message. This process became a vehicle, a communication tool, addressing the

dynamics of communication in order to enhance acceptance, tolerance or

assimilation. In a political context, propaganda has played an important role, namely

a role 'of. a hegemonic, negatively manipulative or propagandistic tool (Ellul, 1973).

Within the student recruitment context, this link had to be established in the

initial messaging of the recruitment process so that students would be able to

identify with the message and the institution and acquire a need to further their

studies at the chosen institution. The students firstly had to be attracted to the field

of study and then the institution. Their choice would be justified by the fact that they

had chosen the best career option at the faculty/tertiary institution for their purpose

of academic venture. This choice of tertiary institution would be regarded as their

commitment to themselves and the institution. The link ensured the initial stage of

their decision-making process, and allowed an interaction between the institution

and the student-fit.

2.5.1 Social-engineering of syntony

Man's existence and communication needs were situated in a social context.

Social engineering occurred within the parameters of social construction. Vallance

(1996) stressed the fact that social construction required one 'to understand all the

dimensions, all the meanings of a facet of living' in order to create individual and

community reality. She (1996:21) stated that social construction became a

subconscious process that emerged as a force of shared construction of meaning.

Social-engineering is synonymous with social change. An alteration

happened in the structure and the function of a social system. This catalyst of

'accepted change' among audiences has shaped our understanding of world needs.

Development communication would change the core of the Western perspective of

development, introducing mass media as the integral way of social transformation.

For example, family planning campaign in China, the decreasing use of pesticides in

the Philippines, the establishing of the 'computer culture' in Singapore, farming,

health, and nutrition (Singhal and Rogers, 1989). Changing attitudes were

fundamental and the importance of attitudes as a predisposing condition to

behaviour in communication situations, played a pivotal role in communication

based development strategies (Singhal and Rogers, 1989).

The character of the messaging could vary. For example, negotiations were

used to obtain the desired 'harmony', or rhetoric, propaganda or persuasive

communication in the study of Manoleas and Carrillo (1991) It became clear that the

dynamics of negotiation and persuasive communication was 'making a difference in

the lives of Latinos'. Latino students were helped to discover, to develop and nurture

a personal style that continued to evolve as they became professionals (Manoleas and Corrillo, 1991:142).

This approach called for sincere and substantial involvement of all societal structures, be it at the level of an individual, an organisation, a community or a society. For example, Latin Americans in Brazilia listening to literacy programmes on the radio (Barnouw *et al.*, 1989:16,20), or Indian communities being exposed to soap-operas on television, like Hum Log addressing values like family planning and family harmony. This required a process of 'strategic planning', a 'repositioning' of projects that acknowledged the important role played by culture in bringing about harmony and the shaping of social reality (Megwa, 1994). It recognised the reality of variability in the individual needs and human action, and the important role culture and the community play in how people perceive reality and relied heavily on 'genuine and substantial involvement of local people in the development process...the role grassroots communication plays' (Megwa, 1994:1).

For the purpose of this research, one had to focus on orchestrating educational decisions within a cultural context. This would shape the student-institution fit, emphasising that recruitment of both the traditional and nontraditional student corps had been implemented in the correct manner.

2.5.2 The theoretical platform underlying the research

The research was based on the tenets of theories, namely Communication Theory, Social Learning Theory, Diffusion Theory and the Triune Brain Theory. Each of these theories intended to shape the research. Emphasis was placed on the

Social Learning Theory, Diffusion Theory and the Triune Brain Theory.

2.5.2.1   Social Learning Theory – Albert Bandura- 1925-

The dynamics of social learning theory and the proposed change, as introduced by Albert Bandura -1925 –stated in his influential work (Bandura, 1977: *vii*) that 'Social learning theory approaches the explanation of human behaviour in terms of a continuous reciprocal interaction between cognitive, behavioural, and environmental determinants. Within the process of reciprocal determinism lies the opportunity for people to influence their destiny as well as the limits of self-direction. This conception of human functioning then neither casts people into the role of powerless objects controlled by neither environmental forces nor free agents who can become whatever they choose'.

Attitudes, values, perceptions and behaviours of man were responses because they were all reactions to external stimuli (Tan, 1985:243). These response tendencies were to be learnt by man. The main determinant to learning was reinforcement. Social learning theory determined how man learns from direct experiences as well as from observation or modelling. Social learning theory highlighted the important roles played by vicarious, symbolic and self-regulatory capacities in man's psychological functioning. Human thoughts and behaviours were markedly influenced by observation. Direct experience encouraged the power of socially mediated experiences. The thinking process was determined by the usage of language symbols. These symbols represented events and conveyed relative information. Humans used symbols to provide encounters dealing with their

environment and developed a close correspondence between the symbolic meaning

and the external events. Through verbal and imagined symbols people were

provided with the instruments of thought where he could process and preserve

experiences in representational forms that served as guides for future behaviours

(Bandura, 1977:36, 37).

Social learning theory fostered the central role in self-regulatory processes,

but had the ability to select, organise and transform the stimuli that was forced upon

him. It needed self-generated inducements and consequences to influence his own

behaviour, in other words, self-produced influences where one's destiny and self-

direction was influenced. To recognise one's own self-directing capacities,

individuals served to be their own change agents. Man found him in a continuous

reciprocal interaction generated by environmental and cognitive factors. These

forces made man act and behave like he does and made him able to exercise some

measure of control over his own behaviour (Bandura, 1977).

Man could generate reinforcements within himself for performing certain

behaviours, of which 'self-satisfaction' and 'inner peace' was general self-

reinforcers. Behaviours performed to the extent that the media influenced us to

change or reinforce our opinions and attitudes in order to raise public awareness

and inform the audience about social matters. The mass media, an important

socialisation agent, functioned as an attentional process, a retention process, a

motor reproduction process and a motivational process (Tan, 1985). Bandura's

social learning theory was effectively utilised for analysing observational learning

and was implemented especially for mass media research regarding large

populations, message reception in natural field settings and pro-social learning as a

dependent variable (Singhal and Rogers, 1994).

Albert Bandura's approach in social learning theory could be explained in his search for a broadening of his ideas of imitation and identification as two prominent variables. According to Bandura the opportunity for learning was encouraged and enhanced by repeated observation of an event, in which one felt positively towards salient events and through the process of reinforcement (Tan, 1985:246). The main determinant to learning was reinforcement and it occurred when man learnt from direct experiences and from observation or modeling. Human thoughts, affect and behaviours were markedly influenced by observation (Bandura, 1977).

Social learning theory focused on both the acquisition, and elimination of innovative behaviours. In the acquisition of an innovative behaviour modelling served as the vehicle for transmitting new ideas, styles of behaviour, by observing others and from the instructions of others. Advertising *per se,* as used in the field of student recruitment, plays an important role in creating innovative behaviours.

If the stimuli is more pervasive, the greater the likelihood that proven innovations were tried by others as well. It was necessary to take cognisance of the fact that the rate of adoption of an innovation occurs in stages, namely the innovator, the first adopters, late adopters, early majority and late majority and finally the laggards (Rogers, 1994). Innovative behaviours include the group of early adopters that have been exposed to media sources of information about the innovation and were spread along existing networks of interpersonal communication. It was disseminated further into group members through personal contact with local adopters and was susceptible to vicarious reinforcement to make the observers respond in the desired manner (Bandura, 1977:50,51).

In the context of student recruitment it needed one student to be attracted to the technikon by an innovative, creative approach, such as the CD-ROM. A process of transmission occurred. This student influenced a fellow friend or relative, and the latter influenced more and more friends. Late adopters and laggards presumably would first wait and see the benefits gained by their friends who were the innovators, early and late adopters before trying to make a decision for themselves.

Man has the ability to select, organise and transform the stimuli forced upon him. To recognise one's own self-directing capacities, individuals serve as their own change agents. Man found himself in a continuous reciprocal interaction generated by environmental and cognitive factors (Bandura, 1977). Human emotions were agitated and intellectual activity among viewers about moral values were ignited, therefore the reciprocal nature of Social Learning Theory (Singhal, 1990).

The attentional process was determined by the fact that man learnt by observation. Man processed information and interpreted it. The retention process valued the fact that what man had learnt could not be performed immediately after observation due to practical reasons. Man retained the thoughts until applicable. The response patterns were symbolised in our minds in order to retrieve the representation when necessary. Steps determined the motor reproduction process, namely cognitive organisation of the responses, their initiation, monitoring and refinement on the basis of informative feedback. The motivational process was characterised by external reinforcements such as rewards that man got for performing certain behaviour (Tan, 1985:244-249).

The processes of communication and the development thereof had become more complex and showed less uniformity. Development communication required a

ground-up notion that took cognisance of political, cultural and social structures in

the process of planned change, as being compared with the previous deterministic

top-down structure of sending messages (Hamelink, 1984).

In order to bring about change within communication, a retooling, re-

engineering of the process was required. Megwa (1994) recognised the importance

of this approach, more specifically within a South African context, that

communication depended totally on culture in shaping the process of organisational,

community and social reality.

Most important for this study, Bandura (1977) stated that man learnt through

the processes of observational learning, directly or indirectly. Singhal (1990)

contended that 'observational learning occurs when an observer acquires new

knowledge about certain rules of behaviour from a model through the processing of

information'. Modeling, either alone or associated with corrective feedback, was a

determinant and played a prime role in the spreading of new ideas and social

practices within a society. This theory was particularly relevant to mass

communication because many behaviours learnt through modeling were observed in

the mass media.

Observational learning occurred through the regulation of four cognitive

processes, namely attentional process, retention process, production process and

motivational process. The acquisition and the performance of a behaviour were

clearly distinguished in the Social Learning Theory. Singhal (1990:246) cited that

people did not perform every behaviour they acquired. Positive incentives assisted

in previously-acquired behaviour, but motivational processes were more likely to be

relevant to the performance of a behaviour, than to the learning of a behaviour.

Television as the medium gave its audiences great opportunities for observational learning experiences through role models. The learning-performance distinction was the key to success in the social learning theory. The viewers tended to emulate certain role models, be it a positive prosocial behaviour or an antisocial behaviour (Singhal and Rogers, 1983). Only then proposed change came into effect.

Singhal (1990:241) conceptualised mimicry as imitation, identification and modeling. These responses instill a value of belongingness in the social learning theory context (Singhal, 1990). Lee and Robbins (1995) proposed that belongingness consisted of three aspects, namely companionship, affiliation, and connectedness. They defined companionship as the phase that originated in infancy and extends throughout the adult life. A bond was created with parent and child providing the child with security, a likeness. This formed the basis of the child's self-esteem. Affiliation referred to a twinship that manifested itself when the child established peer relationships. A resemblance was formed with similar qualities in appearances, opinions and values. This phase ensured a healthy development of the adolescent's threat against his/her self-esteem, he/she could deal with criticism and misunderstandings of peers and could maintain personal one-to-one relationships. The third important phase was connectedness, and this emerged during adolescence throughout adulthood. The connectedness or belongingness enhanced the comfortability and confidence with himself/herself to identify within a larger social context than only friends and families (Lee and Robbins, 1995). These phases reiterated the notion that to interact with the wellbeing of the person and his/her environment was conducive to a bond, a commitment, a companionship, an

affiliation or connectedness. A connectedness related to a person's opinion of himself/herself in relation to others.

2.5.2.2   Diffusion Theory

The most cogent and recent research on diffusion theory was introduced by Everett M. Rogers in 1962 and exemplified the notion of diffusion through the means of innovation. The purpose of communication planning was often perceived as a promotion of an innovation. Recruitment can be compared to a communication campaign *per se* of which the outcome was supposed to be change, and consequently a behavioural change (Wanat and Bowles, 1992, McDonough, 1994). Rogers (1995:35) defined diffusion as 'the process by which an innovation is communicated', and defined communication as 'the process in which participants create and share information with one another in order to reach a mutual understanding'. An innovation is an 'idea, practice or object perceived as new by an individual or other unit of adoption' (Rogers, 1995:35). These processes had to be integrated for the successful spread of innovation to take place according to Rogers. The most crucial phase of innovation was determined by the adoption process, in which the individual or group(s) were confronted with an innovation and their reaction to it. Interplay between mass and interpersonal communication occurred in a delicate way to make the adoption process happen. The rate of adoption indicated 'the relative speed with which an innovation is adopted by members of a social system' (Rogers, 1995:206) and is indicative of the acceptance of the innovation or not. The individual took cognisance of the perceived attributes of innovations,

namely relative advantage, compatibility, complexity, trialability and observability. A key player was the change agent; an opinion leader of a society who would adopt the innovation and continue to spread the innovation until a mass of adopters was reached (Rogers, 1995:208).

Relative advantage is the 'degree to which an innovation is perceived as being better than the idea it supersedes' and could be explained as economic profitability, social prestige or other possible benefits (Rogers, 1995:212). Compatibility is defined as the 'degree to which an innovation is perceived as consistent with the existing values, past experiences and needs of potential adopters' (Rogers, 1995:224). Complexity is the 'degree to which an innovation is perceived as relatively difficult to understand or use' (Rogers, 1995:242) and trialability is defined as the 'degree to which an innovation may be experimented with on a limited basis' (Rogers, 1995:243). Observability ensured the 'degree to which the results of an innovation are visible to others' (Rogers, 1995:244). The latter was positively related to the rate of adopting the innovation.

Diffusion is shaped through an information exchange among participants in a communication process. Opinion leaders within a society play a paramount role. They are categorised as people who are affluent and have higher socio-economic status than their followers are and have greater exposure to mass media. They are regarded as more cosmopolite and they partake in more social participation (Rogers, 1995; Windahl et al., 1992).

In the field of technikon student recruitment the opinion leaders were the recruitment staff and the teaching personnel at the tertiary institution. The opinion makers would believe in the product or institution they were about to sell. Change

agents played a pivotal role in the diffusion process; they influenced other's

innovation decision in a direction that was desirable. They act instrumentally in the

fine-tuning process between student and institution.

Focusing on a practical aspect of implementing an innovation, according to

Rogers (1995), time as a variable was one of the strengths in diffusion. Rogers

(1995) defined time in three areas, namely: in the innovation-decision process by

which an individual passes from the first knowledge of an innovation through its

adoption or rejection; in the innovativeness of an individual or other unit of adoption-

that is, the relative earliness/lateness with which an innovation is adopted -

compared to other members of a system, and in an innovation's rate of adoption in a

system, usually measured as the number of members of the system that adopt the

innovation in a given time period (Rogers, 1995:20).

Social learning theory, as introduced by Albert Bandura from Stanford

University, has direct applicability to diffusion (Rogers, 1995). Both theories sought

to explore how the individual changed their overt behaviour as a result of

communicating with others. Information exchange led to behavioural change and

occurred within the parameters of networks as their source of main explanation of

how individuals altered their behaviours (Rogers, 1995; Windahl *et al.*, 1992).

Instrumental, technological change or the introduction of innovations was regarded

as the main cause of social change.

With relation to this research, the Social Learning theory added value to the

dynamics of mimetic behaviour and the impact of role models used on the

multimedia recruitment tool. The role models were the spokespersons and they

exchanged information that led to decision-making processes amongst the viewers.

2.5.2.3   Paul Maclean's theory on the Triune Brain

This theory provided a model for sending complete messages that communicated with various centres of perception. This concept of the triune brain personified the cognitive, affective, and predispositional levels of perception. Maclean (Nariman, 1993) asserted that through centuries of evolution humans have been endowed with three distinct cerebral centres, namely the reptilian brain (related to establishing territory, hunting, breeding and mating), the paleomammalian brain (related to emotional behaviour), and the neomammalian brain (related to receiving information from the external environment as registered through the senses). Miguel Sabido, creator of syntony within the contents of soap operas in Mexico, adopted this concept and addressed holistic messaging to the cognitive, affective and predispositional levels of perception. Messaging had to facilitate attitudinal, informational and behavioural effects on the audiences (Nariman, 1993:44). The messages would confront social and personal consequences of people's attitudes and behaviours.

With relation to the research, this theory strengthened the prospective students' decision-making processes in three areas. After viewing the multimedia recruitment tool, the three centres of the brain should 'intermesh and work together for humankind to achieve harmony' in order to bring about social objectives (Nariman, 1993:45). By viewing the multimedia recruitment tool and being cognitively involved, firstly, the brain was intellectually involved by receiving information. Secondly, the brain made was affected by the information and choices were made about future careers, tertiary institutions and courses offered at the

School of Management. Thirdly, the participants of the research who had the

opportunity to view the multimedia tool, they were predispositionally involved with

the information.

2.6   Summary

The literature review acknowledged five main areas, namely the role of

tertiary institutions, the role of students, the role of student recruitment *per se*, the

cultural messaging of recruitment tools, and syntony as the shaping process in the

recruitment process. It became clear that a more creative, up-market notion was

necessitating a change in student recruitment approaches. The kingpin was the

process of syntony in order to assist the prospective student with decision-making.

Chapter Three outlines the methodology that was used to conduct the

research.

Chapter 3

3.   Method of research

One of the main aims of this research was to contribute towards the

recruitment process at the Cape Technikon, assisting with the development of an

alternative way to obtain the 'right' student for the 'right' course. This research

acknowledged the student's background and culture so as to create a sense of

belongingness and social connectedness to the tertiary institution. It was hoped that

this might occur by revealing the perceptions of a different recruitment method

presented to Standard 10 learners who were used for this research. No prior

research for recruitment purposes at the Cape Technikon had been carried out into

the social and cultural perceptions of such a target group.

The point of departure was an analysis of what the current Standard 10

learner knew about the tertiary institution, the Cape Technikon, and more

specifically knowledge about the School of Management. Five feeder schools of the

Cape Technikon were chosen for this case study. As part of the Cape Technikon's

mandate for recruitment of prospective students, the selected feeder schools

represented the traditional and nontraditional sector of education in the Western

Cape.

The case study included sixty Standard 10 learners of 1997 from five feeder

schools (sample units) consisting of eight to twelve learners in each group. The

following table serves to indicate how these groups were constituted:

Table 3-1   Description of the various schools, the locations and the learner

populations

HIGH SCHOOL	PRINCIPAL	DESTINATION	TOTAL SCHOOL POPULATION	STANDARD 10s	% IN RELATION WITH SCHOOL POPULATION
Bosmansdam	Mr Fillmore	Bothasig	524	77	14,7%
Livingstone	Mr Visagie (Deputy)	Claremont	1 100	200	18,2%
Fairmont	Mr Wigg	Durbanville	1 200	200	16,7%
Garden's Commercial	Mr De Kock	Cape Town	530	70	13,2%
Vuyiseka	Mr Mzamane	Cape Town	1 012	100	9,9%

(Administration staff of the various schools supplied above-mentioned information,

1997)

Bosmansdam High School is situated in Bothasig, a suburb near Milnerton,

close to major industrial areas. Bothasig serves a relatively racially mixed low to

middle socio-economic income group. Learners attending this school would typically

qualify themselves to skilled-related professions and would attend a technikon or

technical college to further their education, perhaps a few learners would attend a

university. The basis of this statement- the majority of the learners' parents either

work in the area or in adjacent industrial parks. About 50% of the learners pursue

tertiary studies in a technical field, as opposed to a pure academic field. Livingstone

High School is situated in Claremont and draws from a middle socio-economic

income group amongst the coloured population. Although it attracts learners from

the Cape Flats, Athlone, Wynberg, Ottery and Wetton areas, this school is regarded

amongst the coloured community as an élitist school, delivering very high academic

results. About 60% of the learners attend a tertiary institution. Fairmont High School

is situated in the affluent area Durbanville in the Northern Peninsula, approximately

thirty kilometres from Cape Town. This school draws a mixed learner population

from a high socio-economic community and about 70% of the learners attend a

tertiary institution. Garden's Commercial is situated in the Cape Metropolitan Bowl

and accommodates learners with a specific interest in secretarial professions and

commercial subjects as opposed to learners interested in pure academic subjects.

These learners come from a broader spectrum of the Cape Peninsula, not only the

specific Cape Town area. This school represents a 50-55% student interest in

furthering studies at a tertiary institution, rather a technikon or college than a

university. Vuyiseka High School is situated in District Six in the Cape Metropolitan

Bowl. This school draws black learners from greater Cape Town. They come from a

very low socio-economic income group, and have thus for not pursued much of an

interest or possibility of furthering their studies at a tertiary institution.

3.1   Edutainment – the driving force of the research

Student recruitment has been formed by a combination of entertainment and

education strategies, namely edutainment. Edutainment is multidisciplinary, drawing its strengths from the theories of social learning, diffusion, and the triune brain. For the purpose of this study, edutainment was applied in a multimedia CD-ROM format and tested with sixty Matric learners from five selected schools in the greater Cape Town area.

Edutainment was used to convey information to a high school learner about a prospective tertiary institution and the courses offered there. This link gave the prospective student a sense of empowerment to make responsible decision-making choices.

3.2   The Case Study - the sample

In total sixty Standard 10 learners (sample elements) from five feeder schools (sample units) of the Cape Technikon were selected as subjects for this study. This procedure resulted in the selection of culturally diverse groups. The learners were asked to partake voluntarily and randomly.

The research took place in September and October 1997. Many Standard 10 learners would have made decisions by then about their future careers and further tertiary education. Some might not have done so. Some might have delayed definite decisions due to frustration, confusion, no motivation or lack of interest. The intention was to give potential students another chance to be creative in this critical stage of their schooling.

3.3   Execution

The research was executed, using a pre-post experimental focus group design. The mortality error in the above-mentioned design was eliminated by offering participants rewards after completion of the second stage, the focus group interviews. The rewards were gift vouchers from a specific shop.

The first stage consisted of a pre- and post-measurement , the second stage being the focus group interviews.

3.3.1 Pre-measurement

The first visitation was made to the Media Laboratory at the School of Management, Cape Technikon. This visitation included two phases in the pre-measurement stage:

• the pre-phase: a brief writing exercise was done on one page. A general question was asked, namely:

1. Of the six departments in the School of Management, which department do you know more about?

Knowledge of the Cape Technikon, the six departments of the School of Management and potential careers in this field was required. The duration of this phase was about 15 minutes.

• The interactive multimedia CD-ROM recruitment tool was then introduced and the learners were allowed to explore the information from the CD.

The duration varied from 40 minutes to an hour.

- the post-phase: Immediately after the presentation, questions about the six departments followed. The questions were:

1. If you had the interest and desire to study one of these courses at the School of Management, which one would you choose and why?

2. Do you think these subjects/courses at the School of Management at the Cape Technikon create substantial academic, technological and social skills for future careers?

This phase included a brief writing exercise. Descriptive answers deriving from the written exercises on above-mentioned questions were evaluated. The questions were asked in such a way that information was gathered to discover what they had not known before about the Cape Technikon and the School of Management, which was now available on the CD-ROM. The duration of this phase lasted about 20 minutes.

3.3.2 Post-measurement

As a final way of data gathering, two weeks later, the second visitation and final stage, namely the focus group interviews, followed. The same 12 Standard 10 learners per school were involved. It was important to see how the participants' learning behaviour had changed since the previous meeting. The focus group interviews were audio-taped. The questions for the focus group interviews were:

1.   Does the CD-ROM give substantial information on the Cape

     Technikon, the School of Management and the six

     departments?

2.   Did the CD-ROM address the needs, perceptions, futuristic hopes of

     potential careers to be studied in the School of Management to

     motivate you as the viewer to consider the Cape Technikon as a

     possible tertiary institution?

3.3.3 Motivation for using the focus group interviews

The importance of focus groups addressed the following important factors:

i.   An interpretation of the qualitative data required not only the content of the

     information given, but also the nonverbal communication such as silences, tone

     of voice, level of energy. Qualitative information obtained from the pilot project

     and the focus groups provided information about vocabulary, language and

     jargon used by prospective students. The information served to further

     strengthen the interpretation of the data.

ii. The compilation of the groups for the focus group discussions was culturally

     and academically diverse. Focus groups proved rich in idea generation

     (Milman, 1993; Lunt and Livingstone, 1996) and are found in Appendix 7. The

     focus group discussions existed in a socially situated communication context,

     which allowed spontaneous discussions.

iii. Perceptions of prospective students were regarded as important. Information

was gathered in the discovering of the verbal perceptions which resulted from the free-flowing group discussions (Rossouw, 1996). A social climate was created in both venues, in the Media Laboratory, School of Management, Cape Technikon, and at the various schools, and the discussions were shared in a relaxed manner. The effectiveness of focus group interviews lay in the generating of creative information, and in deriving impressions on new concepts.

3.4   Data analysis

The narratives gathered from the pre- and post-tests and the focus group discussions were interpreted to assess patterns of behaviour. Arriving at this crucial stage of the research, the researcher had gathered information regarding the 'categories' as outlined in the Syntony Filter Matrix (pages 104-105).

The Syntony Filter Matrix will serve as a final assessment frame to interpret the narratives of the participants in the pre- and post-tests of the pilot project as well as the focus group interviews.

The following diagram presents the theoretical platform upon which the study was conducted. This diagram was developed specifically for this study. This data was coded according to the operative categories of the Syntony Filter Matrix Grid. If any data related to a cultural aspect or showed signs of a bond with the institution due to cultural influences, it was codified into that category, namely 'Role of cultural background'. Data that aimed at the students' background knowledge were codified into the category 'Affiliation with tertiary institution', 'Identification with role model',

and the 'Effect of information, the technology on viewers' levels perceptions'.

Diagram 3-1 The Grid: the Syntony Filter Matrix Grid as developed for this study

SYNTONY

MIMETIC BEHAVIOUR + DIFFUSION + TRIUNE BRAIN =

SOCIAL CHANGE

MIMETIC BEHAVIOUR (Bandura)	DIFFUSION (Rogers)	TRIUNE BRAIN (Maclean)
social behaviours ensure: • belongingness • companionship • affiliation • twinship • connectedness	qualities: • relative advantage • compatibility • complexity • trialability • observability	levels of perception: • cognitive • affective • predispositional
	S O C I A L C H A N G E	

Following this narrative interpretation, the information was directed towards the two research questions as outlined in the thesis. The research questions, as originally stated on page 6, were:

1. What kind of social message could address the needs of the traditional and nontraditional student within the South African context?

2. How does recruitment information in a multimedia format assist a prospective student in making a decision about a tertiary level education programme?

The Syntony Filter Matrix with the various categories follows:

Diagram 3-2 The Syntony Filter Matrix: Categories

MIMETIC BEHAVIOUR	DIFFUSION	TRIUNE BRAIN
Bandura	Rogers	Maclean

<div align="center">SOCIAL CHANGE</div>

CATEGORIES	creates 'harmony': yes / no	creates need to attend the Cape Technikon	creates belongingness due to culture	creates positive/ negative decision-making
1. Affiliation with tertiary institution				
2. Role of cultural background				
3. Identification with role model				
4. Qualities of diffusion: (i) Tangible compatibility, trialability, observability				
(ii) Tacit meaning – complexity, relative advantage				
5. Effect of information, the technology on viewers' levels of perceptions				

An explanation follows on each of the mentioned aspects in the grid, as to how the researcher found a logical connection to her research problems and the characteristics of the metatheoretical approach to the study. The grid was used as a means of conceptualising and present meaning to above-mentioned categories.

The commentaries, oral and written outputs were labelled according to the

different categories of the Syntony Filter Matrix. The researcher consciously assigned each statement/narrative deriving from the pre- and post-measurement phase as well as of the focus group interviews to fit in the grid of the matrix. Interpretations were conducted to explore how social messaging had been revealed by means of the CD-ROM multimedia tool.

The narratives were interpreted according to the basic qualities of the meta-theoretical approach used by the researcher. They were:

A series of human values, such as individual self-esteem, the correct decision-making processes, inquisitiveness, honesty, a right to choose, fulfilling commitments, not to quit, to better your education, to improve your quality of life, etc. were to be reinforced through the usage of this multimedia CD-ROM. The CD-ROM addressed these objectives by associating them with pre-existing values.

3.5   The codifying system

The codes that were used in the Syntony Filter Matrix Grid were:

- **A1 = Harmony,** which included elements like decision-making to attend the Cape Technikon or not, role of mimetic behaviour
- **A2 = Affiliation,** looking at elements like bonding with, connectedness, twinship
- **A3 = Role of culture**
- **A4 = Decision-making process**

Interpreting the narratives of the pre- and post-phases and the focus group

interviews, the researcher assessed whether social messaging and multimedia would assist in student recruitment at the Cape Technikon. Having encoded the responses, certain behavioural patterns were interpreted.

The multimedia recruitment tool, the CD-ROM, was a vehicle for transmitting a specific social message. A series of factors relevant to student life, the academics, career options, fields of studies, bursaries, recreation, and others, were important to any prospective student showing interest in the Cape Technikon as a future tertiary institution and were part of the message. The presentation on the CD-ROM offered the most basic information required from any potential student at a tertiary institution.

3.6   Method used for the making of the CD-ROM

The information given on the CD-ROM was created using graphics, music, photographs, digitised movies and written material. The storyline and contents of the CD-ROM for 'Student Recruitment for the Cape Technikon' included the following:

- general information about the Cape Technikon, the history and its location
- courses offered at the School of Management, and its admission requirements for the courses
- contents of the courses
- qualification structures at the Cape Technikon, for example a National Diploma leading to a B Tech degree or a National Higher Diploma, M Tech and D Tech degrees
- library facilities – rules, audio-visual aids, conference rooms, bookbinding,

photocopying facilities, short loan facilities, Granger Bay library

- foreign student application procedures

- medium of tuition - English and Afrikaans

- co-operative training opportunities

- residences, hostels (general information and rules), housing facilities

- sport activities, cultural activities, religious activities, social activities

In Chapter 4 data from the pre-and post-measurement phases, as well as the

focus group interviews were analysed according to the Syntony Filter Matrix Grid.

Each narrative was codified and categorised.

Chapter 4

Applying syntony in the social messaging of the interactive multimedia edutainment recruitment tool

The purpose of this study was to explore syntony as the driving force in a student recruitment tool, an interactive CD-ROM, at the School of Management at Cape Technikon. The research proceeded in the following manner:

1. the selection of the schools and learners,

2. the creation of the CD-ROM,

3. the presentation of the CD-ROM to the learners, and

4. the focus group interviews.

4.1   The schools and learners - the sample and sample units

Presentations for the selected twelve Standard 10 learners from the five high schools were held at the Media Laboratory, School of Management at the Cape Technikon. The five high schools chosen were:

1. Bosmansdam High School,

2. Harold Cressy Secondary High School,

3. Gardens Commercial High School,

4. Groote Schuur High School, and

5. Vuyiseka Secondary High School.

The Western Cape Education Department authorised the use of the Standard 10 learners for the research (see Appendix 9). The school guidance teachers chose the Standard 10 learners at random to participate. Each participant explored the CD-ROM programme during the pre-measurement phase.

The six male and six female learners from each school represented a cross-section of South African cultures, namely black, coloured, white, Indian and Central African immigrants. The distribution however varied from school to school. Two schools that had changed school management declined to participate. This occurred in the period between the proposal being accepted and the study being conducted. Harold Cressy Secondary High School replaced Livingstone Secondary High School, and Groote Schuur High School replaced Fairmont High School, without affecting the sample size.

The dates of presentations and focus group interviews with the schools were:

Table 4-1   Appointments of CD-ROM presentation and focus group interviews

HIGH SCHOOLS	PRESENTATION	FOCUS GROUP INTERVIEWS
Vuyiseka Secondary High School	1 September 1997	16 September 1997
Groote Schuur High School	11 September 1997	6 October 1997
Gardens Commercial High	15 September 1997	7 October 1997
Harold Cressy Secondary High	17 September 1997	9 October 1997
Bosmansdam High School	2 October 1997	13 October 1997

The following is a breakdown of male and female learners who represented the sample:

Table 4-2 Breakdown of male and female participants

SCHOOLS	MALES	FEMALES	PRESENTATION TOTAL	FOCUS GROUP TOTAL
Vuyiseka Secondary High School	6	6	12	9
Groote Schuur High School	3	6	9	7
Gardens Commercial School	6	7	13	11
Harold Cressy Senior Secondary High School	5	6	11	11
Bosmansdam High School	3	9	12	12
Attendance % of presentation at the Cape Technikon = 95% Attendance % of focus group interviews = 83.3% Overall attendance = 89.2%				

4.2 Creating the interactive multimedia CD-ROM - *Tools to empower your future - The Cape Technikon*

The name of the CD-ROM is *Tools to empower your future - the Cape Technikon*. The thematic is 'Two campuses in one city'. These two campuses included Zonnebloem, situated in District Six (the Cape Metropolitan area) and Granger Bay, Mouille Point, both in Cape Town.

The CD-ROM was programmed with Hyper Studio software. All instructions were given either by voice command or in written scrolls. The contents were linked

with the interfaces, each interface introducing a new section. The structure of the

CD-ROM consisted of various sections or 'chapters'. They were:

Table 4-3   'Chapters' on the CD-ROM

SECTION	EXPLANATION
1 Credits	Credits and acknowledgement were given to the various contributors, the Centre for Science Development of the Human Sciences Research Council (the CSD HSRC), the researcher, a communication company which was responsible for the DTP and production of the CD-ROM
2 Home Stack	Introduction to *Tools to empower your future - the Cape Technikon*
3 Introduction	Basically a 'Contents' page of the entire CD-ROM
4 Fun Facts	Interesting facts and snippets about the Cape Technikon and the area it is situated in
5 What the Cape Technikon offers	The various schools of the Cape Technikon are introduced, but with emphasis on the School of Management
6 How to apply	The prospective student is introduced and shown the requirements needed to study at the Cape Technikon, other academic specifications, contact telephone numbers and contact people
7 Student Life	Student activities and clubs are introduced to the viewer
8 The School of Management	A comprehensive introduction of the School of Management
9 The End	A conclusion of the all the information of the Cape Technikon

This table of contents, of which each section or 'chapter' was activated by a

'Home' button. The School of Management had a 'Home' and a 'Guide' button. The

'Guide' button activated the various departments of the School of Management. It

introduced an option menu as represented in Table 4-3.

Table 4-4   The different departments and sections of the School of Management

Introduction	Research	Human Resources Management
Marketing	Public Management	Retail Business Management
Public Relations Management	Tourism Management	Part-time Studies

The 'Return' button allowed the viewer of the CD-ROM to return to the table

of 'Contents'. The School of Management section had 'Forward' and 'Return'

buttons. This allowed more interactivity and flexibility for the viewer. These buttons

took the viewer to either the 'Guide' on the School of Management or to the main

table of 'Contents'. The section on 'Part-time Studies' included the departments of

Research, Sports Administration and Marketing, Public Management, Tourism

Management, Retail Business Management, Public Relations Management, Real

Estate: Property Valuation, Human Resources Management and Marketing.

The interactive nature of the CD-ROM did not simply support linear

messaging of communication. It created a flexibility in which the participant could

move between any sections at will. Different sounds, visuals, stills, animation and

scroll bars were used to initiate the varying levels of interactivity.

The contents were linked with graphic interfaces. One of these interfaces

included an illustration of the 'man with the protruding nose' to demonstrate and manifest a fun, young feel to the viewer. His 'open mind' represented studies and academics that created an open mind - knowledge that could be exchanged. The face of the 'man' was neither a man nor a woman but a human being. The selected icons used on the interfaces of the CD-ROM intentionally portrayed the power of knowledge.

The creative input of the multimedia recruitment tool intended to portray a 'local' Cape Town feel, as well as a student culture. This was created by using icons such as pictures of the campus at the foot of Table Mountain, pictures of old and new community scenes, and students working on campus, or socialising at student meeting areas, to mention a few examples. The visuals represented and complemented the departments, schools, and general information of the Cape Technikon.

The contents of the CD-ROM were mainly in English due to costs involved. It was desirable to use three official languages, namely English, Afrikaans and Xhosa, the main languages spoken in the Western Cape, however student voice-overs were recorded in the home language of the speaker. The voice-overs enhanced the notion of 'fine-tuning' the cultural identities of students. This created a respect and an acknowledgement for the languages spoken, the purpose being to create a bond between members of the prospective student base. The spokespeople, students from each of the six School of Management departments wrote and spoke their own scripts using contemporary language. This was mixed with formal language used in other sections by lecturers, members of the Rectorate, and the Chairperson of the Student Representative Council.

Various materials were used to develop the CD-ROM. Photographs on and off campus of students socialising and studying represented and visually introduced the different 'chapters' of the CD-ROM. The photographs were used either as backdrops for information or as stills.

A selection of different sounds and soundtracks were used to introduce the interfaces of the different 'chapters' on the CD-ROM. Music played an important role to enhance the notion of harmony and syntony. An important factor determining musical taste was age, cultural interests and backgrounds. The use of 'Nkosikhona and Ubuntu Marimba Band', marimba drums, modern contemporary and jazzy music all added to a strong rhythmical, young, ethnic feel with which students could easily identify. Other 'sounds' were used to introduce sections on the compact disc. Different 'sounds' introduced different departments of the School of Management. An introductory piece of music every time introduced the 'chapter'.

The narratives and opinions of the spokespeople used in the CD encouraged the viewer to make a decision, regarding their future choices about tertiary institutions, and particular the Cape Technikon. All the narratives and opinions were arranged according to the Syntony Filter Matrix Grid and its various categories. For example, if a participant mentioned that he/she heard 'the marimba drums on the CD-ROM ' or 'the older native woman, because I had respect for her', - that was encoded to the category 'Identification with role model'.

4.3 Phase One: The pre-measurement phase to the presentation of the CD-ROM

4.3.1 The stages of the presentation

Here follows Table 4-5 indicating the various stages of the presentation and lastly the focus group interviews. Detailed analyses will follow.

Table 4-5   The various stages of the research

STAGE	DESCRIPTION	MEDIUM
1. Pre-measurement phase to the presentation of the CD-ROM	Questions were asked: 1. If you had the opportunity to study at the Cape Technikon, would you do so? Why? 2. Of the six departments in the School of Management, which department do you know more about?	Written
2. Pre-measurement phase 3. Pre-measurement phase	CD-ROM presentation, and Questions were asked: 1. If you had the interest and desire to study one of these courses at the School of Management, which one would you choose and why? 2. Do you think these subjects/courses at the School of Management at the Cape Technikon create substantial academic, technological and social skills for future careers?	CD-ROM presentation Written
4. Post-measurement phase	Focus group interviews	Oral

The presentation consisted of three stages. The researcher held the presentation in a controlled environment in the Media Laboratory of the School of

Management at the Cape Technikon. Each session was tape-recorded, even though verbal interaction was limited and a follow-up session of writing occurred the same day. The researcher acted both as a guide and facilitator. Only the learners were allowed in the Media Laboratory.

Appendices 1 to 5 (pages i to xl) have copies of the pre-measurement exercises, (this includes the 5 participating schools completing the pre-phase and the post-phase). The participants were given a page with the questions on it and they were asked to write down their answers. Each commentary was coded according to the Syntony Filter Matrix Grid and its categories. Significance was established by encoding important words/phrases/sentences that best described the category of the Syntony Filter Matrix Grid.

Appendix 6 (pages xli to lxv) has the analyses of the narratives of the focus group interviews (the post-measurement phase) and Appendix 7 consists of the encoded narratives of the focus group interviews in the Syntony Filter Matrix Grid, starting on page lxvi. Significance was established by placing every word/phrase/sentence that best fit every category of the Syntony Filter Matrix Grid. Appendix 8 consists of the questions asked to all the participants during the focus group interviews.

4.3.2   The pre-measurement phase - exploring the CD-ROM

The presentation of the CD-ROM in the Media Laboratory in the School of Management, Cape Technikon, consisted of three stages. The pre-measurement phase entailed:

STAGE 1 – an introduction to the presentation of the CD-ROM. This stage required:

- a written exercise

- and the participants had to answer the following two questions on a

  questionnaire, namely:

> (i)   If you had the opportunity to study at the Cape Technikon, would
>
>   you do so? Why?
>
> (ii)   Of the six departments in the School of Management, which
>
>   department do you know more about?

STAGE 2 - the presentation of the CD-ROM by the researcher.

- The actual presentation of the CD-ROM, *Tools to empower your future - the*

  Cape Technikon took place and was introduced by the researcher. After

  giving a basic outline and instructions, each participant had the opportunity to

  be actively involved in becoming acquainted with the CD-ROM. The actual

  presentation took about 40 minutes to an hour.

STAGE 3 - a written exercise directly after the CD-ROM presentation.

- After the presentation, two questions were asked, requiring another written

  exercise on the same questionnaire.

> (i)   If you had the interest and desire to study one of these courses at the
>
>   School of Management, which one would you choose and why?
>
> (ii)   Do you think these subjects/courses at the School of Management at
>
>   the Cape Technikon create substantial academic, technological and
>
>   social skills for future careers?

4.4 Phase Two: The post-measurement phase - the focus group interviews

The second phase, the post-measurement phase consisted of focus group interviews with the same Standard 10 learners. Permission to access, time and location to conduct the focus group interviews at the schools was given by the various school principals. Two weeks later the focus group interviews followed at the five schools.

The researcher took approximately one hour to conduct the interviews, and with the permission of the students was recorded. The recording was transcribed at a later stage by the researcher. The questions asked at the interviews were the same for all the schools. Appendix 6 (pages xli to lxvii) has the transcriptions of the focus group interviews, and Appendix 7 consists of the encoded narratives into the Syntony Filter Matrix Grid. Appendix 8 is a list of the questions asked to all of the participants during the interviews. The questions asked to the participants were placed on A4 pages to ensure a flow of acquired information and to prevent any possible breakdown of communication. Being able to view these questions prompted the learners to answer the other questions spontaneously.

4.5   A discussion of the Syntony Filter Matrix Grid

A central theme was used when producing the multimedia interactive CD-

ROM. It was designed to focus the attention of the learner and develop an affiliation with the Cape Technikon. The theme was 'Two campuses in one city'. Here follows the Syntony Filter Matrix Grid (Table 4-6) which is followed by an analysis of each category. Refer to pages 89-101 for explanation on theories.

Table 4-6   The Syntony Filter Matrix Grid

The Syntony Filter Matrix		
MIMETIC BEHAVIOURS Bandura	DIFFUSION Rogers	TRIUNE BRAIN Maclean
SOCIAL BEHAVIOURS ENSURE: • Belongingness • companionship • affiliation • twinship • connectedness	QUALITIES: • relative advantage • compatibility • complexity • trialability • observability	LEVELS OF PERCEPTION: • cognitive • affective • predispositional

SOCIAL CHANGE				
CATEGORIES	creates 'harmony': YES / NO (A)	creates need to attend the Cape Technikon (B)	Creates belongingness due to culture (C)	creates positive/negative decision making (D)
1. Affiliation with tertiary institution				
2. Role of cultural background				
3. Identification with role model				
4. Qualities of diffusion: **(i) Tangible -** compatibility, trialability, observability				
(ii) Tacit meaning- complexity, relative advantage				
5. Effect of information, the technology on viewers' levels of perceptions				

Here follows Table 4-7 to indicate the interactions of the theories, categories

of the Syntony Filter Matrix Grid and the qualities of each section.

Table 4-7   The interrelatedness between the theories, categories and qualities

THEORY	CATEGORIES OF SYNTONY FILTER MATRIX GRID	QUALITIES RELATED TO CATEGORIES
Social Learning Theory (Bandura)	• Affiliation with tertiary institution • Role of cultural background • Identification with role model	• By following a mimetic behaviour, the recipient analysis his/her self-concept, his/her social connectedness and belongingness, companionship, affiliation in order to create a sense of harmony, belongingness, or assisting with a positive or negative decision-making process • Learning through modeling – the impact of a role model, be it a person with the same cultural identity, gender, age group • To learn by observation enables people to acquire large, integrative patterns of behaviour without having to form them gradually by trial and error • Learning by motivation and reinforcement, which enables with a person's decision making process, harmony and connectedness • Requiring an adoptive behaviour – one is either in favour of or not in favour of adopting.
Diffusion Theory (Rogers)	Tangible qualities: • Compatibility, trialability, observability Tacit meaning: • Complexity, relative advantage	• By viewing the CD-ROM it created a sense of 'harmony' that relates to a belongingness due to a cultural bond • Creating a need to attend Cape Technikon due to either a friend or family having been a student at Cape Technikon before • Realising that watching the CD-ROM presentation as part of this research, the viewers had a relative advantage to others not watching the presentation.
Triune Brain Theory (Maclean)	• Effect of information, the technology on viewers' levels of perception	• Cognitive-by viewing the CD-ROM and receiving 'new' knowledge and information the purpose being stimulation of the brain • Affective level of perception stimulated both the intellectual and emotional part of the brain • Predispositional level of perception was stimulated by acknowledging one's own choice in the decision-making process.

Values taken from the narratives of the participants (both pre- and post

measurement phase) were interlinked with the categories of the Syntony Filter

Matrix. These values reflected *inter alia* the impact of role models, music and

student jargon, the contents of the CD-ROM of the Cape Technikon and more

specifically by the School of Management. The influence of student and ethnic

symbolism, background music, colours, Cape Town artifacts were some of the icons

on the interface that also played an important role

4.6　The Syntony Filter Matrix Analyses with regard to the narratives of the

　　　learners: the pre- and post-measurement phase

Fifty seven of the 60 nominated learners attended the presentation. The post-

measurement involved the focus group interviews conducted by the researcher. Fifty

of the 60 nominated Standard 10 learners from five feeder schools were interviewed

during this phase. They were interviewed in English or Afrikaans.

For this research the schools are always introduced in the same order,

namely, Vuyiseka Secondary High School, Harold Cressy Secondary High School,

Bosmansdam High School, Gardens Commercial High School, Groote Schuur High

School.

The data used in Appendices 1 to 5 (p i to xl) are direct *verbatim*. No

language and spelling corrections were made.

Each category (e.g.**1** - Affiliation with tertiary institution) was codified

according to the various categories of the Syntony Filter Matrix Grid, namely **A1,**

A2, A3, A4), schools and participants' responses, and qualities of the various

theories were put into categories and codified. The codes that were used were:

Table 4-8   The operative categories, the qualities (according to the categories)

and the codifying system

THE OPERATIVE CATEGORIES	QUALITIES (according to the categories of the Syntony Filter Matrix Grid)	CODIFYING SYSTEM
1. Affiliation with tertiary institution	creates 'harmony'	A1= harmony,
2. Role of cultural background 3. Identification with role model 4 (I) Qualities of diffusion: Tangible – compatibility, trialability, observability	creates need to attend the Cape Technikon	A2=affiliation, looking at elements like bonding with, connectedness, twinship
4 (ii) Tacit meaning-complexity, relative advantage	creates belongingness due to culture'	A3=role of culture
5 Effect of information, the technology on viewers' levels of perceptions	creates positive/negative decision-making	A4=decision-making process

Here follows the schools with the codified data:

Table 4-9   Codified Analyses : STAGE 1 - Vuyiseka Secondary High School

Theory	Qualities of theories/Codes	School
		Vuyiseka Secondary High School
Social Learning Theory (Bandura)	A1=harmony • *Making choices* • *Role of mimetic behaviour*	Vuyiseka High School is located very close to the Cape Technikon, they basically saw the Cape Technikon every day of their school life. The learners showed high regard for the Cape Technikon. The students found the fees at Cape Technikon affordable; it was 'not too expensive'; 'it cost less than a university', this set the platform for a positive decision-making process. The Cape Technikon offered the students an advanced education, it was practical and the value of Cape Technikon was regarded highly in the academical field, it offered them the skills to experience the 'real industry'. They acknowledged that universities were not their immediate goal, but that the Cape Technikon would give them a future. There was less chance of failing at the Cape Technikon. Although the participants of the research showed keen interest in engineering and business, some realised that they did not have the skills yet to study it. The location of Cape Technikon was not too far from their township. Some of these learners had pre-knowledge of the courses offered at the School of Management, such as Marketing, Tourism Management, and Small Business Management (Retail).
	A2=Affiliation • *Bond,* • *Connected ness,* • *Twinship*	The learners felt that studying gives one 'power', therefore the Cape Technikon has become a 'dream' to many learners at Vuyiseka High. They believed that the Cape Technikon could give them a future, because of a 'fair education offered' there. Although being encouraged, they felt they had less chance to fail at Cape Technikon as opposed to a university, because 'many people pass...the Cape Technikon offers more practical experience while you are a student'.
	A3=Role of culture	Taking cognisance of these learners' demographic backgrounds, the Cape Technikon was not too far from their townships, making commuting not such a big problem.
	A4=Decision-making	Their school was close to the Technikon. The fees to be paid at the Technikon was reasonable. The courses offered gave the learners 'hands-on'skills to experience the 'real industry'. Some learners lived very close to the Cape Technikon. They felt empowered by the information.

Table 4-10 Codified Analyses: STAGE 1 - Harold Cressy High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	A1=harmony • Making choices • Role of mimetic behaviour	**Harold Cressy Secondary High School** The participants of the research regarded the education offered at the Cape Technikon of high standard; it was goal-directed, and helped the student to attain his own goals. The Cape Technikon offered computer courses, and 'hands-on' experience in the variety of courses, which were needed for future job opportunities. This made the Cape Technikon highly recommended in the business world. It has 'a great reputation', the job availability was high compared to other technikons. The Technikon offers experiential training in the student's third year. The Technikon - 'it's close to where they live' The education that was offered was of a high standard, it included degrees. Although many jobs required practical experience only a technikon offers, the participants felt positive to study at the Cape Technikon. While at school, many learners had done assignments or research on courses, like Tourism, Marketing, Public Relations, Human Resources, Retail Management. This made them familiar with many of the courses offered at the School of Management. This pre-knowledge made them more acceptable to and interested in the courses offered.
	A2=Affiliation • Bond connected-Ness	The Cape Technikon looked like a 'vibrant university', and being there, benefitted the student to obtain his/her own goals. Many jobs required the practical experience a technikon offers. While at school, many learners had done prior research on Tourism, Marketing, Public Relations. This made them familiar with many of the courses offered at the School of Management. Many of the learners either had friends, peers or family already studying at the Cape Technikon.
	A3= role of Culture	Many of the learners either had friends or family already studying at the Cape Technikon which created a 'shared culture'. This link and identification with their own cultural backgrounds made these learners more aware of the fact that the Cape Technikon was a viable option. This school is situated in old District Six.
	A4=Decision-making	Having obtained pre-knowledge about this institution, made them more acceptable to and interested in the courses offered at the Cape Technikon. The education offered was goal-directed, gave them 'hands-on' experience needed for future job opportunities. The Technikon offers experiential training in the student's third year, and to many learners the close proximity of their homes to the Technikon was vital.

	A4=Decision-making	The education included degrees.. While at school, many learners had done assignments or research on courses, like Tourism, Marketing, Public Relations, Human Resources, Retail Management. This made them familiar with many of the courses offered at the School of Management and assisted them with either positive or negative decision-making.

Table 4-11 Codified Analyses : STAGE 1 - Bosmansdam High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	A1=harmony • *Making* *choices* • *Role of* *mimetic* *behaviou*	**Bosmansdam High School** The participants from Bosmansdam High School felt that students needed to be happy with their environment of studies. Although the campus was big and resembled a typical student life, the buildings of the Cape Technikon and grounds were neat, and reflected a friendly, happy place. The Cape Technikon offered a variety of subjects and courses. The Cape Technikon was a well-known place and had a good record of students leaving with good job opportunities. For some learners the Cape Technikon was in close proximity, therefore attending this tertiary institution would be very convenient.
	A2=Affiliation • Bond, connected-ness	The learners showed substantial prior knowledge of courses offered at the School of Management, due to friends and peers interested in courses at the Cape Technikon, or a highly spoken of field of study, like Tourism. The campus was friendly, it was a happy place. The learners had substantial prior knowledge of courses offered at the School of Management, due to peers and friends interested in courses at the Cape Technikon, or these subjects being a highly spoken and read topic, like Tourism. Living close to the technikon created a bond with the institution.
	A3= role of culture	Although the campus of the Cape Technikon was big, it resembled a typical student culture, a student life. Pre-knowledge of the Cape Technikon made them familiar with the institution and some of the courses taken. One learner mentioned that Tourism would be an interesting course to take, because she was working at a restaurant and had been dealing with many tourists, already creating a positive culture. Marketing was a well-discussed course. Another learner worked in a Quick Shop over week ends, and he had been exposed to advertising, marketing and selling their products. Another learner's mother had her own business, and together they worked on some projects for their business. Marketing formed part of a matric subject, Business Economics. The already existing culture and prior knowledge created an affiliation with the tertiary institution.

	A4=Decision-making	The Cape Technikon offered a variety of subjects and courses, which assisted them with definite decisions to make. The Cape Technikon was well-known, had a good record of students leaving with good job opportunities. For some learners the Cape Technikon was in close proximity, therefore attending this tertiary institution would be very convenient.

Table 4-12   Codified Analyses : STAGE 1 - Gardens Commercial High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	A1=harmony • Making choices • Role of mimetic behaviour	**Gardens Commercial High School** These Standard 10 learners stated that the Cape Technikon had a positive vibe. The Cape Technikon was well known, had a good reputation, a 'brilliant atmosphere', the buildings were beautiful, had a homely, relaxed environment. Taking into account these learners' commercial backgrounds, the practical experience and experiential training were important to them - there were 'better facilities and more practical dealings about the courses', 'the tuition is cheaper' and more 'informative than other tertiary institutions'. The convenience of living close to the Cape Technikon became important to some learners. A learner mentioned that technikon students were being employed more than university students. The learners showed substantial knowledge about the courses offered, although preferences were given to Marketing, Public Administration and Public Relations, and Retail Business Management and Tourism.
	A2=Affiliation • Bond, connectedness	It was stated that Cape Technikon students were being employed more easily than university students. This created an affiliation with the institution. The learners showed substantial knowledge about the courses offered, although preferences were given to Marketing, Public Administration and Public Relations, and Retail Business Management and Tourism.
	A3= role of culture	A 'home culture' was created. The reasons therefore, were friends studying the courses, or a father wanting to start his own business, or a mother or brother involved in certain management directions.
	A4=Decision-making	Cape Technikon was well known, had a good reputation, a 'brilliant atmosphere', the buildings were beautiful, had a homely, relaxed environment. Taking into account these learners' commercial backgrounds, the practical experience and experiential training were important to them - there were 'better facilities and more practical dealings about the courses', 'the tuition is cheaper' and more
	A4=Decision-making	'informative than other tertiary institutions'. The convenience of living close to the

	making	Cape Technikon became important to some learners. A learner mentioned that technikon students were being employed more than university students. The learners showed substantial knowledge about the courses

Table 4-13   Codified Analyses : STAGE 1 - Groote Schuur High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	A1=harmony • Making choices • Role of mimetic behaviour	**Groote Schuur High School** The Cape Technikon offered a wide variety of subjects. The location of the Cape Technikon was very central and easily accessible. Interesting courses were offered, although more specialised courses, such as Medicine, Physiotherapy, B Comm, Journalism, Graphic Design for advertising at an advertising school, Chartered Accountancy, a degree in Fine Arts and Teaching, weren't offered at the Cape Technikon. The learners showed substantial knowledge about the various courses offered at the School of Management. Some learners had already chosen other tertiary institutions, like universities. The majority were interested in studying Medicine, Physiotherapy, B.Com., Journalism, Graphic Design. Because there were many students on the campus, one student reiterated the importance of having more friends if she joined student life at the Cape Technikon. The participants acknowledged the fact that the Cape Technikon, specifically the School of Management, offered interesting varieties of subjects. Their high school was frequently visited by Public Relations practitioners. The learners were *au fait* with the purpose and functions of Public Relations Management, which stimulated their decision-making processes as an interesting field to study in the future.
	A2=Affiliation • Bond, connectedness	Many students implied having more friends, therefore making the Technikon a pleasant place to study. Due to one learner's affiliation with a staff manager in the business sector, she proved to have sufficient knowledge about Human Resources, a course offered at the Cape Technikon.
	A3= role of culture	No respondent showed any signs of culture playing a pivotal role.
	A4=Decision-making	Cape Technikon offered a wide variety of subjects, which assisted with decision-making choices. Cape Technikon was very central and easily accessible. Some learners had already chosen other tertiary institutions, like universities. The learners were *au fait* with the purpose and functions of Public Relations Management, which stimulated their decision-making.

4.6.1 The exact data from the narratives of the participants which showed elements of the above-mentioned categories

Derived from the narratives of the participants of the study the following phrases and words stated elements of the categories.

STAGE 1 of the Pre-measurement phase to the presentation of the CD-ROM

1.A   Affiliation with tertiary institution - creates 'harmony'

- 'it's better than a university'

- 'more practical'

- 'gives me an advanced education'

- 'not too far home, and not too expensive'

- 'things are practical'

- 'fee is much less than universities'

- 'fair education'

- 'get my future here'

- 'I am dreaming of Cape Technikon'

- 'get hands-on experience'

- 'Technikon has a variety of computer courses'

- 'practical as well'

- 'this particular Technikon's job availability is very high compared to other technikons'

- 'Cape Technikon has a great reputation and high standard of work'

- 'highly recommended in the business world'

- 'education of high standard, goal-directed and will benefit me in achieving my goals'

- 'very friendly and happy atmosphere'

- 'neat grounds'

- 'good record of students leaving with good opportunities'

- 'facilities are great'

- 'everyone is very friendly'

- 'offers a wide range of courses...a well-known place'

- 'atmosphere is relaxed'

- 'homely environment'

- 'it's cheaper'

- 'Tech offers practical training, not only theory'.

  Twenty six respondents showed positive responses. The respondents looked at factors like affordable tertiary education, proximity of the Cape Technikon, skills-related professions for the future, a reputable institution.

STAGE 1 of the Pre-measurement phase to the presentation of the CD-ROM

1.B   Affiliation with tertiary institution - creates need to attend the Cape

       Technikon

- 'Marketing is good at Cape Technikon'

- 'like to study at School of Management'

- 'gives an advanced education'

- 'Cape Technikon makes you more powerful'

- 'not far from home, not too expensive'

- . 'fees less than universities'

- 'I know I can afford to study at Cape Technikon'

- 'get my future here'

- 'fair education for all'

- 'I am dreaming of Cape Technikon'

- 'get hands-on experience'

- 'Technikon has a variety of computer courses'

- 'practical as well'

- 'this particular Technikon's job availability is very high compared to other technikons'

- 'Cape Technikon has a great reputation and high standard of work'

- 'highly recommended in the business world'

- 'education of high standard, goal-directed and will benefit me in achieving my goals'

- 'very friendly and happy atmosphere'

- 'neat grounds'

- 'Tech offers practical training not only theory'

- 'coming from a Cape environment it will be convenient for me to come here'

- 'good record of students leaving with good opportunities'

- 'facilities are great'

- 'everyone is very friendly'

- 'homely environment'

- 'offers better facilities'.'offers a wide range of courses...a well-known place'

- 'it's cheaper'

- 'atmosphere is relaxed'

STAGE 1 of the Pre-measurement phase to the presentation of the CD-ROM

1.C   Affiliation with tertiary institution – created belongingness due to culture

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There were a few responses speaking in favour of an affiliation with a tertiary

institution created by culture, namely:

- 'Tourism Management - make people who visit South Africa safe...tell them

  about Cape Technikon'

- 'studying at the Cape Technikon has been advertised and stated that

  technikon students are employed more than university students'

- *(B.Com.), maar dra kennis van Bemarking...my broer doen B.Com. by*

  Stellenbosch en spesialiseer in Bemarking - translation: '(B.Comm.), but I do

  know of Marketing...my brother is studying B.Comm. at Stellenbosch and

  specialises in Marketing'

- 'Marketing ...strong family ties'

- 'I have a brother at Pen Tech who does Marketing'

- 'I would follow my father into Marketing department... like to complete what

my father could not study'

- 'my mother is involved with this aspect of management'.

> STAGE 1 of the Pre-measurement phase to the presentation of the CD-ROM
>
> 1.D   Affiliation with tertiary institution - creates positive/negative decision -
>
>   making process

Derived from the narratives the following phrases and words state elements of either a positive and/or a negative decision-making process:

- '...it's better than a university'

- 'more practical'

- 'gives me an advanced education'

- 'not too far home, not too expensive'

- 'things are practical'

- 'fee is much less than universities'

- 'fair education'

- 'get my future here'

- 'I am dreaming of Cape Technikon'

- 'get hands-on experience'

- 'Technikon has a variety of computer courses'

- 'practical as well'

- 'this particular Technikon's job availability is very high compared to other technikons'

- 'Cape Technikon has great reputation and high standard of work'

- 'highly recommended in the business world'

- 'education of high standard, goal-directed and will benefit me in achieving my goals'

- 'very friendly and happy atmosphere'

- 'neat grounds'

- 'good record of students leaving with good opportunities'

- 'facilities are great'

- 'everyone is very friendly'

- 'offers a wide range of courses...a well-known place'

- 'atmosphere is relaxed'

- 'homely environment'

- 'it's cheaper'

- 'Tech offers practical training, not only theory'.

4.6.2 A summary of STAGE 1 of the Pre-measurement phase to the presentation of the CD-ROM

The affordability and accessibility of the Cape Technikon became important issues for the learners of Vuyiseka Secondary High School. The Cape Technikon is central to many learners, it's in close vicinity to their homes and townships. The affordability of the courses, the variety of subjects to be taken made the Cape Technikon a viable choice as a tertiary institution. Taking cognisance of the learners' backgrounds, it was important to recognise and acknowledge the courage

but also a serious need for these disadvantaged learners to obtain and maintain an education. One learner mentioned that the Cape Technikon offered 'an advanced education'. To some learners only a Standard 7, perhaps a Standard 10 would be sufficient, however, some learners do endeavour to obtain further educational aspirations. The Cape Technikon offered courses that were practical as opposed to only theory, and it offered a 'fair education' to all.

The pre-knowledge of the learners at this school focused on Marketing, Tourism Management and Retail Business Management. This appeared to be significant, as they understood that coming from their 'disadvantaged' platform of their establishment, entrepreneurial skills were needed in order to survive, to make money and practise a business successfully.

At the time of conducting the research, the majority of the learners at Groote Schuur had already made up their minds about furthering their studies. Some of them were interested in going overseas, others had decided to study at the *alma mater* of their parents. The majority of these learners were interested in taking courses at universities, like Medicine, Physiotherapy, Journalism, Computer Science or Graphic Design at an advertising school. The pre-knowledge of the courses offered at the School of Management was however more limited compared to the other sample schools. The majority of the learners were clear about future career decisions. Influences of parents, their socio-economic and academic backgrounds had an effect on their decisions.

The learners of Harold Cressy Secondary High maintained that in order to create an affiliation with a tertiary institution, predictors like living near to the tertiary institution, affordability, the necessity of getting both theoretical and practical hands-

on experience needed in the business world, were important to them. One learner

mentioned that the Cape Technikon's job availability was very high compared to

other technikons. The pre-knowledge of the courses offered at the School of

Management had been dictated by peers, family and friends who had either studied

the courses at the Technikon before or those who were currently in the profession.

The learners also compared the affordable costs for studying at the Cape

Technikon, as opposed to studies at universities.

Learners from Gardens Commercial School came from a practical, skills-

related and businesslike background. They regarded practical, hands-on experience

was very important to them for future careers, although theory was also a

component to deal with. The tuition was fortunately cheaper and more affordable

than other tertiary institutions. The Cape Technikon was well known to them and

had a good reputation as a tertiary institution. Any prior knowledge of courses

offered at the School of Management had either been shared by peers, family and

friends, who had studied the courses or were already in the profession.

Bosmansdam High School learners felt the same as the previous mentioned

schools. The closeness of the tertiary institution, the affordability and variety of the

courses, the warm and friendly student life which was created were all important to

any prospective student. Previous success records of the Cape Technikon and its

students showed an affiliation with the institution and assisted with their decision-

making processes. Peers, family and friends who had either studied the courses at

the School of Management or who were presently working in the occupation,

assisted with pre-knowledge. The learners also realised the financial implications of

studying at the Cape Technikon. It was affordable.

4.7   STAGE 2 of the Pre-measurement phase to the presentation of the CD-ROM

It became evident that there were two juxtaposing factors during STAGE 2 of the pre-measurement phase, namely that some learners had been exposed to computers, some were not, and some had experienced multimedia, some had not. For example, the majority of Vuyiseka Secondary High School learners experienced sitting behind the controls of a computer and a mouse, let alone multimedia for the first time. Once they took control of the computer and more specifically the mouse, they became interactively involved with the multimedia presentation and gained information from the various 'chapters'. Only a few learners coming of more advantaged and affluent backgrounds knew the dynamics of multimedia productions.

4.8   STAGE 3 of the Pre-measurement phase to the presentation of the CD-ROM

STAGE 3 entailed a written exercise. It was introduced by two questions, namely:

1.   If you had the interest and desire to study one of these courses at the School of Management, which one would you choose and why?

2.   Do you think these subjects/courses at the School of Management at the

Cape Technikon create substantial academic, technological and social skills for future careers?

The narratives are to be found in Appendices 1 to 5 (p i to xl).

The categories of the Syntony Filter Matrix operating in STAGE 3 were:

(i)   identification with role model,

(ii)   and the effect of technology on the viewer's level of perception.

4.8.1 The analyses of STAGE 3 - the pre-measurement phase to the presentation of the CD-ROM

4.8.1.1 The first category in STAGE 3 (i) : Identification with role model

The effect of role models on the presentation of the CD-ROM intended to 'glue' together the respondents of the research and the contents of the CD-ROM.

STAGE 3 of the Pre-measurement phase to the presentation of the CD-ROM consisted of the following operative categories:

3.A   Identification with role model – creates 'harmony'

3.B   Identification with role model - creates need to study at the Cape Technikon

3.C   Identification with role model - creates belongingness due to culture

3.D   Identification with role model – creates positive/negative decision-making process.

Each of the responses was codified according to the respective codes, the

categories and schools. Table 4-14 to Table 4-18 represented the Codified Analyses: STAGE 3 (i) of the 5 schools.

STAGE 3 (i) looked at issues that captured data before the presentation, while STAGE 3 (ii) coded data after the presentation, in order to see if the operative categories of the Triune Brain (Maclean) had occurred or not.

Table 4-14   Codified Analyses: STAGE 3 (i) - Vuyiseka Secondary High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura	A1=harmony • Making choices • Role of mimetic behaviour	**Vuyiseka Secondary High School** In this category these students showed a positive and spontaneous reaction. The 'new' knowledge they gained from the presentation led to a keen interest and desire to study at the School of Management (whether the latter was possible or not). The courses offered also assisted as a role model. They showed preferences for the fields of Tourism Management, Public Relations Management, Public Administration and Marketing. The latter, perhaps due to their existing entrepreneurial skills that they spontaneously practise from home in their townships. Tourism also seemed to be a favourite choice. The learners could 'weigh up' their abilities and personalities with the information on the 'Personality Profile'. This 'chapter' assisted with certain decisions about their future careers or potential future courses. They felt comfortable with the courses being driven academically, technologically and practically. The courses were also skills-related, as opposed to courses that were only theoretical, like a university. Being able to identify with some of the role models on the CD-ROM, and the fact that some of the narratives on the CD-ROM were spoken in their mother tongue, namely Xhosa, was important. The CD-ROM *per se* became a role model through identifying with certain role models. This assisted with their decision-making processes. The role models used on the presentation were people with whom they could identify with. The learners believed that the subjects and courses would assist them to gain confidence in their future careers. The subjects and courses were very practical, that the Technikon offered them experiential training. This was encouraging and comforting to be associated with the tertiary institution. The courses prepared the employer/employee to manage, communicate, and at times socialise with the

A2=Affiliation • Bond, connectedness	clients. Some learners mentioned that they wanted to further their studies with a degree. This clearly emphasised their ambition, despite coming from a disadvantaged background. The fact that the Cape Technikon offered the practical component which universities did not, became an important drawing card for this group learners. The learners believed that the subjects and courses offered at the School of Management would assist them to gain confidence in their future careers. The courses offered social, management and communication skills. Some Vuyiseka learners already had their own businesses at home. Marketing was another good course to study. The courses offered a practical, hands-on component.
A3= role of culture	The choice of their mother tongue on the CD-ROM created a bond, and potentially encouraged some of the learners to study at the Cape Technikon in the future. Being acquainted with some of the role models seen on the CD-ROM, and the choice of Xhosa (specifically for this target group) made them even more happy and positive with making decisions about this presentation. The participants' cultural backgrounds identified with some of the role models used on the CD-ROM. Some of the role models were familiar to them, either from the same township, or they recognised them to be prominent sport players in their community or suburb.
A4=Decision-making	Acknowledging the participants' cultures and mother tongues, some learners enthusiastically mentioned that studying Tourism Management at the Cape Technikon would be benefiting, as they already speak three or more languages, namely English, Afrikaans, Xhosa and another African language. This 'third language', Xhosa, although their first language, gave them a head start as opposed to those who couldn't offer a third language, especially with the focus on tourism in the 'new' South Africa. This also related to a shared culture with the role models who spoke Xhosa. Besides the information which acted as a role model, the courses offered also assisted as a role model, as some learners showed interest in Tourism Management, Public Relations Management, Public Administration and Marketing. The latter, due to their existing entrepreneurial skills they spontaneously practise in their townships. Tourism also seemed to be a favourite choice. The 'Personality Profile' helped them to make career choices. The courses were also skills-related. Some of the role models on the CD-ROM the viewers knew personally, and the fact that some of the narratives on the CD-ROM were spoken in their mother tongue, namely Xhosa, was important. The CD-ROM *per se* became a role model through identifying with certain role models. This assisted with their decision-making processes. The subjects and courses were very practical, the Technikon offered experiential training.

Table 4-15   Codified Analyses: STAGE 3 (i) - Harold Cressy Secondary High

School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura	A1=harmony • Making choices • Role of mimetic behaviour	**Harold Cressy Secondary High School** The courses that attracted the attention of the learners after the presentation were mainly Public Relations, Tourism and Marketing. Two learners weren't interested in any of the courses offered, due to other interests. The courses and subjects promised to offer a strong practical component, namely experiential training in the industry in their third year. The learners reiterated the importance of acquiring skills and 'hands-on' experience during their studies. Marketing was a fascination to many learners. They discussed the dynamics of different approaches of international marketing, as the latter was dealt with in a Matric subject, Business Economics. These learners spontaneously drew comparisons and discussed South African approaches to marketing as opposed to the different approaches of international marketing. The 'Personality Profile' allowed the learner to be introspective and assisted with many decision-making processes, in order to find their suitable 'fit'. Facilities, such as supplying computers, making available equipment used for photography and video editing tools, encouraged potential practical courses at the Cape Technikon. This enhanced the notion of making the courses 'user-friendly' and 'student-friendly'The learners did not categorically state that they would like to study at the Cape Technikon due to the influence of any role model. They merely assessed the many options offered by the School of Management The presentation offered insight and information which the learners felt they could enquire and pursue.
	A2=Affiliation • Bond connectedness	Other affiliations with the courses offered were created by family ties in certain fields. The courses offered an interaction of academics, technology and social possibilities. No mention was made that a 'shared culture' created a 'belongingness' with the Cape Technikon. They merely assessed and pursued the many options offered by the School of Management Influences of family and friends created an affiliation with the courses offered at the institution. The courses offered many opportunities to interact academically, technologically and socially - all these qualities were integrated. The presentation offered a different insight which the learners felt they could pursue.
	A3= role of culture	The role of the participants' cultural backgrounds showed little evidence of importance, however, some learners did identify and recognise some of the role models used on the CD-ROM.
	A4=Decision-making	The courses and subjects promised to offer a strong practical component, namely experiential training in their third year. It was importantant to acquire skills and 'hands-on' experience during their studies. The 'Personality Profile' allowed the learner to be introspective and assisted with many decision-making processes, in order to find their suitable 'fit'. Facilities, such as supplying

		computers, making available equipment used for photography and video editing tools, encouraged potential practical courses at the Cape Technikon. This enhanced the notion of making the courses 'user-friendly' and 'student-friendly.

Table 4-16   Codified Analyses: STAGE 3 (i) - Bosmansdam High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura	**A1=harmony** • *Making choices* • *Role of mimetic behaviour*	*Bosmansdam High School* The learners used the 'Personality Profile' in a fun way to assess their personality fit to the courses offered at the School of Management. However, the majority of these Standard 10 learners had already made career decisions at this stage of the year when the research was done, but still acknowledged the potential and dynamics of this multimedia recruitment tool. This interactive CD-ROM became an avenue to create 'harmony', seeing that it was informative and a 'fun' tool to work with. Whether the learners would study at the Cape Technikon or not, the 'Personality Profile' was an aid used in their decision-making process. The learners felt that the courses at the School of Management would develop academic, technological and social skills for prospective students. Above-mentioned skills would equip them, the future employee to function in 'the open society', and to experience the practicalities of the working environments. The courses gave one the opportunity 'to do it in the real "outside" business world'. The training aspect, the experiential training in the student's third year was valued as very important.
	A2=Affiliation • Bond, connectedness	Social skills were valued highly. It would equip the potential employee to function in the 'real' business world. This section offered the participants a sense of self-evaluation. It also created a platform of judgement, and subsequently established a connectedness with the Cape Technikon and themselves. The 'Personality Profile', although an aid used in their decision-making process, used this way to form a bond with the Cape Technikon.
	A3= role of culture	The role of the participants' cultural backgrounds played no role whatsoever. A few learners merely recognised some role models used on the CD-ROM, either as friends, a beauty queen from a township or a sport star. The 'Personality Profile' helped in a fun way to assess their personality fit to the courses offered at the School of Management. This interactive CD-ROM

		courses offered at the School of Management. This interactive CD-ROM became an avenue to help with positive or negative choices about their careers and institutution.
	A4=Decision-making	The learners felt that the courses would develop academic, technological and social skills for prospective students. Above-mentioned skills would equip them for a future career. The courses gave one the opportunity 'to do it in the real "outside" business world'. The training aspect, the experiential training in the student's third year was very important.

Table 4-17   Codified Analyses: STAGE 3 (i) - Gardens Commercial High School

Theory	Qualities of theories/Codes	School
		Gardens Commercial High School
Social Learning Theory (Bandura	A1=harmony • *Making choices* • *Role of mimetic behaviour*	The learners used the 'Personality Profile' in ways to assess their potential personality fit to the courses offered at the School of Management. It created a link of 'harmony' with the tertiary institution - 'The personality characteristics...applicable to me...makes you more confident of your choices', '...you suit the profile...'. However, the majority had already made a career decision, but still regarded the potential of the multimedia recruitment tool as an aid to make sound choices and decisions. The courses offered substantial academic, technological and social skills for their future careers. The multimedia presentation gave the participants a 'new look at what management is all about' and stimulated their choices and decision-making processes. Experiential training in the third year of study was important to many learners. The value of experiential training ensured that one would 'get experience before applying for the real job'. The participants were well informed by watching the presentation and experiencing the multimedia technology. It gave them a very good idea what the Cape Technikon was all about, 'an insight into the Technikon', and helped them with identifying with role models, identifying with the Cape Technikon environment and other familiar surroundings, and more specifically the School of Management. The participants felt that factors, like the tutoring system, the language units, computer facilities, the library and hostels, would be decisive for any potential student to attend the Cape Technikon.
	A2=Affiliation • Bond connectedness	Some learners were influenced by people who had studied at the Cape Technikon previously, as well as some of the role models used on the CD-ROM. The learners used the 'Personality Profile' in ways to assess their potential personality fit to the courses offered at the School of Management. It helped with the decision-making
	A3= role of culture	process in order to create an affiliation, a bond with the tertiary institution. Although recognising some of the role models, the impact of the participants' cultural

		backgrounds played no significant role.
	A4=Decision-making	Other cultural backgrounds of this culturally diverse group, and the effect thereof, did not contribute to the research. The participants were interested in their own cultural backgrounds *per se*. Learners used the 'Personality Profile' in ways to assess their potential personality fit to the courses offered at the School of Management. It allowed a link of definite choices. Tthe majority had already made a career decision, but still regarded the potential of the multimedia recruitment tool as an aid to make sound choices and decisions. The courses offered substantial academic, technological and social skills for their future careers, and stimulated their choices and decision-making processes. Experiential training in the third year of study was important to many learners. The CD-ROM gave them a very good idea what the Cape Technikon was all about, 'an insight into the Technikon', and helped them with identifying with role models, identifying with the Cape Technikon environment and other familiar surroundings, and more specifically the School of Management.

Table 4-18   Codified Analyses: STAGE 3 (i) - Groote Schuur High School

Theory	Qualities of theories/Codes	School
		Groote Schuur High School
Social Learning Theory (Bandura	**A1=harmony** • *Making choices* • *Role of mimetic behaviour*	Students showed interest in all the courses offered by the School of Management. Reasons were that all the courses offered an 'opportunity to work with culturally different people', the courses were 'active' and relevant, they could gain hands-on experience while they were studying, and that the courses were people-related. Although it became evident that these learners showed no significant need to attend the Cape Technikon *per se*, because these Standard 10 learners had already made their decisions to study at a university or other tertiary institutions. Coming from a strong 'traditional' academic background, these participants used their parents as role models who received their academic credentials at universities. Some learners recognised the role models used on the CD-ROM.
	A2=Affiliation • *Bond, connectedness*	Students showed interest in all the courses offered by the School of Management. They felt positive that they could have the 'opportunity to work with culturally different people', the courses were active and relevant, and that they could gain hands-on experience while they were studying. Although a 'lot of the professions expect degrees from universities', they were encouraged that the courses at the School of Management were practical.

	A3= role of culture	The role of the participants' cultural backgrounds played a role in their affiliation with the Cape Technikon. Peers, parents and family have influenced some of the participants positively to further their studies at universities. They acted as their prominent role models.
	A4=Decision-making	The courses were 'active' and relevant, they could gain hands-on experience while they were studying, and that the courses were people-related. Although it became evident that these learners showed no significant need to attend the Cape Technikon *per se*, because some had already made their decisions to study at a university or other tertiary institutions. Coming from a strong 'traditional' academic background, these participants used their parents as role models who received their academic credentials at universities. Some learners recognised the role models used on the CD-ROM. This all helped with their decision-making processes.

4.8.1.2 Words and phrases that show elements of the category - 'Identification with role model'

Derived from the narratives of the participants of the study the following phrases and words state elements of the categories.

STAGE 3 (i) of the Pre-measurement phase to the presentation of the CD-ROM

3.A   Identification with role model - creates 'harmony'

- 'I have a friend studying this (Tourism Management) at the moment and she has explained sort of the basis of it to me'

- 'like to study Marketing, my mother has her own little business and together we plan how to market the product'

- 'would like to study Marketing - we've been studying this in detail in Business economics, I've also researched on this subject for my business project'

- 'Marketing - which is about selling and buying products and services. We have done the basics in Business Economics and studied it briefly'

- 'I liked what I saw on Open Day'

- 'I studied it, Marketing in Business Economics and found that it was a very interesting module. I enjoyed studying the different forms of advertising and selling methods'

- 'The courses done at this Technikon will give knowledge to students...not for passing the exams...also for knowledge in future...'

- 'less than the fees of universities, want to study Small Business Management, deal with those who suffered about money, go to Small Business to borrow money'

- 'after CD-ROM I do Tourism Management. I'm well behaviour, tolerate other people's behaviour, like to communicate, I'm well matured person, make arrangement to move out of South Africa' *(language not corrected - direct data)*

- 'Tourism Management - info received from friends interested in this department'

- '*sou Menslike Hulpbron Bestuur studeer, hou daarvan om met mense te werk, dus sal hierdie kursus vir my die beste wees*' - translation: Would study Human Resources, I like to work with people, therefore this course would suit me best'

- *bied nie my keuse kursus aan nie (B.Com.), maar dra kennis van Bemarking...my broer doen B.Com. by Stellenbosch en spesialiseer in Bemarking* - translation: 'it does not offer the course I'm interested in

(B Comm.), but I do know of Marketing...my brother is studying B.Comm. at Stellenbosch and specialises in Marketing'

- 'using the CD-ROM with a PR - the PR practitioner does his bit and also demonstrates how the CD works'

- 'Public Relations department - the department's name speaks for itself, our school is constantly visited by PROs'

- 'undecided - I would like to study Computer Science, choice between UCT and Tech - each person representing the two institutes tells me what their courses do...have no way of comparing the two and deciding which will give me the better training and education'

- 'I know a little about Human Resources Management, because I have a friend who is a staff manager. Your most important job is to work with people in the working environment and to make sure that everybody is satisfied with their job circumstances'

- 'Tourism Management - info received from friends interested in this department'.

STAGE 3 (i) of the Pre-measurement phase to the presentation of the CD-ROM

3.B   Identification with role model - creates need to attend the Cape Technikon

- 'want to study Public Administration, work with people, want to help and guide to do Commerce faculty at Cape Tech' (*language not correct - direct data*)

- 'after CD-ROM I do Tourism Management. I'm well behaviour, tolerate other

people's behaviour. I like to communicate, I'm well matured person, make arrangement to move out of South Africa' *(language not correct - direct data)*

- 'undecided - I would like to study Computer Science, choice between UCT and Tech - each person representing the two institutes tells me what their courses do...have no way of comparing the two and deciding which will give me the better training and education'.

STAGE 3 (i) of the Pre-measurement phase to the presentation of the CD-ROM

3.C   Identification with role model - creates belongingness due to culture

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- 'I studied it, Marketing in Business Economics and found that it was a very interesting module. I enjoyed studying the different forms of advertising and selling methods'

- 'would like to study Marketing - we've been studying this in detail in Business Economics, I've also researched on this subject for my business project'

- 'Marketing - which is about selling and buying products and services. We have done the basics in Business Economics and studied it briefly'

- 'create academical, technological and social skills, they teach the students not to be shy to their people'.

STAGE 3 (i) of the Pre-measurement phase to the presentation of the CD-ROM

3.D   Identification with role model - creates positive/negative decision-making

      process

- 'like to study Marketing, my mother has her own little business and together we plan how to market the product'

- 'I studied it... Marketing in Business Economics and found that it was a very interesting module. I enjoyed studying the different forms of advertising and selling methods'

- 'would like to study Marketing - we've been studying this in detail in Business Economics, I've also researched on this subject for my business project'

- 'Marketing - which is about selling and buying products and services. We have done the basics in Business Economics and studied it briefly'

- 'I liked what I saw on Open Day'

- 'I have a friend studying this (Tourism Management) at the moment and she has explained sort of the basis of it to me'

- 'less than the fees of universities, want to study Small Business Management, deal with those who suffered about money, go to Small Business to borrow money'

- 'after CD-ROM I do Tourism Management. I'm well behaviour, tolerate other people's behaviour. like to communicate, I'm well matured person, make arrangement to move out of South Africa' (*language not correct - direct data*)

- '*sou Menslike Hulpbron Bestuur studeer, hou daarvan om met mense te*

werk, dus sal hierdie kursus vir my die beste wees' - translation: Would study Human Resources, I like to work with people, therefore this course would suit me best'

- *'bied nie my keuse kursus aan nie (B.Com.), maar dra kennis van Bemarking...my broer doen B.Com. by Stellenbosch en spesialiseer in Bemarking'* - translation: 'it does not offer the course I'm interested to do (B Comm.), but I do know of Marketing...my brother is studying B.Comm. at Stellenbosch and specialises in Marketing'

- 'using the CD-ROM with a PR - the PR practitioner does his bit and also demonstrates how the CD works'

- 'Public Relations department - the department's name speaks for itself, our school is constantly visited by PROs'

- 'undecided - I would like to study Computer Science, choice between UCT and Tech - each person representing the two institutes tells me what their courses do...have no way of comparing the two and deciding which will give me the better training and education'

- 'I know a little about Human Resources Management, because I have a friend who is a staff manager. Your most important job is to work with people in the working environment and to make sure that everybody is satisfied with their job circumstances'.

4.8 1.3 The second category in STAGE 3: Effect of information, the technology

on viewers' levels of perceptions

STAGE 3 (ii) included the following category, namely the 'Effect of

information, the technology on viewers' levels of perceptions'. STAGE 3 (ii) took

place directly after the presentation of the CD-ROM. The analyses consisted of:

5.A   Effect of information, the technology on viewers' levels of perception –

creates 'harmony'

5.B   Effect of information, the technology on viewers' levels of perceptions -

creates need to attend the Cape Technikon

5.C   Effect of information, the technology on viewers' levels of perceptions -

creates belongingness due to culture

5.D   Effect of information, the technology on viewers' levels of perceptions -

creates positive/negative decision-making process.

Table 4-19   Codified Analyses – STAGE 3 (ii) - Vuyiseka Secondary High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura	A1=harmony • Making choices • Role of mimetic behaviour	**Vuyiseka Secondary High School** The section on Tourism Management and Marketing made a positive impression on many viewers of this school. The effect of the information and the novelty of the CD-ROM made one participant 'spontaneous and confident'. Tourism Management aimed to offer quality service to foreigners and tourists in South Africa. These learners had the advantage of speaking three languages. Marketing, equally important, because many learners already have their own little enterprises functioning from home. Some viewers realised that they could match their personality with the qualities in the 'Personality File'

A2=Affiliation • **Bond,** **connectedness** **A3= role of culture** **A4=Decision-** **making**	and identify themselves. Personality traits were typified by the courses offered at the School of Management. This was done by previous research by career guidance counselors at the Cape Technikon. The viewers could estimate in which course they would be a better 'fit' than in others. A respondent regarded the CD-ROM as a promotional opportunity. Another viewer elucidated the fact that the Cape Technikon also dealt with overseas exchange students. Certain courses offered at the School of Management lent themselves to strong personality traits, which they felt many would like to develop. The practical component to the student's third year was very important to these learners. They felt encouraged if they could gain experience and knowledge before they entered the 'real business world'. The Cape Technikon offered degrees, comparatively affordable, because university tuition was too expensive. The viewers were cognitively involved with the contents and affectively involved with the technology. The CD-ROM portrayed information, but acknowledged issues like students' cultural backgrounds and selection of languages on the CD-ROM. Some viewers maintained that knowledge is the symbol of power, spreading a 'light in the darkness'. The practical component, the experiential training in the student's third year was very important. They felt empowered by gaining prior experience and knowledge before they actually entered the 'real business world'. The Cape Technikon offered degrees, which was more affordable than a university degree. That elucidated their enthusiasm to study, making the Cape Technikon much more affordable than a university. A bond was spontaneously created with the Cape Technikon - ' I love Cape Tech!' They created a bond with the Cape Technikon, as one learner stated, ' I love Cape Tech!' The field of study, Marketing was very important to some participants, as they practise their own little businesses from home. The 'Personality File' allowed the viewer to 'match' his/her personality with the certain courses offered at the School of Management. They realised the importance of finding the correct fit, the correct 'match'. The need for knowledge became a symbol of power to them. The learners were encouraged that they had a 'natural' advantage of speaking three languages, and especially where Tourism Management required an array and fluency of languages. Marketing was an important field of study to some participants, as some already have their own little enterprises functioning from home. Tourism Management and Marketing made a positive impression on many viewers of this school. The effect of the information and the novelty of the CD-ROM made them feel empowered. These learners had the advantage of speaking three languages, practicing their own little enterprises from home. This all strengthened their decision-making processes. Some viewers realised that they could match their personality with the qualities in the 'Personality File' and identify themselves. Personality traits were typified by the courses offered at the School of Management. The viewers could decide which course they would be a better 'fit' than in others.

		The practical component to the student's third year was very important to these learners. They felt encouraged if they could gain experience and knowledge before they entered the 'real business world'. The Cape Technikon offered education, comparatively affordable. The viewers were cognitively involved with the contents and affectively involved with the technology. The CD-ROM portrayed information and helped them with their choices of future careers and courses.

Table 4-20 Codified Analyses–STAGE 3 (ii) Harold Cressy Secondary High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	A1=harmony • Making choices • Role of mimetic behaviour	**Harold Cressy Secondary High School** The viewers felt that by studying at the Cape Technikon, they would also obtain skills - academic, technological and social skills,and this would give the students a head-start, because these qualities set the future employee to function on a platform of strength, as opposed to feeling 'inferior or immature'. They would get hands-on experience (experiential training), setting the future employee on a platform of strength, as opposed to feeling 'inferior or immature'. The Cape Technikon offered experiential training in the third year of a student's course. It gave the student and potential employee many opportunities to pursue in the industry, and gaining experience in their 'working year'. One could apply what was learnt. Experiential training gave one the chance to interact with the type of people you will work with (as well as socialising with many cultures), which prepared one emotionally for the career. This helped to establish a better working environment and relationship. This innovative approach, the interactive multimedia, opened their visions which they did not know before. Another viewer mentioned that the Cape Technikon offered facilities, equipment, which was important to them, e.g. film making, photography. This equipment was terribly expensive and they could not afford it on their own. The Cape Technikon offered both theory and the practical. The 'online' information on the CD-ROM gave them the prerogative to require information the student wished to have. This added support to the viewers' choices, and they felt empowered by using the tool. The CD-ROM simplified information access and retrieval. This CD-ROM intrigued the participants' perceptions. It opened new avenues which they had not pursued before. It gave them a learner freedom. They felt empowered by using this tool. These viewers were encouraged that the courses were both theoretical and practical. The viewers could control the presentation as they wished, allowing them to access information of their choice. They took own responsibility to look for information they required on the CD-ROM.

		CD-ROM.
	A2=Affiliation • **Bond, connectedness** **A3= role of culture**	After the presentation, a learner mentioned that because his family had strong ties with Marketing, he felt that the Cape Technikon would be able to supply him with enough knowledge and skills in Marketing. No responses were received.
	A4=Decision- making	The Cape Technikon offered the learners skills - academic, technological and social skills. These qualities allowed the future employee to function on a platform of strength. They would get hands-on experience (experiential training). One could apply what was learnt. Experiential training gave one the chance to interact with the type of people you will work with (as well as socialising with many cultures), which prepared one emotionally for the career. This helped to establish a better working environment and relationship. This innovative approach, the interactive multimedia, opened their visions which they did not know before. The 'online' information on the CD-ROM gave them the prerogative to require information the student wished to have. This added support to the viewers' choices, and they felt empowered by using the tool. The CD-ROM simplified information access and retrieval.

Table 4-21   Codified Analyses – STAGE 3 (ii) Bosmansdam High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	**A1=harmony** • *Making choices* • *Role of mimetic behaviour*	***Bosmansdam High School*** The CD-ROM was the provider of 'new' information in a funlike manner. The viewer could evaluate himself/herself and identify with certain requirements that were important in the 'Personality Profile'. The 'Personality Profile' allowed the viewers to be introspective, and evaluate their strengths and weaknesses in order to make the best 'fit' for a future career. The presentation of the CD-ROM acted as a 'change agent'. The information presented on CD emphasised the importance of acquiring various academic, technological and social skills within the courses offered at the School of Management. The contents of the CD-ROM added value to existing knowledge about the Cape Technikon. The information was complementary to existing perceptions of the courses being offered at the School of Management, for others the information was brand new, which subsequently changed their opinions about the Cape Technikon. They emphasised that their attention was grabbed in an engaging, appealing way. The multimedia was capable of communicating detailed text-based information in addition to animation, stills, graphics and audio.

Theory	Qualities of theories/Codes	School
	A2=Affiliation • Bond, connectedness	The viewers felt empowered by the messaging of the CD-ROM and were pleased with the easy access and retrieval of online information. Their levels of perception were stimulated, and they could hope to form a bond.
	A3= role of culture	No responses were received.
	A4=Decision-making	This provider of 'new' information happened in a funlike manner. The viewer could evaluate himself/herself and identify with certain requirements that were important in the 'Personality Profile', in order to make the best 'fit' for a future career. The presentation of the CD-ROM acted as a 'change agent'. The information presented on CD emphasised the importance of acquiring various academic, technological and social skills. The contents of the CD-ROM added value to existing knowledge about the Cape Technikon, which subsequently changed their opinions about the Cape Technikon. They emphasised that their attention was grabbed in an engaging, appealing way. The multimedia was capable of communicating detailed text-based information.

Table 4-22   Codified Analyses – STAGE 3 (ii) Gardens Commercial High School

Theory	Qualities of theories/Codes	School
		Gardens Commercial High School
Social Learning Theory (Bandura)	**A1=harmony** • *Making choices* • *Role of mimetic behaviour*	By acquiring skills for their future careers, they felt that the Cape Technikon empowered them to get future employment. The Cape Technikon offered the viewers a support system in order to succeed, e.g. the language units, the tutoring systems, all to benefit the student. Experiential training was an important service offered by the Cape Technikon. They felt positive that by acquiring the skills (which were offered in the courses) for future careers, it made it easier for them to get employment. The learnt skills would be applied and equipped them for a future career. These learners were pleased with the presentation. They recognised that the CD-ROM had the drift of marketing the institution, namely the School of Management and the various courses offered there. By studying the courses it would open the door to future careers. They would be equipped with skills, hands-on experience and practicalities which would make it easier to get future employment. One was literally taken into the 'inside' of the institution by means of this multimedia presentation, to places where one would not normally get to.
	A2=Affiliation • Bond, connectedness	The viewers were interviewed by spokespeople, namely the role models. They assisted the viewers with personalised information about themselves, the value of the courses for future employment, and the Cape Technikon.

		The role models used on the CD-ROM spoke up by giving personal viewpoints and supported the viewers' pre-knowledge of the Cape Technikon. They felt encouraged by the fact that the Cape Technikon offered courses that were skills-orientated. The CD-ROM offered the opportunity to the viewers to communicate richer information to the prospective student than was ever before possible. The viewers were given a closer look at the Cape Technikon - one was literally taken into the 'inside' of the institution, perhaps to places where one would not normally get into.
	A3= role of culture	The role models used on the CD-ROM assisted the viewers' pre-knowledge of the Cape Technikon, by sharing their personal knowledge with the viewers. This in fact 'personalised' their encounter with the institution.
	A4=Decision-making	The knowledge gained from the CD-ROM helped them to feel empowered. The Cape Technikon offered the viewers a support system in order to succeed, e.g. the language units, the tutoring systems, all to benefit the student. Experiential training was an important service offered by the Cape Technikon. They felt positive that by acquiring the skills (which were offered in the courses) for future careers, it made it easier for them to get employment.
	A4=Decision-making	By studying at the Cape Technikon, it would open the door to future careers. One was literally taken into the 'inside' of the institution by means of this multimedia presentation, to places where one would not normally get to. The viewers were interviewed by spokespeople, namely the role models. They assisted the viewers with personalised information about themselves, the value of the courses for future employment,

Table 4-23   Codified Analyses – STAGE 3 (ii) Groote Schuur High School

Theory	Qualities of theories/Codes	School
Social Learning Theory (Bandura)	A1=harmony • Making choices • Role of mimetic behaviour	**Groote Schuur High School** The information communicated to the viewers empowered the participants to make valuable choices about their future careers, whether it was at a university, college or advertising agency. The dynamics of the technology and the information presented, assisted with the building up of human values, for example the viewers' decision-making processes, perhaps their inquisitiveness, perhaps fulfilling an academic commitment. They acknowledged the Technikon to assist with the catering of academic, technological and social skills. All these values were reinforced through the usage of the CD-ROM. Although the majority of the participants had already made decisions about their careers (in a few cases their parents assisted as role models and influenced them/chose for them), they were intrigued by the contents of the CD-ROM. The information on the CD-ROM allowed the participants to make their own choices about the various courses offered at the School of Management. Some participants who

A2=Affiliation • **Bond,** **connectedness** **A3= role of culture** **A4=Decision-** **making**	about the various courses offered at the School of Management. Some participants who have been exposed to multimedia before, regarded the technology of the CD-ROM as ordinary - 'not as "funky" as one could make it'. The courses offered were interesting, active and relevant. The courses offered were interesting, active and relevant. It was easy for them to select the aspects that interested them most, which created a maximum learner freedom. No responses were received. The information communicated to the viewers empowered the participants to make valuable choices about their future careers. The dynamics of the technology and the information presented, assisted with the building up of human values, for example the viewers' decision-making processes, perhaps their inquisitiveness. The Technikon assisted with the catering of academic, technological and social skills. All these values were reinforced through the usage of the CD-ROM. The majority of the participants had already made decisions about their careers, but were still intrigued with making their own decisions about possible future careers. Some participants who have been exposed to multimedia before, regarded the technology of the CD-ROM as ordinary - 'not as "funky" as one could make it'. The courses offered were interesting, active and relevant

4.8.1.4   Words and phrases that show elements of the category ' Effect of

information, the technology on viewers' levels of perceptions'

STAGE 3 (ii) of the Pre-measurement phase to the presentation of the CD-ROM 5.A   Effect of information, the technology on viewers' levels of perceptions - creates 'harmony'

• 'the presentation changed my mind'

• 'the "Personality Profile" - I feel that I can handle pressure and personality

  wise I fit in'

• 'the courses offered seems as though everything is wrapped up and it just

depends on you, whether you succeed or not'

- 'this presentation gave me a new outlook on what management is all about'

- 'it will definitely be to the best of our advantage'

- 'The information that was sent across to me was very informative and interesting. The characteristics of the various courses also were applicable to me. I found this part very important as it makes you more confident of your choices'.

- 'the courses offered gave the viewers 'lots of opportunities to succeed, things like the tutoring system, language units - all to benefit the student'

- 'seeing the programme on CD-ROM has helped me by giving me an insight into the Technikon'

- 'the third year...get experience when applying for a job'

- 'offer practical training'

- 'The "Personality Profile" provided me with valuable information'

- 'The programme on the CD-ROM simply made me more interested in doing Marketing'

- 'Because if you acquire the skills they offer, it is easier to get employment'

- 'gained insight from the student themselves on the CD-ROM'

- 'you get hands-on experience - to experience for yourself and not feel inferior or immature when you do enter your job'

- 'experiential training helps prepare students for the future'

- 'it prepares you for your future properly'

- 'it's interesting, challenging and exciting'

- 'It gives you insight into your different careers you wish to pursue'

- 'a course which would be a lot of fun'

- 'get experience in your working year'

- 'I would not choose any of these courses'

- 'the training you receive is integrated and involved'

- 'in your third year you can apply what you have learned'

- 'I feel that I fit the personality profile'

- 'you work with the actual equipment and apparatus you will come across in your future career'

- 'Technikon will give you the facilities as well as the equipment'

- 'skills acquired will establish a better working environment and relationship'

- 'Tourism Management...it offers many languages'

- 'what I saw on the computer, can be my future'

- 'I love Cape Tech'

- 'when I pass my matric, I would like to study at the Cape Technikon, if I have money'

- 'The courses at the School of Management...are good'

- 'lots of people, therefore more friends'

- 'It's very central'

- 'the contents of the subjects at Tech are basically a further development of talents'

- 'Yes and no...do computer course, yes...journalism...Stellenbosch'

- 'does not offer courses that suit me'

- 'does not offer courses and degrees that I am interested in'.

> STAGE 3 (ii) of the Pre-measurement phase to the presentation of the CD-ROM
>
> 5.B   Effect of information, the technology on viewers' levels of perceptions -
>
> creates need to attend the Cape Technikon

- 'The courses done at this Technikon will give knowledge to students...'

- 'I want to tell them about the Cape Tech'

- 'the courses offered seems as though everything is wrapped up and it just depends on you, whether you succeed or not'

- 'This presentation gave me a new outlook on what management is all about'

- 'it will definitely be to the best of our advantage'

- 'The information which was sent across to me was very informative and interesting...I found this part very important as it makes you more confident of your choices'

- 'the courses offered gave the viewers 'lots of opportunities to succeed, things like the tutoring system, language units - all to benefit the student'

- 'Because seeing the programme on CD-ROM has helped me by giving me an insight into the Technikon'

- 'the third year...get experience when applying for a job'

- 'offer practical training'

- 'The programme on the CD-ROM simply made me more interested in doing Marketing'

- 'Because if you acquire the skills they offer, it is easier to get employment'

- 'gained insight from the student themselves on the CD-ROM'

- 'you get hands-on experience - to experience for yourself and not feel inferior or immature when you do enter your job'

- 'experiential training helps prepare students for the future'

- 'it prepares you for your future properly'

- 'it's interesting, challenging and exciting'

- 'a course which would be a lot of fun'

- 'get experience in your working year'

- 'the training you receive is integrated and involved'

- 'in your third year you can apply what you have learned'

- 'you work with the actual equipment and apparatus you will come across in your future career'

- 'Cape Technikon will give you the facilities as well as the equipment'

- 'Tourism Management...it offers many languages'

- 'what I saw on the computer, can be my future'

- 'I love Cape Tech'

- 'when I pass my matric, I would like to study at the Cape Technikon, if I have money'

- 'The courses at the School of Management...are good'

- lots of people, therefore more friends'

- 'It's very central'

- 'the contents of the subjects at Tech are basically a further development of

talents'

- 'Yes and no. ...do computer course, yes...journalism...Stellenbosch'.

STAGE 3 (ii) of the Pre-measurement phase to the presentation of the CD-ROM

5.C Effect of information, the technology on viewers' levels of perceptions -

creates belongingness due to culture

No narratives were found to substantiate this section.

STAGE 3 (ii) of the Pre-measurement phase to the presentation of the CD-ROM

5.D Effect of information, the technology on viewers' levels of perceptions -

creates positive/negative decision-making process

- 'the presentation changed my mind'.

- 'the "Personality Profile" - I feel that I can handle pressure and personality

  wise I fit in'

- 'the courses offered seems as though everything is wrapped up and it just

  depends on you, whether you succeed or not'

- 'This presentation gave me a new outlook on what management is all about'

- 'it will definitely be to the best of our advantage'

- 'The information which was sent across to me was very informative and

  interesting. The characteristics of the various courses also were applicable to

  me. I found this part very important as it makes you more confident of your

choices'

- 'the courses offered gave the viewers 'lots of opportunities to succeed, things like the tutoring system, language units - all to benefit the student'

- 'Because seeing the programme on CD-ROM has helped me by giving me an insight into the Technikon'

- 'the third year...get experience when applying for a job'

- 'offer practical training'

- 'The "Personality Profile" provided me with valuable information'

- 'The programme on the CD-ROM simply made me more interested in doing Marketing'

- 'Because if you acquire the skills they offer, it is easier to get employment'

- 'gained insight from the student themselves on the CD-ROM'

- 'you get hands-on experience - to experience for yourself and not feel inferior or immature when you do enter your job'

- 'experiential training helps prepare students for the future'

- 'it prepares you for your future properly'

- 'it's interesting, challenging and exciting'

- 'It gives you insight into your different careers you wish to pursue'

- 'a course which would be a lot of fun'

- 'get experience in your working year'

- 'I would not choose any of these courses'

- 'the training you receive is integrated and involved'

- 'in your third year you can apply what you have learned'

- 'I feel that I fit the personality profile'

- 'you work with the actual equipment and apparatus you will come across in your future career'

- 'Technikon will give you the facilities as well as the equipment'

- 'skills acquired will establish a better working environment and relationship'

- 'Tourism Management...it offers many languages'

- 'what I saw on the computer, can be my future'

- 'I love Cape Tech'

- 'when I pass my matric, I would like to study at the Cape Technikon, if I have money'

- 'The courses at the School of Management...are good'

- lots of people, therefore more friends'

- 'It's very central'

- 'the contents of the subjects at Tech are basically a further development of talents'

- 'Yes and no...do computer course, yes...journalism...Stellenbosch'

- 'does not offer courses that suit me'

- 'does not offer courses and degrees that I am interested in'.

4.8.2 A summary of STAGE 3 (i) and STAGE 3 (ii) of the pre-measurement phase to the presentation of the CD-ROM

In total STAGE 3 (i) and Stage 3 (ii) focused on the category 'Identification

with a role model' as an important predictor, as well as the 'Effect of information, the technology on viewers' levels of perception'. At the time of the presentation the role model was either the CD-ROM itself, or it was the people who acted as role models on the CD-ROM that had an effect on the viewers of the presentation, or it was parents, family or friends. This was of significance, supporting the principles of Social Learning Theory whereby observational learning is shapedthrough the medium of a role model and mimicry; the role of reinforcement in observational learning strengthened the process of observational learning through mimicry.

The learners could identify with role models from their community whom they recognised on the CD-ROM, from their language groups, from their peers. The viewers noticed some of their peers to be successful students at the Cape Technikon, which affected their decision-making processes positively in a way that they would like to be affiliated with the Cape Technikon, or negatively, that they would not like to be associated with the Cape Technikon.

The fact that the viewers could gain information in any order of their choice, or even revisit certain sections time and time again brought about reinforcement of information of the CD-ROM. The effect of the multimedia CD-ROM and social messaging influenced the participants' perceptions. These are set out in section 4.8.1.1 and 4.8.1.2.

The viewers felt empowered by using the tool. It also gave them learner freedom, allowing them information access and retrieval at their own choice.

4.9	Phase Two: The post-measurement phase - the focus group interviews
	STAGE 4

The focus group interviews occurred two weeks later than the presentation of the CD-ROM. The questions that were asked during the focus group interviews required general perceptions from the participants, as to their feelings of a twinship with the institution and the courses taken, whether they experienced a sense of harmony about their choices, and whether they understood the information given on the CD-ROM. The fact that the CD-ROM is multimedia and interactive, placed an emphasis on a 'novel way' to student recruitment.

The following is the analyses of the narratives taken from the tape-recorded and transcribed interviews. Each will be headed by the various categories of the Syntony Filter Matrix Grid and dealt with in the same order of schools as in the pre-measurement phase. The narratives of the focus group interviews, Table4-24 are coded according to the codifying system and the qualities of Social Learning Theory, the dynamics of Diffusion Theory and the impact of the Triune Brain Theory.

If there are any language or spelling errors in the data, the exact wording was used. Not every narrative was used for this section, only the most appropriate and profound. Other to this, the narratives is to be found in Appendix 6, p xli-liii.

The codes used were: **A1**= harmony (by making choices and the role of mimetic behaviour;); **A2**= affiliation (being connected, experiencing a bond); **A3**=role of culture, and **A4**=decision-making.

Table 4-24   Codified Analyses STAGE 4 - Focus group interviews coded – all the

schools

Theory	Qualities of theories/Codes	Schools
Social Learning Theory- Bandura Triune Brain Theory- Maclean Diffusion Theory- Rogers	A1=harmony • Making choices • Role of mimetic behaviour A1=harmony • Making choices Role of mimetic behaviour	The focus group interviewees evaluated the pros and cons of the Cape Technikon. Harmony was created with both positive and negative responses from the learners. The Cape Technikon was accessible for various reasons, they lived in close proximity, their schools were close to the Cape Technikon, they had friends studying there, and the study costs were not too expensive. The Cape Technikon offered the students a practical application of knowledge learnt. Furthermore, the acquisition of a profession after studying at the Cape Technikon was very important. During the students' third year, they are sent into industry for a few months to a year for experiential training. They gained the necessary experience, but also earned a minimal salary. The participants thought this to be very valuable, as a niche is created while still studying. The campus of the Cape Technikon proved to create harmony, as it portrayed a positive atmosphere. This created a sense of belongingness, the 'Tech has a brilliant atmosphere', and a 'vibrant place to study'. The majority of the Groote Schuur High School learners had already decided upon other careers prior to the research. Their choices were not offered at the Cape Technikon, but mainly at universities. Their socio-cultural backgrounds and influence from parents were typical of a strong traditional academical, mainly Afrikaans and affluent environment. Learners from Groote Schuur affirmatively decided that they were attending universities as opposed to other institutions, because their role models and influence had been parents who had studied at universities. When the research had taken place, which was in September-October 1997, the learners had already made their choices of tertiary institutions. Learners from Gardens Commercial mentioned that due to the information received from the CD-ROM, they thought that the CD-ROM explained much more of what one would normally read from a brochure, which emphasised to communicate the unique features and benefits of the Cape Technikon's approach to education. The brochure required to be read or 'studied', while the information was accessed and retrieved on the CD-ROM in an entertaining manner. A brochure could not 'speak' as much as the CD-ROM, making use of the various speakers, role models, music, sounds, animation, stills and pictures. This definitely created a keenness to the Cape Technikon, and created a bond with the institution, but ultimately assisted and affirmed that their choices and decisions for the right careers were correct Harold Cressy learners were well informed by the CD-ROM which 'brought' the Technikon to the learners, and not vice versa, as it is not always possible for potential students to visit the Cape Technikon on 'Open Day'. The CD-ROM was used as a marketing tool, applied in an interactive manner. The essence of marketing is differentiation. This recruitment approach was different, it was a novelty. The presentation intended to convey information that would help the Cape Technikon recruit students that were right for the institution.

	A1=harmony • Making choices Role of mimetic behaviour	Cape Technikon recruit students that were right for the institution. Learners of the Vuyiseka Secondary High School reiterated that education was very expensive, one had to pay lots of money to obtain an education. They recommended to have tertiary recruitment done earlier in their schooling, and not in Standard 9 or in Standard 10. That was too late. If done earlier, it would diminish wrong career choices and subject choices at school. The acquisition of knowledge played a pivotal role in their lives, because knowledge empowered and enriched their lives, specially to those who had come from a poor and disadvantaged background.
Social Learning Theory-Bandura **Triune Brain Theory-Maclean** **Diffusion Theory-Rogers**		The fact that Vuyiseka learners worked on a computer and with the multimedia presentation, gave the majority of them the feeling that they were at 'the control of information' in which they were interested. Some were shy, one stepped aside, some were apprehensive. This aspect was experienced totally differently by the learners of Groote Schuur High School, as the latter hailed from an affluent demographic area, most of them were *au fait* with the interactive multimedia. They mentioned that study costs were important, but the majority had their parents supporting them and some had applied for bursaries. Some Groote Schuur learners had alternatives to go overseas before making a wrong decision for future studies. This viewpoint distinguished the learners from advantaged and disadvantaged backgrounds very clearly, those who could 'afford' to go overseas as opposed to those who could not. This same argument was discussed by learners from Harold Cressy High, Bosmansdam High and Gardens Commercial Schools. The participants all agreed, that from the information received of the CD-ROM, they could make their own preferences and decision- making choices. The learners preferred a mixed student base'. The 'student base is different and well represented...how boring if it weren't, say for instance all the students came from Cape Town, all the perspectives would be the same...', a learner from Bosmansdam High School noted. Another learner mentioned that the presentation offered '...different types of people, not only males, or not only females, a good balance of the sexes, there were ethnic groups, there were Chinese, someone of Bangladesh...different languages...young and older students...'. A learner from Vuyiseka High emphasised the importance of education. He wished that his parents had an education and had the opportunity to study - '...but I will motivate my parents to study, they would get better employment if they study...' He then concluded that, 'No, my parents are too old now'. *The impact of role models on the viewer was very positive. Because mimicry was obtained through observational learning, it was significant that during the presentation of the CD-ROM, the viewers identified with them. This gesture created harmony. The participants for this study identified two categories of role models, firstly the CD-ROM itself with the various people who acted as role models, and secondly, other people who were instrumental and might have influenced them, like peers, a teacher, a brother. The role models intentionally involved the viewers with the opinions of the institution. The role models spoke with respect and pride about both the traditional and the nontraditional students represented on the campus, as well as the academics. The CD-ROM was a role model itself, although it was regarded not the 'normal' way of recruiting, but as an innovative, alternative method. The presentation was 'well presented and*

Social Learning Theory- Bandura Triune Brain Theory Maclean Diffusion Theory- Rogers	A1=harmony • Making choices Role of mimetic behaviour	balanced', according to Harold Cressy and Bosmansdam High School learners. The Vuyiseka learners were delighted and motivated by their African peers who spoke on the CD-ROM - 'I would study hard so that I can pass with flying colours...push forward in life'. A Gardens Commercial learner said, that by being a student, one 'could have a balanced student life' - 'there is time for studies and soccer...'. It was also encouraging to see more mature students on campus, as well as 'girls doing engineering...breaking the stereotypes'. The contents, story line of the CD-ROM projected a positive message about the Cape Technikon, and more specifically the School of Management. Many learners exclaimed that they would like to attend the Cape Technikon. They thought it 'a nice place to study', 'a good thing that the technikons are practically inclined...give students work in their third year...'. Because these learners were 'introduced' to various role models, they were encouraged that people of their race, creed and colour were well represented on the CD-ROM, therefore supporting them with any decision-making processes. The learners felt that by following the example of a role model or accepting their advice, had a positive influence on their decision-making abilities. The learners spontaneously recognised some of the spokespeople (who were in fact present students) as role models, namely a famous local soccer player, and a beauty queen of a township. After watching, the learners felt that the CD-ROM assisted them to familiarise themselves with the tertiary institution. By gaining information in a funlike manner and being actively involved with 'new information' supported their pre-knowledge of the institution, the academia, the social life, etc. It was an easy, entertaining way of accessing information. The participants were actively involved with the controls of the computer and the information. Some learners of Groote Schuur High School suggested to have the detailed syllabi of all the subjects taught at the School of Management, as the present presentation did not have a detailed account of the syllabi. This would assist them with future choices of careers. The CD-ROM was entertaining, stimulating, informative and gave clear-cut answers while retrieving information. The CD-ROM was user-friendly, easy to apply, as the instructions were on the interfaces. After viewing the CD-ROM it was evident that diffusion had taken place. Diffusion created compatibility, and even if the participants had never used a computer before, this CD-ROM programme gave clear instructions as how to use it. The programme was entirely compatible, it was entertaining and informative. They could observe, or they could be interactively involved, and this enhanced the notion of diffusion. Certain menus on the CD-ROM and certain fields of study were more 'visited' than others. The Harold Cressy learners stated that they 'could see what the courses entail...what they need to do to apply for a course...know which personality traits are best suited for the best courses'. The presentation of the CD-ROM stimulated all the senses, and instilled both positive and negative decision-making processes, because the interactivity of the CD-ROM programme forced the viewers to be cognitively involved. The viewers were stimulated visually. By being exposed to the contents of the different courses at the School of Management and giving them insight about themselves in the 'Personality File', gave them food for thought. This allowed the viewers to become introspective towards the 'who' and the 'what' they were. A Vuyiseka learner said that with the information she received, she no longer was 'left in the dark...gave me a clear vision what is offered at the Technikon...and what is required from me as a student'.

Social Learning Theory- Bandura **Triune Brain Theory- Maclean** **Diffusion Theory- Rogers**	**A1=harmony** • *Making choices* *Role of mimetic behaviour*	The participants of the research were granted a relative advantage by viewing the multimedia presentation, as opposed to those who never saw it. The presentation of the CD-ROM had a section, 'Personality File'. This section was visited by all the viewers. They could 'match' their personality with the requirements for the various careers offered at the School of Management, and then receive clarity on their prospective career choice. The viewers were all cognitively and affectively involved. *The contents of the CD-ROM were divided into chapters (menus), which allowed the viewer to choose any section they were interested in, or revisit or skip information. The viewers had the prerogative to control the presentation by viewing only the sections they were interested in.* Learners valued the section on 'How to apply'. Choosing a career and a tertiary institution is difficult, and being able to guide the viewer on the CD-ROM as how to apply for the Cape Technikon, diminished some uncertainties. This exercise would give any prospective student a headstart - a relative advantage. 'Before seeing the presentation, I vaguely knew something about the Tech, now I know lots more...', a Gardens Commercial emphatically stated. The viewer received the tacit meaning of the messaging of the presentation. Special mention was made of experiential training during a student's third year. This allowed the students to gain experience within a work environment, but simultaneously complete their studies. The information given on the CD-ROM was informative, balanced, and covered all the aspects needed for student recruitment at the School of Management. The viewers were cognitively involved and found the presentation entertaining. Computer-illiteracy would not affect anybody accessing information from the CD-ROM, its so easy to work with. They felt it was easy to control the presentation as the instructions were on the interfaces. This 'first time experience of multimedia' was gladly received by a Vuyiseka learner. He drew parallels with the CD-ROM and a person's brain, namely '...it's like a brain - someone who is intelligent, it does not forget, brings knowledge to others...'. A Gardens Commercial learner who was an exchange student overseas, said '...what was introduced to me on the CD-ROM...can be compared to international standards...like universities overseas and other foreign technikons...'. A Bosmansdam learner mentioned that the presentation '...showed us the School of Management, the campus in an extraordinary way...to promote the Technikon..." Learners from Vuyiseka Secondary High School experienced computers to be a novelty, very trendy but an object only used by academic, materialistic snobs. With the exception of one learner, every participant of this specific group at Vuyiseka School, had never been exposed to a computer nor have they even touched a mouse. The fact that they could experience the computer and the presentation really empowered them. The fact that they could read the information on the CD-ROM and not in brochure form, became a greater novelty. This amplified the fact that the youth of today were 'visual readers' as opposed to 'traditional readers'. The youth were all products of the television age in South Africa. The interactive multimedia student recruitment tool enhanced the function of interactivity and enforced the participants to be involved. Bosmansdam learners felt that the information received from the CD-ROM gave them a sense of belonging, '... told my parents that I wanted to study there...the place makes you feel welcome'.
Social Learning		

| Learning Theory-Bandura Triune Brain Theory-Maclean Diffusion Theory-Rogers   Social Learning Theory- | A2=Affiliation • Bond, connected-ness | Bosmansdam High School learners stated that the CD-ROM actually 'personalised' their needs and questions about the Cape Technikon. The interviews with the role models assisted the participants to understand and identify with the contents of the CD-ROM. The CD-ROM had the ability to individualise, 'it spoke to me...'. Learners of Harold Cressy mentioned that after viewing the CD-ROM, they could see for themselves what the courses entailed, which career options to take or not to take, and that their choice of the Cape Technikon was the right one, or not. Of this group of twelve learners at Harold Cressy, four participants showed interest to attend the Technikon the following year. They all lived in close proximity of the Cape Technikon and the courses offered were the most suitable for them. The information given on the CD-ROM was informative, balanced, and covered all the aspects needed for student recruitment. All the viewers were cognitively involved and found it entertaining as well. The participants of Groote Schuur High School expected a more sophisticated prototype for this CD-ROM programme, which would be very expensive. However, the contents were informative and the messaging spoke to them in a powerful manner. A Vuyiseka learner stated that the presentation was 'very alive...because what you see is like the television...it was like opening my future, try to educate and entertain me'. Some participants could evaluate for themselves what the courses entailed, which career options to take or not to take, and that their choice of the Cape Technikon was the right one, or not the right one. The effect of the information and the technology of the CD-ROM influenced their decision-making processes, be it positive or negative. Due to the commercial academic background, the participants from Gardens Commercial felt an affiliation with the School of Management. They come from a businesslike commercial background; the subjects are all commercial and very practical. Their focus was on knowledge, abilities and practical skills, exactly what the Cape Technikon propagated. Bosmansdam learners recommended student recruitment representing races from all over, '...you need people from all over...the student base should be different and be well represented...how boring if it weren't, say for instance if all the students were from Cape Town, all the perspectives would be the same...'. The student base should be varied. |
| | A3= role of culture | Some participants of the research were enthused by the idea of joining the Cape Technikon, both for education and socialising - to gain further qualifications was important, but equally important they would be socially accepted in such a huge student population. Some learners were undecided about their own future and the need to attend the Technikon. The fact that acquiring an education at a Technikon was less expensive than a university, made the Cape Technikon a viable option. The role models used on the CD-ROM were representatives of all nationalities. The viewers identified with them, and experienced a feeling of 'belongingness' to the institution that would accept them for who and what they were. The choice of the role models, both male and female was mentioned - 'good balance of the sexes, there were ethnic groups, mix of races, the different languages, young and older students...' - and it all created harmony within the viewer. An already established mindset and 'home' culture encouraged a learner to study at the Cape Technikon, only because his brother, sister or parents were doing so. The viewers sensed a |

		'student culture' which was very attractive, they could hear from the role models who spoke on the CD-ROM and in fact had their questions and answers personalised. The role models spoke positively about the School of Management and projected being happy at the Cape Technikon and with their courses they were studying. The photographs also portrayed a 'happy' feel of the campuses, Zonnebloem and Granger Bay, and the students. All the learners acknowledged the importance of their cultural backgrounds. The fact that they could recognise and identify cultural 'icons', e.g. the ethnic and jazzy music, photographs of mosques in District Six and Chinese students in the library, made a positive impression on the viewers.
Theory- **Bandura** **Triune** **Brain** **Theory-** **Maclean** **Diffusion** **Theory-** **Rogers**	**A3=role of Culture**	The participants of the study felt encouraged that the information given on the CD-ROM was sensitively portrayed by acknowledging the various cultural groups at the Cape Technikon. They recognised cultural 'icons' on the CD-ROM, which made them feel comfortable. Some learners in fact attended the mosques of which there were photographs, some swayed their bodies to the music of the ethnic marimba drums, and some identified with the familiar role models they knew. The participants were delighted that the CD-ROM offered them language preferences. They were given a choice to listen to the narratives of the role models in the *lingua* familiar to them...and the languages...some spoke in English, some in Xhosa, some in Afrikaans...'. The role models used for the CD-ROM spoke in two of the official languages, and some sections offered Xhosa. The fact that the viewers were given language preferences, meant that there was sensitivity towards the viewers' cultural backgrounds, acknowledging their cultural identities. *Qualities of diffusion: Tangible – compatibility, trialability, observability -creates belongingness due to culture -* It appeared that this point of discussion was not important during the presentation, nor during the focus group interviews. *Effect of the information, the technology on viewers' levels of perceptions - creates belongingness due to culture -* During the focus group interviews this aspect revealed no importance.
	A4=Decision- **making**	Because harmony was instilled in many learners minds, both positive and negative, the majority felt that the Cape Technikon was accessible, close to where they live, near public transport and they had friends studying there, and the study costs were not too expensive. Students were given a practical application of knowledge learnt, and the acquisition of a profession after studying was very important. The students' third year, an experiential training helped them to gain experience. The campus of the Cape Technikon proved to be modern. 'Tech has a brilliant atmosphere', and a 'vibrant place to study' assisted them with making decisions. The majority of the Groote Schuur High School learners had already decided upon other careers prior to the research. Their choices were not offered at the Cape Technikon, but mainly at universities. Their role models and influence had been parents who had studied at universities.. Gardens Commercial learners mentioned that the information received from the CD-ROM was very informative, and explained much more of what one would normally read from a brochure to education. The CD-ROM, made use of the various speakers, role models, music, sounds, animation, stills and pictures. This definitely assisted them with future career choices.

A4=Decision-making	Harold Cressy learners were well informed by the CD-ROM which 'brought' the Technikon to the learners, and not *vice versa*, it was different, it was a novelty. The presentation intended to convey information that would help the Cape Technikon recruit students that were right for the institution.

Education was very expensive, and some learners felt that recruitment should take place earlier in their schooling, to prevent wastage of time and money.

Some Vuyiseka learners had worked on a computer and with the multimedia presentation. This gave them a feeling of 'controlling the information'. This aspect was experienced totally differently by the learners of Groote Schuur High School. They were *au fait* with the interactive multimedia.. Some Groote Schuur learners had alternatives to go overseas before making a wrong decision for future studies. This viewpoint distinguished the learners from advantaged and disadvantaged backgrounds very clearly. This same argument was discussed by learners from Harold Cressy High, Bosmansdam High and Gardens Commercial Schools. The participants all agreed, that from the information received of the CD-ROM, they could make their own preferences and decision- making choices.

A mixed student base was important to them. The impact of role models on the viewer was very positive. Because mimicry was obtained through observational learning, it was significant that during the presentation of the CD-ROM, the viewers identified with them. This assisted with making choices. The role models spoke with respect and pride about the insitutution and student life.

The CD-ROM was a role model itself, the viewers gained good inofrmation. The presentation was 'well presented and balanced', according to Harold Cressy and Bosmansdam High School learners. The Vuyiseka learners were delighted and motivated by their African peers who spoke on the CD-ROM. The contents, story line of the CD-ROM projected a positive message about the Cape Technikon, and more specifically the School of Management. Many learners exclaimed that they would like to attend the Cape Technikon. Various role models spoke, they were encouraged that people of their race, creed and colour were well represented on the CD-ROM, therefore supporting them with any decision-making processes. The learners felt that by following the example of a role model or accepting their advice, had a positive influence on their decision-making abilities. The learners spontaneously recognised some of the spokespeople (who were in fact present students) as role models, namely a famous local soccer player, and a beauty queen of a township.

The CD-ROM assisted them to familiarise themselves with the tertiary institution. By gaining information in a funlike manner and being actively involved with 'new information' supported their pre-knowledge of the institution, the academia, the social life, etc. It was an easy, entertaining way of accessing information. The participants were actively involved with the controls of the computer and the information. The CD-ROM was entertaining, stimulating, informative, user-friendly, easy to apply.

After viewing the CD-ROM it was evident that diffusion had taken place. Diffusion created compatibility, trialability and relative advantage because of viewing this innovative recruitment tool. They could observe, or they could be interactively involved, and this enhanced the notion of diffusion. Certain menus on the CD-ROM and certain fields of study were more 'visited' than |

		others, depending on the viewers'needs.
	A4=Decision-making	In total, the learners could make valid choices derived from the information of the recruitment tool.

4.9.1 Summary of the focus group interviews

The function of the focus group interviews reiterated and encompassed the overall perspectives on both the pre-measurement phase and the post-measurement phase of the research. The narratives of the interviews strengthened or ignored the various categories and codes by which the data was codified.

There were sections that no comments were codified, such as the categories 'role of culture', 'qualities of diffusion: tangible – compatibility, trialability, observability - created a sense of belongingness due to culture', and the 'effect of the information, the technology on viewers' levels of perceptions - created belongingness due to culture'. The information on the CD-ROM allowed the viewers to make decisions about their careers, that it was important to further their studies, but not necessarily the sole choice of the Cape Technikon. Diffusion intentionally addressed the tangible qualities and the tacit understanding of innovation, the CD-ROM, and the principles of the Triune Brain Theory looked at the participants' levels of understanding the information. This required a deeper level of understanding and more lateral thinking. The role of culture per se was not important, rather a culture of student life where the student could feel a twinship with friends, their courses and institution. Certain aspects of 'a home culture' and a 'peer culture' were more prevalent, due to the fact that their friends were studying, or that they had parents

practicing certain businesses. Different cultural backgrounds did not play a role as to which tertiary institution they were interested in, but to obtain educational qualifications were more important.

Participants from advantaged backgrounds were influenced by friends and family, and to a certain degree culture *per se* played a role. Participants from disadvantaged backgrounds experienced 'ubuntu' as their culture. 'Knowledge' was their strength and culture.

The effect of the information, the technology on the viewers' levels of perception did not create a belongingness due to their culture. The participants were not effected cognitively, affectively and predispositionally. They merely accepted or not accepted the information about the Cape Technikon, in order to make decisions.

STAGE 4: The post-measurement phase – interpreting the focus group interviews
1.A   Affiliation with tertiary institution - creates 'harmony'

After watching the CD-ROM the learners were encouraged by a tertiary institution like the Cape Technikon. The role models used for the CD-ROM portrayed a positive image about the Technikon that influenced them to be affiliated with the Cape Technikon.. The CD-ROM explained the requirements, namely that a prospective student required a D-aggregate, and for certain other fields of study there were other certain specific requirements - 'It offered more than I realised.'

A Harold Cressy learner emphatically reiterated the importance of education - 'if one does not excel in studies it will bring you to a dilemma...a normal matric won't take you very far...you will get a job as a packer...factory worker...you do need a higher education'. *The sense of being able to 'belong' to an institution enhanced the notion of being affiliated with the Cape Technikon.*

The following are sentences, phrases shared by the participants during the focus group interviews. With reference to an affiliation with the tertiary institution, the study provided valid predictors for creating harmony, be it affirmative or negative. Perspectives like the following were:

- 'it's better than a university'

- 'not far from my township'

- 'faculties have a fairly high education standard'

- 'not too expensive'

- 'can get my future here, a fair education'

- 'to get hands-on experience at Technikon'

- 'I saw that the Technikon has a variety of computer courses which is necessary in future job opportunities'

- 'Cape Technikon makes you more powerful, things are practical'

- 'yes, this particular Technikon's job availability is very high compared to other technikons'

- 'I feel that the Technikon provides a more practical education tha university - Cape Technikon has a great reputation'

- 'Tech looks nice, like a vibrant university'

- 'Cape Technikon is highly recommended in the business world'

- 'they have a good record of students leaving with good opportunities'

- 'the grounds are clean and big, relaxing, it gets treated with respect, the people are friendly'

- '...you need people from all over...the student base should be different and be well represented...how boring if it weren't, say for instance if all the students were from Cape Town, all the perspectives would be the same...'

- 'It offered more than I realised'

- 'A fair chance of getting into the Technikon...following the procedures to apply...knowing if your choice for the right career is correct - the "Personality File"...'

- 'if one does not excel in studies it will bring you to a dilemma ...a normal matric won't take you very far...you will get a job as a packer...factory worker...you need a higher education'

- '...you are part of student life, want to be part of a strong team at the Technikon'

- '...creates a bond'

- '...I was also uninterested in studying further, but now...'

- '...the Tech has a lot of atmosphere, you feel like going there, there is fun, hard work and one can play...'.

- '...and the languages...some spoke in English, some in Xhosa, some in Afrikaans...'

- '...never been to an "Open Day"'

- '...not necessary interested in School of Management, good way of advertising the course...'

- '...told my best friend there is new courses I did not know about offered at the School of Management and other things, so when I told him how they work, how you enter, so he also was interested, specially him...'

- 'I would prefer to go to Stellenbosch for accounting'

- 'Technikon does not offer courses that suit me, e.g. medicine'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews
1.B Affiliation with tertiary institution - creates need to attend the Cape Technikon

The role models on the CD-ROM created a vibrant feel, which attracted the participants. They viewed the role models on the CD-ROM as spontaneous, exciting, positive and happy about their studies at the Cape Technikon. A Vuyiseka learner stated that the Cape Technikon offered 'a fair education to all, therefore I would like to study here...I told my mother (domestic worker) also to study here'.

Other phrases were:

- 'I still believe that the future of technikons is going to increase'

- '...they can study for less money and get a better education'

- 'and get hands-on experience at the Tech, so why go to a university?'

- 'has a brilliant atmosphere'

- 'A fair chance of getting into the Technikon...following the procedures to apply...knowing if your choice for the right career is correct - the "Personality File"...'

- '...place makes you feel welcome'

- '...you are part of student life, want to be part of a strong team at the Technikon'

- '...the Tech has a lot of atmosphere, you feel like going there, there is fun, hard work and one can play...'

- '...everyone that spoke were very positive, one could see they were enjoying being there...'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews
1.C   Affiliation with tertiary institution - creates belongingness due to culture

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The participants were influenced by peers, neighbours and friends who were existing students at the Cape Technikon. As one interviewee said that he felt that the Cape Technikon offered him a 'home' culture, because his brother was studying at the Cape Technikon. The Cape Technikon established its own academic culture through channels like the courses offered, the subjects offered, the students, the extra-mural activities, etc. This 'culture' was also used as a drawing card. Then the student established its own 'student culture', the student life on campus.

Here follows some narratives:

- 'Fair education at Cape Tech...more knowledge, it is fair...'

- '...important to socialise,...like Public Relations...work with people, good link...not necessary interested in School of Management, good way of

advertising the course...'.

STAGE 4: The post-measurement phase – interpreting the focus group

interviews

1.D   Affiliation with tertiary institution - creates positive/negative decision-

making process

Two important aspects that predominantly affected the participants' decision-

making processes, were firstly, the multimedia production and contents of the CD-

ROM, and secondly, the spontaneity and enthusiasm of the role models. The story

line highlighted aspects like proximity to the tertiary institution, costs and the

affordability of studies, the courses' contents (being both very practical and

theoretical), job availabilities, etc., which were important to the participants of the

study.

The direct data:

- 'it's better than a university'

- 'not far from my township'

- 'not too expensive'

- 'can get my future here, a fair education'

- 'to get hands-on experience at Technikon'

- 'I saw that the Technikon has a variety of computer courses which is

  necessary in future job opportunities'

- 'Cape Technikon makes you more powerful, things are practical'

- 'yes, this particular Technikon's job availability is very high compared to other technikons'

- 'Cape Technikon has a great reputation'

- 'Tech looks nice, like a vibrant university'

- 'Cape Technikon is highly recommended in the business world'

- 'Marketing is good at the Cape Technikon'

- 'they have a good record of students leaving with good opportunities'

- 'the grounds are clean and big, relaxing, it gets treated with respect, the people are friendly'

- 'It offered more than I realised'

- 'if one does not excel in studies it will bring you to a dilemma ...a normal matric won't take you very far...you will get a job as a packer...factory worker...you need a higher education'

- '...you are part of student life, want to be part of a strong team at the Technikon'

- '...creates a bond'

- '...I was also uninterested in studying further, but now...'

- '...the Tech has a lot of atmosphere, you feel like going there, there is fun, hard work and one can play...'.

- '...and the languages...some spoke in English, some in Xhosa, some in Afrikaans...

- '...advise us to attend the Tech....yes, the first time the things happening at the Technikon, what course I must take...'

- 'important to socialise...like Public Relations...work with people, good link...interested in geology...not necessary interested in School of Management, good way of advertising the course...

- '...to my friend, he must understand it is good to work with the computer to see what is going on at the Cape Technikon...'

- '...told my best friend there is new courses I did not know about offered at the School of Management and other things, so when I told him how they work, how you enter, so he also was interested, specially him...'

- 'Tells you what type of person is needed for the various courses, and what abilities and skills are required...'

- '...to show and help recruit people in the future...those who can't come to an "Open Day"'

- 'I would prefer to go to Stellenbosch for accounting'

- 'Technikon does not offer courses that suit me, e.g. medicine'.

STAGE 4 - The post-measurement phase – interpreting the focus group interviews
2.A   Role of cultural background - creates 'harmony'

The cultural backgrounds were understood as 'student' cultural backgrounds, 'family' cultural backgrounds, 'academic' cultural backgrounds, as opposed to cultural backgrounds per se. These cultural backgrounds were reflected on the CD in various ways. They were depicted in 'Student Life', student activities offered at

the Cape Technikon, the use of regional languages as voice-overs, and jazzy ethnic music. Cultural backgrounds included the historical backgrounds, where nationalities came from and factors that made them different to others.

A variable, like a disadvantaged background was affected by factors like poverty, living in distant rural townships, not being exposed to electricity and modern technology - only to mention a few. These impoverished backgrounds counteracted the possibility of many students in the past to further their studies.

Here follows narratives that indicated the role of cultural backgrounds and the effect it had on creating 'harmony', be it positive and/or negative. This took into consideration the influence of cultural 'icons' used in the presentation.

- '...in Standard 8, some students don't know what subjects are needed, they make mistakes...from Standard 8 it can be rectified...start earlier in schooling, in Standard 8 you get to the stage to enroll, and in Standard 9 you are more focused...my subjects are based on this and this, the right stuff, subjects are based on the future course you want to take, education costs money, if you make the mistake in Standard 9 it is too late...'

- '...Agnes Darch, the older student, would have worked, but did extra studies, she is an example of the nontraditional students...one could convince your mother, parents, ...to go back to studies, they feel they are the young people again, if they can study again, they would get better employment if they study...my parents are too old...'

- 'Depends how people feel, where he comes from, they were suffering...must know the backgrounds, changing from what is that to where they are facing and how the future goes, look ahead...' (*language not correct - direct data*)

- 'respect where we come from, give equal opportunities...can learn from others languages and cultures...yes, my behaviour - one behaves in different ways, there are counsellors, who help you, guide you, yes, is important, must know where I am coming from...' (*language not correct - direct data*)

- 'appreciate...get qualification, get good employment...' (*language not correct - direct data*)

- 'advertise culture, basket ball, hiking, ubuntu, judo, cycling' (*language not correct - direct data*)

- '...money is always a problem...'

- '...there was jazzy music...marimba drums...'

- '...student culture came through...students sitting on the piazza on the lawns and socialise...it is good to see people of my own Indian culture there...'

- '...each group could identify with themselves, but at the same time also mix with others...'

- 'District Six...demolished about thirty years ago...accommodated a strong Muslim community...'

- '...there are basically two campuses...the viewer can see there is a campus at Zonnebloem and the other at the Waterfront...'

- '...the older African woman...have respect for her...amazed...how old she was and still had the courage to study, despite having a family...'.

> STAGE 4: The post-measurement phase – interpreting the focus group
>
> interviews
>
> 2.B   Role of cultural background - creates need to attend the Cape Technikon

During the focus group interviews this aspect was not important at all.

> STAGE 4: The post-measurement phase – interpreting the focus group
>
> interviews
>
> 2.C   Role of cultural background - creates belongingness due to culture

A bond, through the medium of recognising and acknowledging the prospective student's culture and background, was created between the viewers and the contents of the CD-ROM. A culture of survival and acceptance was important to some learners from Vuyiseka Secondary High School. This culture drove them to support themselves, or share (ubuntu), be it for the purposes of schooling and/or a tertiary education. The majority of the learners, despite the fact that they were still at school, had a 'side-line' as their little business - 'I have my own business at home', which generates money and supports the family financially. This notion encouraged survival to many disadvantaged learners, but also encouraged entrepreneurship. The learners of Vuyiseka Secondary High School realised, like so many other learners, that education costs money. Some learners were determined to acquire an education, some even paid for their own studies at school.

Those who were fluent in Xhosa were delighted to hear Xhosa as a medium of conversation on the CD-ROM. The participants also recognised the 'cultural icons' that were used.

- '...in Standard 8, some students don't know what subjects are needed, they make mistakes...from Standard 8 it can be rectified...start earlier in schooling, in Standard 8 you get to the stage to enrol, in Standard 9 you are more focused...'

- '...my subjects are based on...the right stuff, subjects based on the future course you want to take, education costs money, if you make the mistake in Standard 9 it is too late...'

- 'I have my own business at home'

- 'Agnes Darch, older student, would have worked, but did extra studies, catered for the nontraditional students...convince your mother, parents, yes...'

- '...if parents want to study...they can get more knowledge, go back to studies, they feel they are the young people again...'

- '...motivate my parents, they would get better employment if they study...my parents are too old...'

- '...student culture came through...students sitting on the piazza on the lawns and socialise...it is good to see people of my own Indian culture there...'

- '...each group could identify with themselves, but at the same time also mix with others...'

- 'District Six...demolished about thirty years ago...accommodated a strong Muslim community...'

- '...the older native woman...have respect for her...amazed of how old she was

and still had the courage to study, despite having a family...'

• *'...heard the marimba drums'.*

STAGE 4: *The post-measurement phase – interpreting the focus group interviews*
2.D   Role of cultural background - creates positive/negative decision-making process

The participants were very conscious of study costs and were careful with their choices of careers and choices of tertiary institutions. For some participants their backgrounds did not allow further tertiary education, for some it was possible. Poverty or coming from a disadvantaged background would definitely have had an effect on their choices of education and future careers. Self-motivation, parent-motivation or peer-motivation was most probably missing.

The learners remembered the 'cultural icons' used in the presentation, like photos of the mosques in District Six, the rhythm of the marimba ethnic band. A learner of Groote Schuur High School said that the CD-ROM also created a student culture that was conducive to a balanced student population. The learners could recall the subjects and courses that were offered, they recognised that the Cape Technikon supplied the needs for both the traditional and nontraditional students. Part-time studies became an important aspect to many students, as they could work during the day time and study in the evening. The learners could identify with the residences that were shown on the CD-ROM, the libraries, student counseling,

ATM's, cafeterias, the book shop on campus.

- '...in Standard 8, some students don't know what subjects are needed, they make mistakes...from Standard 8 it can be rectified...start earlier in schooling, in Standard 8 you get to the stage to enrol, in Standard 9 you are more focused...'

- '... my subjects are based on the future course you want to take, education costs money, if you make the mistake in Standard 9 it is too late...'

- 'Agnes Darch, older student, would have worked, but did extra studies, catered for the nontraditional students...convince your mother, parents'

- '...if parents want to study...in South Africa, they feel down, 'I have nothing for my child, because my child needs to be educated', now they can get more knowledge, go back to studies, they feel they are the young people again, if they can study again, motivate my parents, they would get better employment if they study...my parents are too old...' (language not correct - direct data)

- 'Depends how people feel, where he comes from, they were suffering...must know their backgrounds, changing from what is that to where they are facing and how the future goes, look ahead...' (language not correct - direct data)

- 'respect where we come from, give equal opportunities...can learn from others languages and cultures...yes, my behaviour-one behaves in different ways, there are counsellors, who help you, guide you, yes, is important, must know where I am coming from...'

- ' appreciate, get qualification, get good employment...'

- '...advertise culture, basket ball, hiking, ubuntu, judo, cycling'

- '...student culture came through...students sitting on the piazza on the lawns

and socialise...it is good to see people of my own Indian culture there...'

- '...each group could identify with themselves, but at the same time also mix with others...'

- 'District Six...demolished about thirty years ago...accommodated a strong Muslim community...'

- '...the older native woman...have respect for her...amazed of how old she was and still had the courage to study, despite having a family...'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews

3.A   Identification with role model - creates 'harmony'

The learners mentioned that after viewing the CD-ROM, they regarded the presentation as the most trendy and powerful vehicle for selling the Cape Technikon. Many viewers saw and 'visited' the Cape Technikon for a first time. Although some of the learners had attended an 'Open Day', they were really taken into the 'inside' of the Cape Technikon. Another learner mentioned that the CD-ROM 'brought the Technikon to the learners'. Role models were recognised, e.g. a soccer star to be a student, and another to be a beauty queen in a local township.

The first access to a tertiary institution was through student recruitment, and this initial stage was very important. Vuyiseka learners emphasised the importance of application procedures to be more 'application friendly'. They wanted to identify with the person who assisted with the application procedures as well as the

*application form. This section, 'How to apply?' was frequently 'visited' on the CD-*ROM presentation by the majority of the viewers. By acquiring this pre-knowledge, the whole issue of application was sensitised, and enhanced the notion of 'belongingness', a connectedness with the institution. The participants expressed that, by knowing what they should do to apply for the Cape Technikon, it would give them a headstart if the procedures were explained like on the CD-ROM.

The participants enjoyed the role models sharing their opinions. It gave them an understanding that they were being addressed to individually, 'talking on a one-to-one' base, which automatically created a bond with the viewer. Role models, cultural identities were equally important and created a sense of harmony with the 'reader'/viewer. Although the inferior tape recording at times made it difficult to hear what was spoken.

Bosmansdam High School learners recalled the importance of acknowledging the older/mature student to the student base - '...there was the older woman...had respect for her...I was amazed of how old she was and still had the courage to study, despite having a family and other responsibilities...'.

Gardens Commercial learners remarked on the enthusiasm of the role models. 'They spoke with such enthusiasm'. The viewers were encouraged - they spoke about the 'practical experience in their third year...gives you lots of confidence about what you are going to do, gives you insight in the business...'. The experiential training in the student's third year formed an extension of their studies.

The narratives are:

- '...good thing for universities and Technikons that give students work, like part-time jobs...backgrounds of families are poor and no money to take the

child to travel from school is better when a student starting to work at school, pay the school, but even for himself pay the school, than owing a lot of money... would like to study directly after the matric, more the time goes, more other time I would need to finish my studies and I would be working...better to start after school, study hard so that you can pass with flying colours, push forward in life, you have to move on...my parents promised me that I can study, major factor, father is a pensioner, half of a salary, five in the family...'

- '...student who spoke about Marketing, Shaheem, he's from Mitchells Plain, he plays soccer...Charlotte Nkana, spoke in Xhosa, she's a PR student, she did not speak of the Cape Technikon, but where she came from, Tanzania...she spoke about personality, to be outgoing, spontaneous...'

- '...when an older lady spoke...students who did part-time studies...some were older mature students...they had been working during the day, and then night time they study...'

- '...catered for all the types of students...very balanced...lady with braids in her hair from Africa...even a lady can do engineering...'

- '...the CD-ROM...vehicle for selling the product, the Technikon...could not visit an "Open Day"...can view the disc...'

- '...good thing...Technikon offers in-service training...give students work in their third year...'.

STAGE 4: The post-measurement phase – interpreting the focus group

interviews

3.B   Identification with role model - creates need to attend the Cape Technikon

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It did not appear that this point was very important during the focus group interviews. Yes, the role models did have an effect on the viewers but it did not create the definite need to attend the Cape Technikon. The participants identified general aspects which was mentioned by the role models. It was discussed briefly.

- '...good thing for universities and Technikons that give students work, like part-time jobs...'

- '...during student's third year...in-service training...'

- '...student who spoke about Marketing, Shaheem, he's from Mitchell's Plain, he plays soccer...Charlotte Nakana, spoke in Xhosa...a beauty queen from Khayelitsha...'

- '... *backgrounds of families are poor...money...travelling to and from* school...would like to study directly after the matric...study hard so that you can pass with flying colours, push forward in life, you have to move on...'.

	STAGE 4: The post-measurement phase – interpreting the focus group interviews
3.C	Identification with role model - creates belongingness due to culture

The viewers identified with the role models and created a bond with them. They recognised a local 'famous' soccer player and another student to be a beauty queen from a local township. This underlined the need of culture as the 'cement' of belongingness. The fact that some of the role models spoke Xhosa was also important. This allowed the participants their language preferences. Some of the participants came from a disadvantaged background, some came from an affluent background. Having identified with the various backgrounds of the role models, the viewer felt a mutual affiliation with the role models. The role models expressed 'hope, academic success', and the viewers of the CD-ROM felt encouraged. Here are some of the narratives:

- '...Technikons that give students work, like in-service training...part-time jobs...travel to and from school...would like to study directly after the matric...study hard so that you can pass with flying colours, push forward in life, ...my parents promised me that I can study...father is a pensioner'

- '...sound of the marimba drums, old type of music...used all the instruments... jazzy music...drum solos, trumpets used to introduce new things...'

- '...student who spoke about Marketing, Shaheem, he's from Mitchells Plain, play soccer...Charlotte Nkana, spoke in Xhosa, the PR student...she came from Tanzania...'

- '...all races represented, even a Chinese...photo of them working in the library...students from Tanzania...history of District Six...photos...campus is built on this land...the mosques I go to is the one just opposite the Tech...'

- '...*the older student, she could introduce older people to further their studies and give them encouragement and motivation*...'

- '...experiential training...encourages them, that while they are a student, they have the opportunity to develop their skills and they get paid a salary...'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews
3.D   Identification with role model - creates positive/negative decision-making process

Due to the fact that the CD-ROM was the vehicle of 'bringing the Cape Technikon to the learners', the participants acknowledged the Technikon as a 'vibrant', pleasant place to study. This created a positive feel amongst them. The role models spoke positively and encouraged the viewers.

The role models on the CD-ROM were well represented - male students and female students, different nationalities, and the more mature student. It created the feeling *that anybody could 'belong' to this institution, that they were accepted*, despite age, colour, race or creed - '...the older African woman could introduce other older students to the Technikon to further their studies...give them encouragement and motivation...'. In essence the role models encouraged the viewers to further

their studies - '...they encouraged other people to do the courses...the courses had international recognition...spoke about a good career future...the experiential training actually encourages them, that while they are a student, they have the opportunity to develop their skills and they get paid a salary...'. The narratives follow which underline the essence of this category, namely influencing their decision-making processes:

- '...a good thing for universities and technikons that give students work, like part-time jobs,...in-service training...'

- '...push forward in life, you have to move on...my parents promised me that I can study, although father is a pensioner...half a salary...'

- '...student who spoke about Marketing, Shaheem, he's from Mitchell's Plain, plays soccer...Charlotte Nakana, spoke in Xhosa, PR student...she came from Tanzania...spontaneous'

- '...the older African woman could introduce other older students to the Technikon to further their studies...give them encouragement and motivation...'

- '...experiential training...encourages them, that while they are a student, they have the opportunity to develop their skills and they get paid a salary...'

- '...it was honest...positive...role models were enthusiastic...enjoyed being there...could work and play...'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews

4.(i)A Qualities of diffusion: compatibility, trialability, observability - creates 'harmony'

Groote Schuur learners suggested a more detailed account of the different syllabi of all the subjects offered at the School of Management. They felt that the other Schools at the Cape Technikon should also have been represented on the CD-ROM, not only the School of Management. By observing the activities of the Technikon, the viewers realised the academic demands the Technikon required.

Bosmansdam learners felt that the CD-ROM spoke to them personally, and that the 'personalised' voice (of the role model) instantaneously influenced them to create a bond with the Cape Technikon - '...it was personalised, when I heard the interviews of the students, I could understand and identify what they meant...gave me personal perspectives of the Technikon...the information on "Open Day" is addressed to hundreds of learners, whereas the CD-ROM is individualised, it spoke to me.' Here follows data:

- '...describes the courses at the Technikon...show people about the Cape Technikon, various courses and subjects...message came through...not left in the dark...remember the requirements in order to apply...'

- '...on the contrary there was too little information on the courses...'

- '...you focused too little on the social side, because I never had the opportunity to socialise at school...'

- 'presentation was balanced...'

- '...courses were an eye-opener...I did not know of Sport Administration...

  without a shadow of doubt...the Technikon offers more than I ever realised...'

- '...Technikon has its own standard...high...you walk out with a qualification...'

- 'please place the contents of the syllabi as well...'

- '...the CD-ROM is something for the future, kids do not want to read

  brochures and pamphlets...want to see something like the CD-ROM...'

- '...people are always afraid of the unknown...letting them know what is

  expected, what it is all about... required of them...will help them to make a

  choice...'

- '...at "Open Day", there was no one to contact...whereas on the computer,

  there were people to whom I could "speak" to...learn so much more from

  watching the computer...more focused...'

- '...personalised...when I heard the interviews with the students, I could

  understand and identify what they meant, they gave more personal

  perspectives of the Technikon...the information on "Open Day" is addressed

  to hundreds of pupils, whereas the CD-ROM is individualised and

  personalised...it spoke to me...'

- '...future is moving to computers...despite of where you are, the CD-ROM

  allows you to interact...equip yourself with information...not many people want

  to read brochures...prefer the CD-ROM...your can use it like a book, but this

  one has special pictures, colour, sounds, interesting facts...'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews

4(i)B   Qualities of diffusion: Tangible - compatibility, trialability, observability - creates need to attend the Cape Technikon

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The Cape Technikon became a good option as a tertiary institution, because many of the participants live in close proximity of the Cape Technikon, the Cape Metropole area and District Six. For the others transport was expensive and the time spent on commuting, were very important considerations. Here follows data:

- 'I live close to the Technikon...'

- '...I have made this decision that I was not going to study...when I went home I told my parents that I wanted to study, I want to be there!...the place makes you feel welcome'

- 'I want to be part of a strong team at the Tech...this creates a strong bond...Tech has lot of atmosphere...'.

STAGE 4: The post-measurement phase – interpreting the focus group interviews

4(i)C   Qualities of diffusion: Tangible - compatibility, trialability, observability - creates belongingness due to culture

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It appeared that this point of discussion was not important during the focus group interviews.

STAGE 4: The post-measurement phase – interpreting the focus group

interviews

4(i)D   Qualities of diffusion: Tangible - compatibility, trialability, observability -

creates positive/negative decision-making process

Some learners of Groote Schuur High School felt that the syllabi of all the

subjects offered at the School of Management could have been more detailed,

including a presentation of the other Schools of the Cape Technikon, not only the

School of Management.

Vuyiseka High School learners mentioned that by analysing themselves best-

suited for the career option, they found the section on the 'Personality File' very

interesting. They could distinguish their strengths and their weaknesses, therefore

making careful career decisions.

The learners of Bosmansdam High School sensed a pleasant atmosphere at

the Cape Technikon that was conducive to a better academic climate. A learner

said, '...I like the atmosphere there...there is a real student life...on campus, in class,

in the cafeterias at breaks, they socialise...'.

The CD-ROM was easy to read and understand. Harold Cressy learners

stated that the CD-ROM gave them answers about their careers 'in a colourful

way...I will rather use the CD and not read a pamphlet or brochure...not only us

students are lazy to read, it is everybody...time is also a factor...don't have the time

to read a boring booklet...the CD is so effective'.

Learners of Bosmansdam High School said, '...although at an "Open Day" there were people you could speak to, the CD-ROM provided "other" people...whereas on the computer there were people to whom we could "speak" to - it's strange because the people aren't really there, but they are there in a way...you learn so much more from watching the computer as from an "Open Day"...do you understand what I mean?...it was more focused on the CD-ROM, more personalised...'. Here follows data:

- 'please place the contents of the syllabi as well...'

- '...the CD-ROM is something for the future, kids do not want to read brochures and pamphlets...want to see something like the CD-ROM...'

- '...people are always afraid of the unknown...letting them know what is expected, what it is all about...required of them...will help them to make a choice...'

- '...at "Open Day", there was no one to contact...whereas on the computer, there were people to whom I could "speak" to...learn so much more from watching the computer...more focused...'

- '...personalised...when I heard the interviews with the students, I could understand and identify what they meant, they gave more personal perspectives of the Technikon...the information on "Open Day" is addressed to hundreds of pupils, whereas the CD-ROM is individualised and personalised...it spoke to me...'

- '...future is moving to computers...despite of where you are, the CD-ROM allows you to interact...equip yourself with information...not many people want to read brochures...prefer the CD-ROM...you can use it like a book, but this

one has special pictures, colour, sounds, interesting facts...'.

STAGE 4: The post-measurement phase - – interpreting the focus group

interviews

4(ii)A   Tacit meaning: complexity, relative advantage - creates 'harmony'

The viewers felt that those who watched the CD-ROM gave them a relative

advantage, as opposed to those who were not able to see the CD-ROM. The

presentation of the CD-ROM was exciting, colourful, balanced and covered all the

aspects of the School of Management, and to a lesser degree the Cape Technikon.

The learners of the Harold Cressy Secondary High School stated that no

'Open Day', booklet or brochure could sensitise important issues like accepting and

acknowledging cultural identities. They definitely had a relative advantage to others

who did not see it, 'because you visualise and see something, you remember so

much more...you remember the sounds, the pictures, photos, you see certain words,

not lengthy sentences...more interesting...what you read has a totally different

meaning to you after you have seen it on the CD-ROM...', and 'you can learn such a

lot from it...not many people want to read, so it's an easier way to access

information...I am too lazy to read a brochure...'.

The learners of Bosmansdam High School also experienced a relative

advantage as opposed to those who were not part of the research. They stated that

'...the other Matrics who never saw the CD-ROM were forced to have read the

'uninteresting' brochures...but they lost interest...perhaps, because they are too lazy

to read the brochures...', although 'we had to tell our class about the presentation'.

Here follow some narratives:

- '...Technikon wants to create their own way of recruiting students in order to get the cream of the crop...keep standards high...make recruitment programme as interesting as possible...'

- '...in order to draw pupils you got to let them know what the courses are about...be appealing...'

- 'please, place the contents of the syllabi as well...to certain students it may be boring, but I would like to have it in...'

- '...future is moving to computers...despite of where you are, the CD-ROM allows you to interact...equip yourself with information...not many people want to read brochures...prefer the CD-ROM...you can use it like a book, but this one has special pictures, colour, sounds, interesting facts...'

- '...practical experience in the student's third year...gain practical experience in the field of the industry...'

- '...gained "new" knowledge...gives me clear vision...'

- '...the whole world is moving towards computers and they are moving away from books...if you want to know something, you don't go to books, you find it on computers, Internet, e-mail...CD...better in sending information in future...one is lazy to read...CD gives you answers to your questions in a colourful way...I don't have the time to read a boring brochure...'

- '...the CD gave some better insight...now I definitely know what the Tech offers...clearer insight...'

- '...books, brochures are printed in black and white...CD-ROM was

colourful...more information on the CD than I received on "Open Day"

- '...because on "Open Day"...nothing was really explained, it is weird to say but there was no one to contact..students could probably have helped...whereas on the CD there were people to whom I could "speak" to...'

- '...it was personalised...heard the interviews with the students, I could understand and identify what they meant...gave more personal perspectives...'

- ' "Personality File"...I got to know my strengths and weaknesses...it tells you what the course requires of you as a person...fit in the different courses best for you...'

- '...before the presentation, I vaguely knew something about the Tech, now I know lots more...gave clearer idea where the different faculties are, the venues, the libraries, sport activities...'.

STAGE 4: The post-measurement phase – – interpreting the focus group interviews

4(ii)B   Tacit meaning: complexity, relative advantage – creates need to attend the Cape Technikon

It appeared that this point of discussion was not very important during the focus group interviews. The complexity of the CD-ROM, the interactive nature of the multimedia and the 'relative advantage' the innovation offered the viewers, was not the sole motivation to study at the Cape Technikon. They only required to read and

view information that could assist them with decision-making as to study or not. Although one participant mentioned the following:

- '...I have made this decision that I was not going to study...when I went home, I told my parents that I wanted to study, I want to be there...the place makes you feel welcome...you are part of a student's life, want to be part of strong team at the Tech...creates a strong bond...'.

STAGE 4: The post-measurement phase - – interpreting the focus group interviews

4(ii)C Tacit meaning: complexity, relative advantage - creates belongingness due to culture

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It appeared that this issue was not important during the focus group discussion.

STAGE 4: The post-measurement phase - – interpreting the focus group interviews

4(ii)D Tacit meaning: complexity, relative advantage - creates positive/negative decision-making process

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In order to reach the best student in the recruitment process, the viewers felt encouraged that a tool like the CD-ROM gave them a relative advantage to those who were not able to see the CD-ROM. The tacit meaning of the CD-ROM

influenced their decision-making process. The knowledge gained from the presentation was balanced and covered all the aspects of a tertiary institution.

Learners of Bosmansdam High School stated that after seeing the CD-ROM they were familiarised with the tertiary institution and that they '...did gain more...got the feeling that you got more knowledge, because you have already "seen the place"...you were acquainted with more things and places...you have been there before (even if you hadn't)...even on "Open Day" we just walked around in circles, nobody showed us around, were sent all over, little information was given, lost at some times...was useless exercise...we were looking for the Hotel Management buildings...did not know the campus was at the Waterfront...'.

- '...Technikon wants to create their own way of recruiting students in order to get the cream of the crop...keep standards high...make recruitment programme as interesting as possible...'

- '...in order to draw pupils you got to let them know what the courses are about...be appealing ...'

- 'please place the contents of the syllabi as well...to certain students it may be boring, but I would like to have it in...'

- '...future is moving to computers...despite of where you are, the CD-ROM allows you to interact...equip yourself with information...not many people want to read brochures...prefer the CD-ROM...your can use it like a book, but this one has special pictures, colour, sounds, interesting facts...'

- '...practical experience in the student's third year...gain practical experience in the field of the industry...'

- '...gained "new" knowledge...gives me clear vision...'

- '...the whole world is moving towards computers and they are moving away from books...if you want to know something, you don't go to books, you find it on computers, Internet, e-mail...CD...better in sending information in future...one is lazy to read...CD gives you answers to your questions in a colourful way...I don't have the time to read a boring brochure...'

- '...the CD gave some better insight...now I definitely know what the Tech offers...clearer insight...'

- '...books, brochures are printed in black and white...CD-ROM was colourful..more information on the CD than I received on "Open Day"

- '...because on "Open Day"...nothing was really explained, it is weird to say but there was no one to contact...students could probably have helped...whereas on the CD there were people to whom I could "speak" to...'

- '...it was personalised...heard the interviews with the students, I could understand and identify what they meant...gave more personal perspectives...'

- ' "Personality File"...I got to know my strengths and weaknesses...it tells you what the course requires of you as a person...fit in the different courses best for you...'

- '...before the presentation, I vaguely knew something about the Tech, now I know lots more...gave clearer idea where the different faculties are, the venues, the libraries, sport activities'.

STAGE 4: The post-measurement phase - – interpreting the focus group

interviews

5.A   Effect of information, the technology on viewers' levels of perceptions -

creates 'harmony'

The following narratives spoke for themselves:

- 'The CD-ROM was valuable...it was informative and also entertained you,

  because there were different sounds, various people spoke in various

  languages'

- '...it was in colour and there were black and white photographs...saw some

  animation'

- '...it was interactive...gave information while I actually "played"...works on the

  same principle as a book...page through...can skip and reread'

- 'helps to make up your mind'

- 'you see certain words, not lengthy sentences...more interesting, because

  what you read on the CD and what you hear gives you a totally different

  meaning'

- '...it was good for students who would be studying at the Technikon next year,

  see what will be expected of them'

- '...already know their surroundings...where they are going to study'

- '...it was a good idea to hear and see each student speak on behalf of their

  own fields of studies'

- 'helped a lot...one could play with the mouse, to and fro, and find information, one can go back and retrieve information...'

- 'a vehicle for selling a product, namely the Technikon'

- '...we were really involved'

- '...I went home and told my parents that I wanted to study there!'

- '...the place makes you feel welcome...you are part of having a student life'

- '...want to be part of a strong team at the Tech...this creates a strong bond...'

- 'Technikon has a lot of atmosphere...you feel like going there...there is fun, hard work and time to play...a nice feel about the Tech...'

- '...the CD was more focused on my needs...it was more personalised, when I heard the interviews of the students, I could understand and identify what they meant, they gave more personal perspectives of the Technikon..."Open Day" is addressed to hundreds of pupils, whereas the CD-ROM is individualised, it spoke to me...'

- '...it's like a brain – someone who is intelligent, it does not forget, brings knowledge to others...'

- '...what was introduced to me on the CD-ROM...can be compared to international standards...like universities overseas and other foreign Technikons...'

- '...showed us the School of Management, the campus in an extraordinary way...to promote the Technikon...'

- '...to show and help recruit people in the future...students who can't come to "Open Day"...doing promotion...one normally finds in a booklet...you don't have to read intensely, you see it on the programme...'

- '...CD told you what type of person you had to be as to fit the right course...this definitely does not come out in a booklet'

- '...CD helpful...one often makes wrong choices, and the CD gave me enough information...'

- '...you can sit in your home or school...see what the Technikon has to offer...moving away from books...information found on computers...rather use the CD-ROM programme and not read a boring brochure...'

- '...it was more informative than any book could give us...'

- '...yes, it was valuable...it entertained, because there were different sounds...colours, animation...CD gave me information while it was fun...same principles of a book...I did not have to read through the whole book to know what was going on...you can skip some information and reread parts...helps you to make up your mind...'

- '...better to see something than to read...you visualise ...remember so much more...'

- '...CD, it was entertaining and educational...that's what I like...'

- '...helped to familiarise the pupils ...easy way of accessing information...'

- '...CD-ROM helped me tremendously...presentation different...if a PR of the Technikon had to visit our school and they spoke about everything, it would not have made such a strong impression on me as the presentation, which I could visually experience...'

- '...The CD-ROM was user-friendly...please do all the ten schools...'

- '...saw some history on the CD...gave background and introduced us to the Technikon...'

- 'CD-ROM helped you in case you had doubt about a career...'

- '...good for students who would be studying at the Technikon next year...see what they will be up to, expected of, their new surroundings, familiarise with everything...'

- '...show us the campus in an extraordinary way...'

- '...you needn't have to concentrate the whole time, it was fun using the CD...'

- '...was colourful, made the reading easier...had to be interactive and involved...'.

STAGE 4: The post-measurement phase - – interpreting the focus group interviews

5.B   Effect of information, the technology on viewers' levels of perceptions - creates need to attend the Cape Technikon

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One learner mentioned that after watching the CD-ROM (previously she had not heard of the Cape Technikon) she told her parents about the presentation and that she 'wanted to study there!' (Cape Technikon). She applied and was accepted.

STAGE 4: The post-measurement phase - – interpreting the focus group interviews

5.C   Effect of information, the technology on viewers' levels of perceptions - creates belongingness due to culture

During the focus group interviews this aspect revealed no importance.

> STAGE 4: The post-measurement phase - – interpreting the focus group interviews
>
> 5.D   Effect of information, the technology on viewers' levels of perceptions - creates positive/negative decision-making process

The CD-ROM was a method of advertising the institution, a promotional tool. Student recruitment is vital, to 'get the right students in the institution...', '...get the cream of the crop...'. The majority of the learners regarded the CD-ROM as a recruitment tool for the future, it was persuasive, it stimulated, it entertained in a less sophisticated degree, but it was educational. The CD-ROM had the potential to 'bring' the Technikon to them, because in so many cases, not all the learners had the opportunity to attend the 'Open Day' event at the Cape Technikon. 'I did not know there were two campuses...Student Centre...ATMs, Cats Radio...the CD-ROM was very helpful...it gave me enough information to make the right choice...', Harold Cressy learners mentioned.

After watching the CD-ROM, the learners felt that the CD-ROM assisted to familiarise them with a tertiary institution like the Cape Technikon. It was an easy, entertaining way of accessing and retrieving information. The participants were actively involved with the controls of the computer and the information. They regarded the CD-ROM as 'a vehicle for selling a product'. In order to assist them with future choices of careers, some participants would have preferred more

detailed account of the syllabi of all the subjects taught at the School of Management. After viewing, all negative reports or prejudices about the Technikon were cancelled. The CD-ROM was both entertaining and informative. There was clarity to many questions.

These five feeder schools selected for this study had been previously exposed to visitations of the Cape Technikon's Public Relations staff. Despite their visitations and 'Open Day' events, the Standard 10 learners selected for this research expressed their enthusiasm. They gained 'new information' about the Cape Technikon. The CD-ROM stimulated their senses, '...we read,...saw and heard', it became a facilitator. The youth of today had become 'visual readers', therefore the need to be educated and entertained at the same time - '...and if the CD can give you the answers in a colourful way, I will rather use the CD and not read the pamphlet...'. Learners of Bosmansdam High said, '...not many people want to read, so it is an easier way to access information...I am too lazy to read a brochure, therefore I would rather prefer the CD...you can use it like a book...'.

The CD-ROM stimulated the senses and assisted with many decision-making processes, both positively and/or negatively - '...enough information to make a sensible selection and choices...'. The contents of the CD-ROM became a conversational point at school, at home, with friends and family. '...I told my parents and friends about it', 'I had to speak to my whole class...'. The interactive mode of this technology allowed the 'readers' to become 'interactive participants', a learner of Gardens Commercial High stated. The learners compared the CD-ROM with a book, with its contents page, different pages and illustrations, '...use the CD like a book, but this one has special pictures, colour, sounds, interesting facts...you see pictures

and listen to music and people speaking on the CD-ROM...', '...made the reading so much easier. I'd rather sit in front of a computer than read a brochure, the brochures are black and white and the CD-ROM is colourful...'. The acquisition of information became a 'fun' element, as stated by Bosmansdam learners, '...you needn't have to sit down and concentrate the whole time, it was fun using the CD-ROM...relaxed while you got info...'.

They could skip certain sections if they weren't interested, or they could revisit other 'chapters' - 'I did not have to read through the whole book to know what is going on, you can skip some information and reread others'.

Technology has improved so much - ' the whole world is moving towards computers and they are moving away from books, if you want to know something you don't go to books, you find it on computers, Internet, e-mail, so the CD will fit in better in sending the information in the future...', a Harold Cressy learner said.

The choice of using new technology, like the interactive CD-ROM, made the process of acquiring information so much easier. Harold Cressy learners stated that they would rather use the CD, because 'the CD does everything for you, you just need to read or listen'. Bosmansdam learners remarked that, '...the future is computers...one cannot visit the whole world to recruit students for the Technikon, but the CD-ROM is such an easy way to do it...one can send it to various schools and tertiary institutions in the world at not such a high cost...'.

The CD-ROM had the dynamics to personalise certain needs of the students, it spoke to them personally, to their heart. It had the ability to diminish indecision or uncertainty - '...it told you everything you needed to know...if you were undecided, it would definitely change one's view...if you see the CD-ROM, you see everything

you ought to know...'. A Gardens Commercial learner stated that 'the CD-ROM helped you in case you had doubt about a career, the CD-ROM gave you better insight in the questions you had asked yourself about what you wanted to do...'. The CD-ROM 'passed on information...because computers is more of a trend now...it was very colourful, not black and white like brochures, and I could retain so much more than reading a brochure'.

The Gardens Commercial learners realised the dynamics of this interactive multimedia recruitment tool. They felt that the CD-ROM should reach more than their exclusive group of learners utilised for this research, as they stated, '...the presentation should be more inclusive which will address more students at one time...sending the CD-ROM to all schools will also be inclusive...give one to the local library, that's where many people are, they can then watch it there whenever they want to, after hours...'. Bosmansdam learners said that '...one cannot visit the whole world and recruit students, and this (the CD-ROM) is such an easy way to do it, despite the fact where you are, if you, the school, libraries, have CD-ROM facilities, one can acquire information and interact with the CD-ROM and equip yourself with the information needed...'.

The following narratives substantiate this category:

- The CD-ROM was 'valuable...it was informative and also entertained you, because there were different sounds, various people spoke in various languages'

- '...it was in colour and there were black and white photographs...saw some animation'

- '...it was interactive...gave information while I actually "played"...works on the

same principle as a book...page through...can skip and reread'

- 'helps to make up your mind'

- 'you see certain words, not lengthy sentences...more interesting, because what you read on the CD and what you hear gives you a totally different meaning'

- '...it was good for students who would be studying at the Technikon next year, see what will be expected of them'

- '...already know their surroundings...where they are going to study'

- '...it was a good idea to hear and see each student speak on behalf of their own fields of studies'

- 'helped a lot...one could play with the mouse, to and fro, and find information, one can go back and retrieve information...'

- 'a vehicle for selling a product, namely the Technikon'

- '...we were really involved'

- '...I went home and told my parents that I wanted to study there!'

- '...the place makes you feel welcome...you are part of having a student life'

- '...want to be part of a strong team at the Tech...creates a strong bond...'

- 'Technikon has a lot of atmosphere...you feel like going there...there is fun, hard work and time to play...a nice feel about the Tech...'

- '...the CD was more focused on my needs...it was more personalised, when I heard the interviews of the students, I could understand and identify what they meant, they gave more personal perspectives of the Technikon..."Open Day" is addressed to hundreds of pupils, whereas the CD-ROM is individualised, it spoke to me...'

- '...it's like a brain - someone who is intelligent, it does not forget, brings knowledge to others...'

- '...what was introduced to me on the CD-ROM...can be compared to international standards...like universities overseas and other foreign Technikons...'

- '...showed us the School of Management, the campus in an extraordinary way...to promote the Technikon...'

- '...to show and help recruit people in the future...students who can't come to "Open Day"...doing promotion...one normally finds in a booklet...you don't have to read intensely, you see it on the programme...'

- '...CD told you what type of person you had to be as to fit the right course...this definitely does not come out in a booklet'

- '...CD helpful...one often makes wrong choices, and the CD gave me enough information...'

- '...you can sit in your home or school...see what the Technikon has to offer...moving away from books...information found on computers...rather use the CD-ROM programme and not read a boring brochure...'

- '...it was more informative than any book could give us...'

- '...yes, it was valuable...it entertained, because there were different sounds...colours, animation...CD gave me information while it was fun...same principles of a book...I did not have to read through the whole book to know what was going on...you can skip some information and reread parts...helps you to make up your mind...'

- '...better to see something than to read...you visualise ...remember so much

more...'

- '...CD, it was entertaining and educational...that's what I like...'

- '...helped to familiarise the pupils...easy way of accessing information...'

- '...CD-ROM helped me tremendously...presentation different...if a PR of the Technikon had to visit our school and they spoke about everything, it would not have made such a strong impression on me as the presentation, which I could visually experience...'

- '...The CD-ROM was user-friendly...please do all the ten schools...'

- '...saw some history on the CD...gave background and introduced us to the Technikon...'

- 'CD-ROM helped you in case you had doubt about a career...'

- '...good for students who would be studying at the Technikon next year...see what they will be up to, expected of, their new surroundings, familiarise them with everything...'

- '...show us the campus in an extraordinary way...'

- '...you needn't have to concentrate the whole time, it was fun using the CD...'

- '...was colourful, made the reading easier...had to be interactive and involved...'.

Conclusions

Although this research was of a qualitative nature, the researcher could draw some statistical conclusions. Assistance and data was given by Mr Derek Neethling (2000), Faculty Officer: Business Informatics, at the Cape Technikon.

Table 4-25   Record of participants that pursued studying at Cape Technikon after

the completion of research in 2000

SCHOOLS	Students studying at Cape Technikon (1997-2000)	Students not studying at Cape Technikon (1997-2000)
Vuyiseka Secondary High School	None out of 13 participants	None out of 13 participants
Harold Cressy Secondary High School	3 out of 12 participants	9 out of 12 participants
Bosmansdam High School	2 out of 12 participants	10 out of 12 participants
Gardens Commercial High School	4 out of 13 participants	9 out of 13 participants
Groote Schuur High School	1 out of 10 participants	9 out of 10 participants
	Total = 10 studying at Cape Technikon = 16,6%	

(Data was received from D. Neethling:Faculty Officer, Cape Technikon, 2000)

It was found that 10 out of sixty participants started their studies at the Cape Technikon after 1997, the year in which the research commenced. This indicated 16,6% of the participants of the research pursued further studies at Cape Technikon. Derived from the information received, 16,6% (10 out of sixty) participating in the study, 7 of the learners represented the nontraditional group students (Neethling, 2000).

4.11   Similarities/comparisons/ discrepancies between the pre- and post-measurement phase

The purpose of this research was to determine if syntony would be the

vehicle of 'carrying' the social message of student recruitment at the Cape

Technikon. The CD-ROM was functioning as an educational and entertaining tool.

The viewers learnt to retrieve information in a playful, entertaining manner.

Information they were not interested in, they ignored or 'skipped'. Information they

were interested in, they could visit and revisit.

In order to have seen if social change ultimately had taken place through the

dynamics of syntony, the researcher compared the data between the pre- and post-

measurement phases. Here follows a comparison to show any similarities/

discrepancies/differences which were found in the pre-measurement phase

(STAGE 1 to STAGE 3) and the post-measurement phase (STAGE 4).

4.11.1 Pre-measurement phase

1.   The research:

•   The research occurred in a controlled environment, namely the Media

        Laboratory at the School of Management, and guided by the researcher.

•   This section of the research required both verbal and written exercises.

2.   Qualities taken from the Syntony Filter Matrix:

•   During the presentation mention was made that the CD-ROM was very

        informative.

•   Issues like costs, close proximity of the townships and the institution were

        mentioned in the presentation. Practicalities like these were evaluated when

        choosing an institution to study.

- The necessity of an education was important. It empowered people, ensured them of an income, a healthy living.

- *Although the focus of the CD-ROM was specifically the School of Management, interest was shown in the other courses offered at the Cape Technikon.*

- Courses offered at the Cape Technikon were highly in demand in the business world, which required a practical approach in the course content. In-service training was offered during the student's third year.

- The student representation was balanced - it included all nationalities, as well as overseas students and a strong representation from Africa.

- The role of the participants' cultural background and the creation of 'harmony' and effecting their decision-making process were effected by their own 'home' culture, and to some degree the 'student culture'. Role models on the CD-ROM played an important role which encouraged observational learning and mimicry.

- *The influence of a role model and its effect on the participant's perception of creating a need to attend the Cape Technikon was of lesser importance.* However, individuals stated that they had other role models, like parents and friends in existing professions which also influenced their decision-making processes. That in effect created 'harmony'.

- After the presentation of the CD-ROM (during STAGE 3) the tangible qualities of diffusion became important. Because it was 'new' knowledge which the participants received, the emphasis was rather on the contents of the CD-ROM. The 'Personality Profile' gave the viewers insight as to how

their personality should 'fit' the appropriate courses offered at the School of Management. The various courses and degrees were important to the viewers, as well as the requirements needed for the courses and how one should go about to apply at the Cape Technikon. The information given on the CD-ROM gave the viewer a head-start as to know what the courses entailed. They felt comfortable with the right 'fit' and this created a sense of 'belongingness' to the tertiary institution.

- The tacit meaning and effect of the CD-ROM were reflected by a viewer's opinion, namely that it gave him 'light in the darkness'. The understanding of the information on the CD opened horizons for many uninformed viewers.

- The dynamics of the multimedia recruitment tool had a wide reaction. For some it was a novelty, for others not. The majority of the viewers were enthused by the interactive nature of the multimedia, but also requiring valuable information for their future careers.

4.11.2   Post-measurement phase

1.   *The research:*

- The research took place in a controlled environment at the various schools, also under the guidance of the researcher.

- The focus group interviews consisted of verbal discussions that were transcribed from tape recordings.

2.   Qualities taken from the Syntony Filter Matrix:

- The participants expressed high regard for the value of the CD-ROM as an advisory tool, which could easily substitute the role of the Public Relations practitioner visiting the schools.

- After viewing, the issue of study costs were discussed. The study costs at the Technikon was much more affordable as opposed to a university. Accessibility to the Cape Technikon and transport were equally important, therefore living in close proximity to the institution would influence costs as well.

- The value of education - the Technikon offered both practical and theoretical education, which empowered one. This in essence was vitally important to one's own benefit, but would also have a knock-on effect in the business world, which required an ambitious and skillful workforce.

- The campus of the Cape Technikon was attractive to the viewers, it fulfilled their needs, the student base was well represented and balanced, and the fact that the language of tuition was both English and Afrikaans, was important to the participants. In some cases the classes were offered in Xhosa. The Cape Technikon was focusing on Xhosa as a tuition language in the near future.

- The impact of the CD-ROM appeared to be 'personalised' and 'individualised' - it spoke to them personally, and the participants were interactively involved with the information, graphics, sound, etc. The viewers identified with the information given on the CD-ROM and with the role models, of which two role models were familiar to some viewers. The choice of languages on the CD-

ROM acknowledged their language preferences and allowed a flexibility amongst the viewers. The CD-ROM 'brought the Cape Technikon' to the viewer, and not *vice versa*. It also catered for the nontraditional student. The participants emphasised that the Cape Technikon offered courses which 'broke stereotypes', like catering for ladies who wish to do engineering, and men who wish to do 'lady jobs'.

- The multimedia interactive CD-ROM became a prominent development tool for recruitment. This innovation needed to be communicated through channels of which the CD-ROM was the technological channel that addressed the various aspects of the School of Management and the Cape Technikon. This had to happen within a 'time frame' of adoption. The messages communicated occurred over a period of time among members of a social system, namely the potential student corps.

- Formal education as social status was a consistent predictor of adoption. Derived from the narratives, the researcher intended to interpret the relationship between the need for tertiary education and the actual student recruitment processes. Given this pattern, student recruitment became the important variable most consistently associated with the need to accommodate the cultural identity and background of the student in the recruitment process. The CD-ROM was the channel through which the recruitment message was being communicated.

- The interactive recruitment tool was used to assist the diffusion process to the adoption of newly gained information. Because entertainment is value driven, it required a powerful medium to communicate, therefore the

necessity of the interactive multimedia recruitment tool, the CD-ROM.

- While producing the CD-ROM, culture was the binding factor. Cultural 'icons' were used, be it ethnic music, photographs of old 'District Six' and mosques, or the different language preferences. Some viewers mentioned that they viewed a happy student culture on the multimedia disc. The effect of their own 'family culture' played an important role. Since childhood these learners from Vuyiseka Secondary experienced entrepreneurial abilities due to their less fortunate cultural background which included poverty, being disadvantaged due to political reasons. Their entrepreneurial skills have come to fulfillment in later years. Otherwise many viewers could identify with their family being their role models and influence when choosing a future career.

- The role models subconsciously encouraged a mimetic behaviour on the viewer, which was reinforced several times in the presentation. Language preferences created a bond with the viewer. The spoken word of the role models and the written word on the CD-ROM expressed academic success to the viewers, especially in a time where future job availabilities were difficult to find. The role models were well represented, different ages, sexes and nationalities.

- The story line and characters, and role models were compelling devices for involving the viewers with the Cape Technikon. These included 30 second inserts each of the Vice Rectors, the Director of the School of Management, alumni, profiles of present students studying at the School of Management, as well as recordings of a student music group.

- In the past very little was done to accommodate the disadvantaged as part of a student base. This interactive student recruitment tool tried to reinforce the need to have a well-balanced student population, and delete a previous non-educational culture, in order to have 'harmony' on the campus and classes.

- The viewers could experience the compatibility, observability and trialability of the disc due to the interactive nature of the CD-ROM. This allowed viewers to be involved with the contents of their choice, giving them a relative advantage as opposed to those who never saw the CD-ROM. The viewers had pre-knowledge reinforced and also gained 'new' knowledge. This assisted in many decision-making choices.

- The effect of the technology used for the CD-ROM opened horizons for many viewers. The viewer was educated with information, but simultaneously entertained. Some participants who were *au fait* with multimedia, mentioned that they would have preferred a more superior quality CD-ROM. The CD-ROM had the ability to be updated at any time.

- The essence of marketing was differentiation. After all, if the Cape Technikon was no different from any other institution, why should a student enrol? It was *necessary to convey the information that would help them recruit the students* that were right for the Cape Technikon. The CD-ROM showed a 'different' marketing value. In effect, the CD-ROM was a marketing tool to be shown across the Cape Technikon borders, South African borders, even there where the Public Relations practitioner could not reach, like overseas. It was light in weight, and compact to be posted. Although the contents of the CD-ROM were focused on the School of Management, some viewers were in favour to

have all the Schools of the Cape Technikon represented on the CD-ROM.

- The CD-ROM assisted to familiarise the prospective student with procedures and information on the Cape Technikon. Its purpose was to be user-friendly, student-friendly, and it offered an easy and entertaining way to access information, even to those who were computer illiterate.

- The CD-ROM had the ability to substitute a visitation by a Public Relations practitioner, as well as any printed matter, like a booklet or brochure on the tertiary institution. 'Reading' the CD-ROM became informative but entertaining. It allowed flexibility to the reader, as one participant stated that the 'CD does everything for you...us students are lazy...I don't have the time to read a boring brochure...', therefore one could 'use the CD like a book'.

- The CD-ROM brought the 'unknown' of the Cape Technikon in a visual and audio context to the viewer. So often a prospective student was recruited and 'they don't know what they are letting themselves in for', but by viewing the presentation, it gave some direction and clarity with their decision-making choices. To acquire knowledge, the participant was forced to be actively involved.

- Multimedia offered the opportunity to communicate richer information to prospective students than ever before. The viewers were comfortable with receiving information delivered in this format - they were simultaneously entertained and educated.

4.12   Interpretation of the findings

The findings addressed the two research questions asked, namely:

1.   What kind of social message could address the needs of the traditional and

nontraditional student within the South African context?

2.   How does recruitment information in a multimedia format assist a prospective

student in making a decision about a tertiary level education programme?

4.12.1   Findings on Research Question One – What kind of social message

could address the needs of the traditional and nontraditional student

within the South African context?

The kind of social messaging which addressed the needs of the traditional

and nontraditional student populations at the Cape Technikon and any other tertiary

institution would have to be driven by syntony. This shaping process was

determined by acknowledging different cultures, identities and backgrounds of the

represented student population in order to establish a belongingness to the

institution.

The present study showed that there was an urgent need that student

recruitment at tertiary institutions should be 'sensitised' to the needs and

expectations of students. The multimedia student recruitment tool, *Tools to*

empower you future - the Cape Technikon, showed that syntony was the driving

force. *The recruitment messaging acknowledged the cultural identities of the student*

base, bringing about 'communication harmony' and in shaping cognitive

understanding and social reality. The participants felt the need for a 'social connectedness', a state of belongingness, that provided the structure and motivation for their self-expression. The process of fine-tuning advocated the requirement of skills to develop the balance between cognitive understanding and self-efficacy and emphasised the importance of their cultural identities.

Sabido's Tonal Theory focused on the orchestration of several message elements in order to have the desired effect on the audience. The researcher intended to orchestrate the various elements, namely contents, menus, chapters of the interactive CD-ROM to have the desired effect on the participants of this study. In essence, the CD-ROM carried a different approach to student recruitment. It intended to carry a social message that tried to reach the diverse student population of the Cape Technikon. A tertiary institution should investigate the most recent technologies and approaches.

Format and production were important aspects for the making of the CD-ROM. Production elements used for the CD-ROM included the characters, the actors, the role models, dialogues, music, video clippings, sound affects, the location, camera shots, editing, etc. Pro-social values were presentable on the CD-ROM format. This edutainment-genre was interactive, allowing repetition, rehearsal and reinforcement. The viewer could personalise ideas, perceptions, hope, needs and questions with the role models, the dialogues, the photographs and music.

The findings of this multidisciplinary research lent added support to Miguel Sabido's Tonal Theory, Bandura's Social Learning Theory, Paul Maclean's Triune Brain Theory and Roger's Theory of Diffusion. Syntony and its dynamic effect on social change were emulated in cultural identities and social issues, as portrayed in

the presentation. Syntony brought the student in 'harmony with' the communication

messages. The CD-ROM was unusual in this respect. The audience, 'the viewers',

reacted and gave feedback. The feedback manifested in various ways, either giving

remarks on certain issues dealt with on the CD-ROM, chatting to their friends, or

applying to the Cape Technikon, or merely showing interest in the courses offered at

the Cape Technikon.

The findings reinforced the need to find alternative recruitment and

admissions criteria, in which identifying with the students' cultural backgrounds and

acknowledging language preferences in the recruitment phase. The findings of

Groote Schuur High School predicted entirely differently to schools from a lower

socio-economic standard, like Vuyiseka High School and Harold Cressy Secondary

High School in Cape Town. Vuyiseka Secondary School was equipped with the

basic educational amenities, needs and necessities. Schools like Groote Schuur

High School, Gardens Commercial and Bosmansdam High School showed that they

had more material and educational equipment than Vuyiseka Secondary School and

Harold Cressy Secondary School. The two latter schools were over- populated, the

classes too small for the quantity of learners, and the availability of computers at

both their schools and homes were basically non-existing. Some of these schools

had their own computer centres and offered Computer Science as a subject, whilst a

school like Vuyiseka only had the very basics, like desks and blackboards. Gardens

Commercial was more au fait with the business-like environment. This supported

their access and knowledge of the CD-ROM. The contents of the programme were

more approachable, in comparison with Vuyiseka Secondary High School whom all,

except one learner, were not acquainted with computers. The learners realised that

any education at a tertiary institution costs money. Learners from advantaged

homes and backgrounds would be supported by parents, while learners from

disadvantaged backgrounds would have to finance themselves or receive 'free' or

no education.

The participants acknowledged a twinship, an affiliation with a tertiary

institution as important. The learners exclaimed that while they were being recruited

by the CD-ROM their backgrounds were acknowledged and that they could identify

with role models they saw on the CD-ROM programme. They identified with

students, their peers, who were successful as role models. This left a feeling of

harmony in their midst.

4.12.2   Findings on Research Question Two - 'How does recruitment

information in a multimedia format assist a prospective student in

making a decision about a tertiary level education programme?'

Recruitment became the interactive process between the institution, student

and student-fit. The main factor was how the individuals interpreted the recruitment

process, whether they understood the messages, whether they were attracted by the

contents of the messages. It was speculated that if recruitment would comply with

the dynamics of syntony, the results of and expectations for student recruitment

would suit the correct student-institution fit. That indicated that the student would be

studying the correct field of study and would have completed the course

successfully, having acquired the skills and correct approaches to be successful in

his/her future profession. Satisfaction would be a strong predictor, hopingly that it

would rub off on their assessments of various domains in life.

The findings that supported an affiliation with the tertiary institution and creating 'harmony' to attend the Cape Technikon, depended mainly on the choice of the learners' career options, whether they were interested in doing a Bachelors degree, college training, as opposed to courses offered at the Cape Technikon. Financial implications and close proximity to the Cape Technikon were important factors. The need to attend the Cape Technikon appeared important because courses offered at the Cape Technikon gave them the leading edge to acquire a qualification with practical experience and a theoretical background.

Culture *per se* played a salient role. The mere acknowledgement of cultural identities was very important. This could make a student feel welcome or not. In essence, culture played a part in created harmony and assisted with the learners' decisions.

While being interactively involved with the CD-ROM, the participants' senses were stimulated. The messaging on the CD-ROM were enforced visually, and they could hear the commentary of the role models. The retention of visual imagery and making use of verbal symbols (music, different sounds), fluidity were stimulated and gave the viewer the opportunity to revisit and participate in any section of the CD-ROM.

The viewers perceived their relationship with characters as real, because they knew some of the role models personally. Unintentionally two of the role models that were used on the CD-ROM, were both role models in their own right. The other role models were acknowledged with respect.

Only after the presentation (in the pre-measurement phase) one could identify

the dynamics of the innovation of the CD-ROM. Student recruitment had previously

been done in a conventional way. However, it can be assumed, that this innovation

had to be diffused in two stages. Firstly, the qualities of diffusion had to be tangible -

there had to be signs of compatibility, trialability and observability. Secondly, the

innovation expressed a tacit meaning, showing qualities like complexity and a

relative advantage. What the study did do, was to distinguish differences in

behaviour and attitudes of the participants before and after the presentation.

Observational learning effected the information received, and the dynamics of

technology on the viewers' levels of perception were evident in the viewers'

behaviour. This normally occurred when an observer acquired new knowledge of the

behaviour from a role model through cognitive processing of information. The

acquisition of a desired or undesired behaviour occurred through reinforcement. The

impact of role models played a pivotal role in this regard. The reinforcement

occurred through the regular interactive visitations to the various menus/chapters on

the CD-ROM. In itself, the reinforcement of the viewers' behaviours were done by

means of the written and spoken word on the CD-ROM. Viewers, prospective

students to the Cape Technikon, could identify and understand the student jargon

coming from their peers. By means of interactively returning to any section on the

CD-ROM, allowed the viewer to recognise salient aspects they did not know before.

The notion of only acquiring university qualifications stemmed from the

'traditional platform', reinforced by parents who acquired their education from

universities. This was not seen as incorrect. Opposed to this, the majority of the

learners acknowledged an academic qualification from a technikon or college as

sufficient. The fact that technikons offered both practical and theoretical application

of academia, made them a good choice. It was important to the learners to be skilled and get hands-on experience from the industry and business, which was made possible during a student's experiential training in their third year.

The dynamics of diffusion were evident while the learners were working with the CD-ROM programme. The participants experienced the stages of diffusion, namely compatibility, trialability, observability, complexity and relative advantage.

In this sense, the CD-ROM served a dual purpose – it entertained the audience, and simultaneously acted as reinforcer of existing social values. A process of imitation, a mimicry and identification, allowed the individual to take on a model's behaviour and personality patterns, only to some degree. The need of belongingness, an alter ego, provided the structure and motivation for self-expression and idealisation that was made possible with the CD-ROM. The characters used in the presentation displayed socially desirable behaviours. Never was the intention to emulate a socially undesirable behaviour. It would have defeated the purpose of making the CD-ROM, as well as marketing it as an alternative recruitment tool.

This multimedia student recruitment tool signaled a new approach to recruitment. Each viewer became the co-author, the movie-goer, the interactive 'reader'. The interactive nature of the CD-ROM allowed the viewer to 'page' through the parts they were interested in or skipped the sections that were less interesting to them. There were no page numbers for the different 'chapters'; each had its own icon. One clicked on either icons, pictures, photographs or certain words and the information was retrieved.

The multimedia approach ensured that the messaging was maximising

interactive participation and comprehension, which went beyond the traditional television, magazines and newspapers, the radio, songs and dance, theatre, and other forms of art expressions. The CD-ROM set the stage for an interesting new mode of communication.

These findings support the notion that edutainment is a theoretical force in which multimedia, in a CD-ROM capacity can be effectively applied to student recruitment, and specifically the Cape Technikon. The genre, edutainment, acknowledged the importance of cultural identity. Syntony facilitated this 'accepted change' among the potential student population. The locus of syntony lay within the power to 'fine-tune', to bring the intended audiences 'in harmony with' the desired communication messages.

Chapter 5

Multimedia, in the form of a CD-ROM, has impact when used to recruit

students. The usefulness of the CD-ROM encouraged 'visual visitors' to actively

interact with the contents, the visuals, graphics, music, and role models. It was

apparent that not all respondents were acquainted with the technology of the CD-

ROM, the computer and the interactive facility of the CD-ROM. However, this mainly

depended upon the respondents' exposure to this technology, their computer

literacy and the accessibility of the computer in various schools or homes, not in

their acceptance of it.

This study provided support for a shift in the way traditional and

nontraditional students are recruited at technikon level. Developing recruitment

packages that acknowledged a sensitivity for students' cultural identities and

backgrounds, gender, and their interest in an interactive approach to decision-

making supported the fact that the perception of an affiliation or a belongingness to

the tertiary institution was important. The group used in the study thought the CD-

ROM to be entertaining, and educational. They responded positively, that the CD-

ROM addressed an interest in wanting to 'belonging' to the Cape Technikon.

The findings of the study showed that the CD-ROM had the ability to

encourage change amongst the sample units (learners). The multimedia recruitment

tool complied with a variety of observational learning experiences, showing that

people do learn behaviours from observing others, and that such observation occurs

from real-life models. The observational learning occurred when the observer

acquired new knowledge about certain rules of behaviour from a model through

cognitive processing of information. By viewing the CD-ROM, viewers obtained new information about student recruitment at the Cape Technikon, with special emphasis on the School of Management. Another application of reinforcing modelled behaviour, was the spoken word on the CD-ROM. Viewers could identify and understand the student jargon coming from their peers.

The study extended the notion of teaching socially desirable behaviours through modelling and by 'selectively reinforcing', as prescribed by Albert Bandura's Social Learning Theory. The participants were actively involved with observational learning, a process through which an individual took on a role model's behaviour and personality patterns to some degree. Current students, alumni, lecturers and senior staff members of the Cape Technikon were used as role models. The learners could identify with them and with the contents of the CD-ROM. The interactive nature of the CD-ROM set a platform from which certain perceptions and queries were personalised and could be emulated.

The CD-ROM student recruitment tool, *Tools to empower your future - the Cape Technikon* was regarded as an innovation at the School of Management, and at the Cape Technikon at the time of the research. The nature of the interactive CD-ROM was capable of 'talking back' to the user, almost like an individual participating in a conversation. The CD-ROM functioned as a 'change agent' in the process of diffusion.

The CD-ROM allowed multiple access points to institutional information. One could search and review information with speed. Learners felt empowered by this tool, because it simplified the process of information access and retrieval, so that even the computer illiterate had success. They could progress at their own pace and

retrieve information best suited to their interest and needs. The environment allowed two-way communication to take place.

5.1   Recommendations

Although the CD-ROM used in this study was mainly presented in English, it is desirable in terms of regional language needs and institutional language policies to consider constructing such tools in multiple languages. The distribution of this multimedia tool is important, for example, it could be shown on campus, in the admission office, a library, at home. The institution can set up computers in the admission office waiting room for a presentation. While students are waiting for an interview or go on a tour on 'Open Day' the viewers can explore the campus in a different way. Presentations or a 'Road Show' of the CD-ROM could be taken to distant places. The CD-ROM could be sent with each catalogue or prospectus of the tertiary institution. Because of its small size and weight, it is relatively inexpensive to mail. Updates can be done with minor reproduction costs.

It is recommended that future research is needed concerning CD-ROM approaches to student recruitment. Multimedia is shaping educational delivery internationally. A niche has already been created to market courses of numerous tertiary institutions worldwide. By encouraging 'visual visitors' to institutional offerings, the level of interactivity can become a catalyst for informed decision-making.

5.2 Limitations

The research was done with Standard 10 learners. Participants felt that at that specific stage of their lives, many had already made their career choices. A group of learners suggested that student recruitment should be done at an earlier stage of their schooling, as early as in Standard 8. By making one's choices earlier, it would diminish unnecessary career training mistakes. They regarded education as expensive. Therefore earlier use of recruitment information at high schools is necessary. Although this was a general comment about recruitment practices and not about the research project *per se,* it is noted as significant for future researchers.

The audibility of the taped interviews used on the CD-ROM could have been of a better quality of sound. The recordings could have been done in a sound studio. The software format used to construct the CD was based on an Apple Macintosh computer. Future CD constructions should be based on universal formats usable on either Macintosh or PC platforms.

5.3 Proposals for future research

Multimedia has established firm footholds in society. For future research a tertiary institution should focus on their student recruitment programme including an interactive CD-ROM format, as well as 'traditional' methods of recruitment. The institution wishing to hone their skills in student recruitment should address the possibility of using multimedia student recruitment formats.

Finally, this research focused only on the School of Management at the Cape Technikon. Similar research in the other academic programmes of the Cape Technikon could further explore the value of such a recruitment tool.