DISSERTATION

The determinants of fit between the world of work and Tertiary learning:
A tracer study of Cape Peninsula University of Technology (CPUT)
Marketing Diploma graduates

by

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Declaration

I, Cindy Faith Blassoples, hereby declare that this research project is my own original work, and all sources have been accurately reported and acknowledged, and that this research project has not previously, in its entirety or in part, been submitted at any institution of higher learning in order to obtain an academic qualification. The opinions contained herein are my own and not necessarily those of the Cape Peninsula University of Technology.
Acknowledgements

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Lastly, to the graduates, lecturers and employers who participated in this study I would like to offer my sincere appreciation for availing yourselves to be part of this study.
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Abstract

A quantitative research study was conducted in order to gain insight and knowledge into the various destinations CPUT Marketing graduates end up after completing their course of study. A cohort of students that graduated between 2001-2010 was used in this research. The motivation for the study stemmed from the researcher’s experience working at CPUT, lecturing and the researcher’s interaction with the students. The ultimate objective of the study was to trace the graduates, identify their employment status and observe if they are employed in the area for which they have studied.

The literature study covers areas that relate to how students choose what to study, graduate skills, the workforce and graduate employment and unemployment. These areas were reviewed from different sources and authors that specialize in graduate development.

The researcher elected to work with CPUT graduates as the researcher too is an alumnus of CPUT and was familiar with the policies and procedures of the institution.

Results of the research confirmed that tracer studies are an essential tool for tracking graduates and the findings of tracer studies are beneficial for future curriculum development. Although tracer studies yield valuable insight into graduate trajectories they undervalued and underutilized. Furthermore, the results confirm that graduates are employed in the sectors for which they studied or associated sectors. Moreover co-operative education should be further explored to yield better results and perhaps secure employment for the student after graduation.

The recommendation is that academic staff revisits the curriculum and better incorporate scarce skills such as critical thinking skills and also institute a formal tracking system that can be used to benefit the department.
CHAPTER ONE
INTRODUCTION AND BACKGROUND TO THE RESEARCH

1.1 Introduction

The focus of this study is to discover possible reasons why the first work destination of marketing diploma graduates of Cape Peninsula University of Technology (CPUT) is or is not in a marketing-related field. Due to changes in society, the workplace and technology, change the perceptions of work, work values and work goals (Schreuder & Theron, 2001:13). It is therefore important for academic institutions to be certain that the content of the courses offered are relevant and current for what is required in industry. The only thing that is constant is change and therefore it is essential that academic institutions stay abreast of changes in industry to develop a student that will graduate with the necessary skills that will ensure that they are successful in their respective career paths. It is for precisely this reason that graduate tracer studies are valuable as it will reveal whether students are indeed pursuing a career for which they have studied.

This study aims to report on key findings of the graduate tracer study in terms of:

- Where the graduates currently find themselves.
- What a sample of employers’ views are about those graduates who are in a marketing-related field.
- What a sample of the lecturers views are regarding the training received and the curriculum strategies implemented.

The vision and mission of the institution state that CPUT strives to develop and sustain an empowering environment through teaching, learning and research. CPUT wants students to be able to create and apply knowledge that contributes to development (http://www.cput.ac.za). The graduate tracer study will help to understand the extent teaching and learning contribute to overall achievement of CPUT’s vision and mission. Prospective students or students that are currently studying Marketing may find the results of the tracer study useful as it could be used as a platform to plan their future careers as there are numerous career options available after graduation.
1.2 Background to the study

Every year graduates need to make the transition from tertiary study to the world-of-work. With three years of higher education behind them and a national diploma in hand, Marketing graduates set out to find themselves a job. They will make decisions regarding career choices, undergo job searches and, if successful, will then progress to what may be their first career position.

There are various means of finding employment. In a study conducted by Michael Cosser with Jacques du Toit & Mariette Visser (Cosser, du Toit & Visser 2004) it was found that those graduates that were employed at the time of the study, 22% found employment through relatives, 14% through personal contacts and 12% through family enterprises. Graduates are likely to find employment using one of these methods.

It was noted in the University World News: The Global Window On Higher Education, that graduates are not always employable (University World News: 4 November 2007). A survey that was done by the Development Policy Unit (DPU) of 20 of South Africa’s top companies revealed that the companies were not always able to use graduates to meet the skills requirements. This was due to the following reasons:

- Graduates have the qualifications but not always the practical skills and experience.
- The wrong types of graduates are being produced. (There are too few technical graduates).
- Frequently graduates are not suited to fill shortages at management level.
- Skilled staff is often poached by other companies or emigrate.
- Graduates are not always of a high enough quality.

Graduate unemployment in South Africa has doubled in the first decade of democracy. Research by the Development Policy Research Unit (DPRU) in the University of Cape Town’s School of Economics found that the promises of “a good job and prosperous life” associated with higher education have eluded many of the growing number of South Africans completing their tertiary education. Unemployment among graduates grew from 6.6% in 1995 to 9.7% in 2005, (University World News, 4 November 2007).

The article also stated that contributing to graduate unemployment an oversupply of graduates with diplomas or certificates rather than degrees. It is said that there are too many commerce degree-holders (who account for 28% of jobless graduates) and an oversupply of black African graduates, whose numbers have grown massively and who accounted for 85%
of the tertiary unemployed in 2005. According to South Africa: The Good News (South Africa: The Good News, 27 September 2007) one of the country's biggest challenges is the mismatch between skills taught and skills required, as is reflected in the number of unemployed graduates. The article mentions a study that was conducted by the South African Graduate Development Association which found that graduates are the fastest growing group swelling the numbers of the unemployed. Graduates are also unemployed because of the poor quality of education in South Africa at all levels and in some universities, continued racial discrimination in favour of whites, lack of ‘soft skills’ such as time management, communication and creative thinking, lack of ability to work independently, and too-high expectations (University World News, 4 November 2007). South Africa should tackle the weaknesses within its education system and companies should absorb more graduates and provide them with additional training where necessary.

1.3 Statement of the research problem

1.3.1 The statement of the problem

It has become more prevalent that graduates enter into the world of work in a field for which they did not study.

1.3.2 The statement of sub-problem

The prevalence of marketing graduates’ first job being in a marketing-related field is low.

1.4 Objectives of the research

1.4.1 Objectives of the study

1.4.1.1 Main objective

- To establish whether or not the marketing graduates’ first work destination is in a marketing-related field.

1.4.1.2 Sub objectives

- To establish the present employment status of graduates.
- To identify the nature of employment.
- To determine the alignment between what is learnt at CPUT and what is actually done at work.
- Proposal for re-curriculum to improve graduate employability.
1.5 Key questions pertaining to the research

- What is the likelihood of graduates being employed in a marketing-related field?
- What is the nature of employment of these graduates?
- Is the re-alignment between what is learnt at CPUT and what is required in industry accurate?

1.6 Significance of the research

The study will determine the destinations of the marketing graduates of CPUT who studied full-time. The aim is to determine the nature of employment after graduation and to discover possible reasons why the first work destination of marketing diploma graduates of CPUT is or is not in a marketing-related field.

For the purpose of this tracer study we will focus on the graduates with a National Diploma in Marketing and identify the nature of employment. The study will capture information regarding the first work destination of CPUT graduates. This will entail those full-time students who have successfully completed the three year Diploma course at CPUT, specifically looking at their first work destination. This study initially sought to incorporate the 2001-2008 population of marketing graduates but was later extended to 2010.

The tracer study will help determine the alignment between what is learnt at CPUT and what is actually done at work but most of all whether the graduates are given the opportunity to apply what was learnt. This study will solicit the views of the graduates, employers and lecturers involved.

Given the findings, one of the aims is to attempt to redesign the course to improve the graduates’ employability. Therefore the tracer study is exploratory in nature. Results of the study will help identify opportunities for recirculation and develop content that will prepare students for industry.

1.6.1 Delimitations

- The study will be conducted within the Cape Peninsula University of Technology only.
- The study will only incorporate graduates residing in Cape Town.
- The study will focus on National Diploma in marketing full-time study only.
- Full-time marketing graduates from 2001-2010 will be reviewed.
- Views and perceptions will be sought from the main subject lecturers in the Marketing department.
- Opinions of employers of graduates who are employed in a marketing-related field will be sought.
1.7 Preliminary literature review

“Learning is not attained by chance, it must be sought for with ardour and attended to with diligence” – Abigail Adams 1780 (Bell 2002:3).

During the more senior grades in high school students would embark on a process of career planning to be sure of the career path that will be chosen. This would entail self-exploration where individuals seek information about themselves before a course of tertiary study is chosen (Schreuder & Theron, 2001:25). Individuals obtain knowledge about themselves such as what their values, personality, preferences, strengths and weaknesses, interests and abilities are. Once these factors have been established the next step would be obtaining information about the working environment. A concerted effort should be made to achieve a proper match between personality characteristics, strengths, weaknesses and a specific career path (Schreuder & Theron, 2001:21). This is done to prevent individuals from being in a career far removed from his/her course of study.

The responsibility for career planning is the onus of every individual. Despite having a career plan or following a specific career path many students still find themselves in a situation where they are in a career for which they did not study. This can not only restrain career success but it can cause the individual to become despondent and unhappy.

Roe’s (Schreuder & Theron, 2001:40) theory states that the individual’s occupation, more than any other situation, can potentially provide some satisfaction on all need levels. These need levels are as follows: physiological needs, safety needs, the need for affiliation, the need for respect and self-esteem needs (Schreuder & Theron, 2001:40). Work can satisfy these various needs, for example the need for independence, the need for information and the need for respect can all be found in the workplace. This can be satisfied by being part of a work group or by having status associated with a certain kind of job. Thus one work situation may satisfy different needs in different ways (Schreuder & Theron, 2001:40).

Students in this study should have also completed the required three months of co-operative education (co-op) in their third-year level of study. Students are sent on co-op to help them identify if they are suited for that particular career and to provide them with practical training outside the classroom. Co-operative education requires students to put their academic theory into practice. Students are placed in various industries around the Cape Peninsula. Each student is responsible for performing assigned tasks, given to them by their mentor, during the co-operative education period. These tasks range from general office tasks, teamwork assignments, communication tasks both written and verbal, and electronic aided tasks. They are also required to show initiative in all tasks that have been assigned to them. The main objective of co-operative education is to give students a chance to put the application of theory to practice in a controlled and supervised environment. Co-operative
education placement officers are in contact with the managers and supervisors of the various industries. The managers and supervisors are required to do an assessment of the student’s performance during the co-operative education period. The co-operative education placement officer also interviews the supervisor or mentor of the student as well as the student. This is to ensure that what was taught in the classroom becomes practical and real for the student.

1.7 Higher Education and employment

A degree of tension exists when the transition from higher education into first destination employment is made (Holden & Harte, 2004: 272-282). In South Africa the April 1994 elections brought about a major change in the composition of the labour force. Today the workforce is comprised of more women and is more representative of all races (Schreuder & Theron, 2001:135). Ultimately there are many more individuals in search of a defined career path, thus increasing the competition for a limited number of jobs. According to Statistics South Africa (Stats SA July 2012) in 2012, the number of persons in the labour force increased by 207 000 in quarter 4 (Q4):2011 and Q1:2012. Employment decreased by 75 000 in Q1:2012 and the number of unemployed persons rose by 282 000 on a quarterly basis. There are many more new graduates available to recruiters and their composition is more diverse (Holden & Harte, 2004:272-282). This could directly contribute to the situation of graduates finding themselves in a job while having studied something completely different.

CPUT adopts an outcomes based education to ensure that graduates are equipped with the academic and practical knowledge when they enter into industry. Outcomes based assessment focuses on using frequent and varied assessment techniques to guide students towards achieving the outcomes set for the course. This is in contrast to the continual assessment in which students merely are repeatedly assessed. Continuous assessment makes use of a variety of assessment practices during the course of study with the intention of understanding where the student is in terms of learning and understanding. Feedback from assessment enables the lecturer involved to provide as much guidance to the students as possible (http://wwwche.ac.za). These measures are to ensure that students graduate with the necessary skills and knowledge needed for the world work.

1.7.2 Relevance of the training

The question remains whether or not the marketing graduates actually do possess the necessary skills and training to do the job.
Some of the skills sought by employers in marketing graduates as stated in a conference (ANZMAC, 2002), range from generic skills such as critical thinking skills and communications skills to those mentioned below:

- Literacy skills,
- numeracy skills,
- basic computer skills,
- time management skills,
- written business communication skills,
- oral skills,
- interpersonal skills,
- problem solving skills and
- overall comprehension of business processes.

In addition to the above mentioned skills, graduates also need to learn and develop personal attributes that employers look for when recruiting new graduates (ANZMAC, 2002).

Such as:

- enthusiasm
- motivation,
- ambition,
- maturity and
- personal presentation.

Marketing educators need to address these attributes and incorporate them into the curriculum. Thus, marketing educators need to consider questions such as:

- What is it that they would like students to be? (graduate attributes)
- How would they help students get there? (teaching and learning strategies) and
- How would they know if students have developed these capabilities? (assessment)

To do this marketing educators will draw on text book knowledge and practical skills knowledge to equip the graduates with the fundamentals needed in the world of work.

The assumption is that the marketing graduates have been equipped with all those skills, and together with work co-op, have the necessary overall training.

Graduates would have been taught:

- how customers and consumers behave,
• how markets function and evolve,
• how firms relate to their markets and
• how marketing contributes to the overall performance of a company

This study will seek to identify the skills lacking in new graduates and try to identify the supposed strengths and weaknesses of graduates as they enter first destination employment.

1.7.3 Higher Education and quality assurance

The Cape Peninsula University of Technology in their vision and mission statement tells us that the institution strives to be at the heart of Technology Education and Innovation in Africa. CPUT strives to develop and sustain an empowering environment where, through teaching, learning, research and scholarship it wants the students and staff, in partnership with the community and industry, to be able to create and apply knowledge that contributes to development. (http://www.cput.ac.za/).

Thus, to honour the vision and mission of the institution, the Business Faculty Marketing department has to continually revise how they understand, measure and assess the capacity of the marketing programmes to provide viable educational experiences to students.

1.7.4 Attracting quality students

A key factor in the Marketing department is their ardour for quality improvement, enrolments management and the evaluation process. In making these attempts to ensure a quality educational experience it is the responsibility of every prospective student to be sure that they indeed want to be a marketer when they apply to study at the institution. The quality assurance practices in the department are also intended to enhance strategic advantages in the competition for students (Welsh & Dey, 2002:17-25). Thus if the Department enrolls what they perceive to be good quality students the hope is that it will translate into a good pass rate and that the student will pursue a career in marketing. Prospective students or students that are currently studying Marketing may find the results of the tracer study useful as it could provide them with an indication of the numerous directions that graduates take after completing their qualification.

By implementing the processes and procedures that accompany career planning before the students enrol at a higher education institution together with outcomes based education and quality assurance practices graduates should be employable at the end of the course of study.
1.8 The proposed method for data capture and analysis

1.8.1 Quantitative and qualitative approaches

This project will adopt a quantitative and qualitative approach. This research approach will provide the reader with a holistic view of the study. The quantitative aspect will utilize a survey questionnaire for data collection from the graduates who participate in the research. The questionnaire would be a traditional, structured instrument. The qualitative approach initially sought to interview via telephone both the employers and lecturers of the graduates who have been successfully employed in a marketing position but was later changed to a telephonic interview of only the employers and the lecturer survey was administered via e-mail.

1.8.2 Advantages of using a survey

Surveys are a relatively inexpensive form of data collection. They can be administered from remote locations using mail or e-mail. Comprehensive questions can be asked about the topic giving considerable flexibility to the analysis. There is also flexibility at the creation phase in deciding how the questions will be administered, for example, whether by hard copy or by electronic means. For the purpose of this study the questionnaires will be administered via e-mail. Standardized questions make measurement more precise by enforcing uniform definitions upon the participants. Standardization ensures that similar data can be collected from the participants then interpreted comparatively. (http://writing.colostate.edu/guides/research/survey).

1.8.3 Disadvantages of using a survey

Possible disadvantages of this technique may be that the methodology relies on standardization which forces the researcher to develop questions general enough to be answered appropriately by the respondents. Surveys are inflexible in that they require the initial study design to remain unchanged throughout the data collection (http://writing.colostate.edu/guides/research/survey).

1.8.4 Sample

The quantitative research (survey) would be undertaken with the view of tracking whether National Diploma Marketing graduates’ first work destinations are in marketing-related fields. The convenience sampling technique would be used to select the final sample for the research. The rationale for this is that the participants are widely dispersed and the
The researcher would rely on those that are available and willing to participate to form the final sample. These participants would be identified from an existing data-base and contacted via their telephone numbers and e-mail addresses. Contact will be made to secure acceptance to participate, thereafter the instruments would be e-mailed or posted to the participants depending on which medium they prefer.

1.8.5 Data collection instrument

A mixture of questioning styles would be employed in the instrument with some being close-ended and other being more open-ended. The survey questions will range from basic questions such as:

- Which of the following statements best describes your employment circumstances?
- Which methods did you use to actively seek employment?

Questions will also be asked, to learn what may have been responsible for the respondents’ current situation and the data collected will include:

- whether the respondent is in full-or part-time employment,
- whether the respondent is seeking employment and, if relevant,
- name of the employer,
- location of the employer,
- sector in which the employer operates,
- area of industry in which the employer operates,
- type of work the respondent is doing and
- expected length of employment (permanent, or contract employment).

The questions will also aim to disclose the methods graduates make use of when seeking employment, whether they are happy with their current employment situation, will they be undertaking further studies, etc. The questionnaire will also attempt to find out the extent to which the graduates used the skills acquired from the course and also find out what areas are important but not included in the Marketing course programme. Once the recipient has completed the questionnaire it will be e-mailed or faxed back. Thereafter it will be captured and using the SPSS student version free download, the data will be analyzed.

The qualitative research would gather information by means of telephonic interviews held with a sample of employers of those graduates who are employed in a marketing-related field and also the lecturers who trained them. The aim of the interview sought to learn the
reasons why the employer hired that graduate. An interview of only the employers took place and the lecturer survey was administered via e-mail. The change in research plan did not compromise the main aim of learning the reasons behind why the employer hired the graduate and also how lecturers ensure relevance of training as is further discussed in Chapter three.

The reasoning behind contacting the lecturers who trained the graduates was to better understand the curriculum, course content and also the different instructional strategies that were used to train the students at the time. This would ultimately uncover the reasons why the Marketing department feels that they are confident in releasing those students into the world of work. The researcher will ask the interview questions via telephone and the responses will be captured. There are many different kinds of interviews. However, for this purpose we will use the structured and semi-structured interviewing techniques. The aim is to learn what made that graduate successful in getting that job and also what can be improved. The interview with the lecturer will aim to identify course content, curriculum design and instructional strategies. The interview questions will be prepared in advance and shared with the respective employer and lecturer before the time. The actual interviews will take place via telephone. The interview method is effective in terms of generating descriptive data. The interviewer is also able to probe sensitive areas in depth whereas a structured questionnaire cannot easily do this. A disadvantage in using the interview method is that it can be time consuming. A further discussion of the research plan and design is described in Chapter three.

1.9 Definitions, terms and concepts used in the research

- **Graduate tracer study**: targets graduates who have completed their studies and traces where they have ended up
- **Empowering**: To fill an object with energy for a specific purpose
- **Transition**: The act of passing from one state or place to the next
- **Job search**: To actively seek to find a job
- **Employable**: A person who is qualified and ready to work
- **Career planning**: to enable students to plan and follow a flexible course of action that will lead to self-sufficiency
- **Quantitative**: Observations that involve measurements and numbers
- **Qualitative**: Data that is related to the quality of observations
- **Convenience sample**: Persons or groups selected at the convenience of the investigator or primarily because they were available at a convenient time or place
- **Co-operative education**: A learning approach that integrates college studies with working experiences in industry
- **Needs**: situation where something is necessary
- **Skills**: the ability to do something well
- **Abilities**: being able to do something; cleverness; talent
- **Occupational environment**: Physical surroundings and social environment at work
- **Labour**: workers
- **Labour market**: Usually an informal market where workers find paying work and employers find willing workers
- **CHE**: Council on Higher Education
- **DPRU**: Development Policy Research Unit

Definitions were extracted from:


### 1.10 Concluding remarks

It is of utmost importance that before embarking on a course of study students undergoes a process of career planning. This process will help students identify their personality traits and help establish what their strengths and weaknesses are. By identifying these aspects students can choose a course of study that will enhance aspects of themselves that they already inherently possess.

The role of academic institutions in preparing graduates for the workplace is integral. Academic institutions and the world of work need to be linked in order to ensure that what is being taught in the classroom is relevant for the workplace. The situation today is of such a nature that more and more graduates enter into the world of work in a field for which they did not study due to various reasons.

In Chapter two the research further explores tracer studies and the relationship between career planning, academic institutions and the workforce. Tracer studies are an important tool of institutional development as the world of work is changing rapidly. With a tracking system CPUT can receive systematic feedback from their former students. CPUT will have knowledge of the destinations of their graduates, their working conditions and a retrospective assessment of their course of study could stimulate the curricular debate. The researcher will look at graduate skills and the state of employment and unemployment and the possible reasons for this. The researcher will also look at the satisfaction level of employers with graduates.
CHAPTER TWO
THE LITERATURE REVIEW

2.1 Introduction

A tracer study is a tool used to trace graduates. The intention is to determine whether the knowledge and skills the graduates received at CPUT is relevant to their places of work. Graduate employability is concerned with the ability of a graduate to function successfully in a job. It is not simply destination statistics or a focus on employability as an institutional achievement, but also about graduates being better equipped for employment. In the study conducted by Koen, (Koen:2003) affirmed that the guiding principle behind graduate research is employment. It is examining and quantifying the relationship between demographic factors, educational qualifications, first destination employment and initial job outcomes. In essence, tracer studies provide both a theoretical and empirical account of employment.

In order to try and understand graduate employment patterns it will be beneficial to first recognize the dynamics of the labour force. The trends in the labour force or labour economics are used as a tool to understand the functioning and dynamics of the market for labour. Labour markets function through the interaction of employees and employers. Labour economics looks at the suppliers of labour (higher education institutions); the individuals who demand labour (employers), and attempts to understand the resulting pattern of wages, employment and income. In order to ensure that higher education meets the employers’ expectations it is imperative that graduates possess the necessary skills.

In attempting to understand the dynamics involved in tracer studies, employment and unemployment patterns it is important to revert to the beginning when career planning should take place. When prospective students decide on a course of study they both knowingly and unknowingly use formal content theories to make decisions regarding their choice of study and future career decisions. Once career planning has transpired a course of study is embarked upon and after graduation with a national diploma in hand, marketing graduates set out to find themselves a job. Graduates are under the assumption that they will find a job related to their course of study. However, this is not always the case.

2.2 Career Planning during the course choice process

Career planning starts with students in the senior grades (grades 10-12), in high school where they should start thinking about what careers would interest them and seek career choice counseling. Students in grade 10 to 12 should be encouraged to find their passion and discover what their strengths and weaknesses are. This will help them to accurately
decide on a course of study when the time comes to enrol at tertiary education institutions. During this process students are using content theories to help them decide on what to study. It involves a process of self-discovery to determine individual strengths and weaknesses.

2.2.1 Graduate course choice process

Many graduates are unemployed, because they have chosen the wrong field of study. Individuals do not sufficiently research which course of study and career they really wish to embark on. A student often knows only that they want a degree because you need it to get a job. They know little about what they are interested in or what they have the talent for (Wasserfall, 2009:1). Therefore it is important to go through the process of career planning before choosing a course to study.

The meaning of work embraces the significance that work or working has in people’s lives (Schreuder & Coetzee, 2006:1). Therefore it is important that students in the senior grades, grade 10 to 12 in high school start thinking about what careers would interest them and seek career choice counseling. Very often students receive little career guidance at school and at higher education institutions and students lack adequate information about careers in their fields of study. Career choices in the subjective viewpoint are the individual preferences, aspirations and intentions. In the objective viewpoint it is seen as economic conditions and sociological factors such as family and education. Thus the concept career choice can have different meanings. Career choice acquires meanings in accordance with how it is conceptualized by different theorists (Schreuder & Coetzee, 2006:94).

Content theories assist in making career choices (Schreuder & Coetzee, 2006:94). Illustrated below are some common approaches of how individuals make career choices.

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In order to see how these theories relate in the day-to-day lives of students a closer look needs to be taken.
2.2.2 The trait-and-factor approach

Referring to Table 1 the trait-and-factor approach is a measurement of individual characteristics which we can denote as traits and factors. Traits are characteristics typical of the individual and stable over time and consistent in situations. A factor is a construct which represents a group of traits that correlate with each other. The trait-and-factor approach is a development of the matching men and jobs developed by Frank Parsons (Schreuder & Theron, 2001:40).

In order for an individual to experience full job satisfaction it is important to match the person to the job. This will entail having knowledge about personal characteristics and the link between those characteristics and the possible career. Individuals should take cognizance of the following:

- Have knowledge about personal characteristics and their limitations.
- Have knowledge of different occupations with regard to success, future prospects, compensation, advantages and disadvantages.
- Think reasonably about the relation between their characteristics and occupations

In making career decisions, individuals should be informed about their own characteristics and those characteristics related to the occupations and take notice of their interrelatedness. Measures need to be taken to ensure that graduates are adequately prepared for entry into the labour force and greater efforts should be implemented to encourage learners to choose directions of study that play to their strengths and have superior employment prospects.

2.2.3 Roe’s theory (Schreuder & Theron, 2001:40)

Roe’s theory focuses on satisfaction of needs. Roe’s theory (Schreuder & Theron, 2001:40) states that the individual’s occupation, more than any other situation, can potentially provide some satisfaction on all need levels. These need levels are as follows: physiological needs, safety needs, the need for affiliation, the need for respect and self-esteem needs (Schreuder & Theron, 2001:40). Work can satisfy these various needs, for example the need for independence, the need for information and the need for respect can all be found in the workplace. This can be satisfied by being part of a work group or by having status associated with a certain kind of job. Thus, one work situation may satisfy different needs in different ways (Schreuder & Theron, 2001:40).

Therefore it is of the utmost importance that individuals make the correct choice to ensure ultimate job satisfaction after the course of study has been completed.
2.2.4 Holland’s theory (Schreuder & Theron, 2001:40)

This theory is based on career choice being a function of the relation between personality type and occupational environment (Schreuder & Theron, 2001:40). Therefore simply stated the choice of career is dependent on the personality of the individual.

When individuals embark on a process of career planning to be sure of the career path that will be chosen, it would entail a process of self-discovery. Such is mentioned in the trait-and-factor approach. Individuals obtain knowledge about themselves such as what their values, personality, preferences, strengths and weaknesses, interests and abilities are. Once these factors have been established the next step would be obtaining information about the working environment. The aim in Holland’s theory is to ultimately try and achieve a proper match between personality characteristics, strengths, weaknesses and a specific career path (Schreuder & Theron, 2001:21).

Students are knowingly or unknowingly implementing formal theories developed by individuals such as Roe and Holland. Holland’s theory is based on career choice being a function of the relation between personality type and occupational environment. As a result if you are creative, have a natural affinity for customer relations and have the ability to think out of the box a good career to suit your personality would for example be in marketing. The responsibility for career planning rests on the shoulders of every individual. Despite having a career plan or following a specific career path many students still find themselves in a situation where they are in a career for which they did not study. This can not only hold back career success but it can cause the individual to become despondent, depressed and unhappy. The interrelatedness of career planning, institutions of learning and the workforce is notable and students should always take cognizance of this.

2.3 Academic institutions and the workforce

The importance of the link between academic institutions, the workforce and the economy is explained by looking at universities, universities of technology and colleges producing graduates who meet labour demands, thereby, indicating the degree of responsiveness by higher education institutions to national economic needs which provide insight into the changing nature of employment.

2.3.1 Relationship between institutions of learning and the labour market

With the rapidly growing economy desperately in need of skilled labour, unemployment among graduates would be assumed to fall. However, it was stated that unemployment has risen among young and better-educated people. The Development policy research unit (DPRU) at the University of Cape Town (UCT) research has shown that increased enrolment
at tertiary institutions has put more graduates into the labour market but not increased the rate at which they are employed. South Africa is faced with a unique employment problem as it has high levels of unemployment (estimated at four million job seekers as at 2005). South Africa has thousands of high-skill jobs available and there were approximately 180,000 graduates out of work, according to Statistics South Africa of April 2005 The Labour Force Study estimates that there were eight million South Africans unemployed which constituted 41 percent of the total SA workforce at the time (Stats SA April 2005). The survey mentioned that 3, 6 million were considered “discouraged workers” meaning they were economically active but discouraged from seeking employment because of a lack of opportunity (Stats SA website at www.statssa.gov.za/qifs/index.asp).

Having studied the situation and observing some industry insights into the problem, there are various causes that contribute to the problem of graduate unemployment. Looking at the fact that there is an oversupply of graduates in general, however, unemployment is higher for:

- Those with a diploma or certificate coupled with grade 12.
- African graduates, although this is partially explained by the massive increase in enrolment in African students at tertiary institutions.
- Commerce students – again, this may be because that is a field more people enroll in.

The demographics of South Africa’s workers are creating a new, diverse and changing workforce. There are more single parents, working couples, women and minorities. In Statistics South Africa (Stats SA), South Africa’s population in 2001 was estimated at 444,819,778 (Stats SA in Grobler et.al 2006:22). The resultant shifting labour force means that one needs to understand the limitations of the standard labour market and develop skills in alternative ways to look at the labour market. A distinction should also be made between being employed and being self-employed. While some may choose to work for an employer and a boss, others prefer to regulate their own work schedule and become self-employed. However, for the purpose of this study we will focus on graduates who are employed by an employer and not on those for being self-employed.

In a study conducted by Cosser et al. (Cosser et al. 2003) it mentioned that the outlook for graduate employment is influenced by three important demand and supply factors. These are:

- growth in the number of jobs requiring a graduate-level education,
- number of new graduates coming into the market and
ability of new graduates to apply for, and be offered jobs as employment positions becomes available.

A delicate balance exists between the workforce and the economy. A third factor namely academic institutions, also comes into play as universities, universities of technology and colleges are responsible for producing the graduates who will meet the labour demands.

Academic institutions are guided by the policies and procedures of the Council of Higher Education (CHE). The CHE is an independent statutory body that aims to contribute to the development of a transformed, equitable, high quality higher education system. This system should be capable of responding to the intellectual, ethical and human resource challenges of a democratic society based on social justice principles which operate in a global framework. The CHE oversees the South African higher education system which includes 23 public higher education institutions which consist of 11 universities, 6 comprehensive universities and 6 universities of technology. As at January 2009, there were also 79 registered and 15 provisionally registered private higher education institutions. At the operational level, the CHE is guided by the principles of generally accepted business practices, including compliance with applicable laws, commitment to organisational integrity, avoidance of conflict of interest, and observance of ethical standards. In addition, the CHE provides for a policy and work environment that encourages intellectual creativity, non-discrimination, diversity, innovation, diligence and responsiveness (www.che.ac.za).

The CHE is a formal statutory body established to oversee the educational development of our students and future labour market. It is therefore difficult to grasp why graduates are unemployed or why they are in a career for which they did not study.

As per the document of the South African Technology Network (SATN, 2008), it was stated that as we move further into the age of the knowledge economy, the workforce will require more sophisticated education and training in order to sustain competitiveness. The education and skills of individuals are seen as the key to both their personal quality of life as well as the broader strengths of their society (SATN, 2008). People are seeing education as their hope for leading meaningful lives. The perception is that one’s level of education is seen to be a primary determinant of one’s economic well-being. The SATN (SATN, 2008) document states that educational institutions and more specifically Universities of Technology such as CPUT must deliver appropriately qualified graduates to the labour market. It should therefore be closely allied to the business sector to ensure relevant curricula. Contact between employers and tertiary institutions are beneficial as employers can provide input on training for tertiary institutions; tertiary institutions can provide training to employer staff and employers can provide co-operative (co-op) education to students. By doing this, continual revision of the educational programs can occur.
According to South Africa: The Good News (South Africa: The Good News, 27 September 2007) it points out that one of the country’s biggest challenges is the mismatch between skills taught and skills required as is reflected in the number of unemployed graduates. The article makes mention of a study that was conducted by the South African Graduate Development Association which found that graduates are the fastest growing group swelling the numbers of the unemployed. Graduates are also to blame. According to the DPRU research (www.dpru.uct.ac.za), which shows that students prefer university qualifications to more practical further education and training college qualifications. Graduates would much rather obtain (for example) a human science degree than a technical diploma, despite the lower employment prospects attached to the former. Graduates are unemployed because of the poor quality of education in South Africa at all levels and in some universities, continued racial discrimination in favour of whites, lack of ‘soft skills’ such as time management, communication and creative thinking, lack of ability to work independently, and too-high expectations (University World News, 4 November 2007).

Since the days of apartheid, South Africa has experienced a devastating and well-publicised “brain drain” as graduates from world-class schools and universities pursued their trades in grateful recipient countries. The brain drain is certainly not unique to South Africa. We are operating in an open global economy and skills migration is part of globalisation. Unlike many of the developed countries, SA has precious few skilled citizens to share (The Good News, 15 April 2005).

2.4 Graduate Employment and Unemployment

Graduate unemployment in South Africa has doubled in the first decade of democracy, despite a worsening skills shortage, according to economists at the University of Cape Town (UCT). Research by the Development Policy Research Unit (DPRU) in Cape Town’s School of Economics (www.dpru.uct.ac.za) found that the promises of a “good job and prosperous life” associated with higher education have eluded many of the growing number of South Africans completing tertiary education.

2.4.1 Graduates and finding work

Due to the changes in society, workplace, work content and technology so the perceptions of work, work values and work goals have also changed. It is important for academic institutions to be certain that the content of their courses offered are relevant and current for what is required in the world of work.

It may not be that there are no opportunities for graduates, but rather that their expectations are too high. They expect that their qualifications will open the door to high salaries and management positions, and are not willing to start “at the bottom”. Ultimately there are many
more individuals in search of a defined career path thus increasing the competition for a limited number of jobs (Holden & Harte, 2004:272-282). The assumption is that individuals with a higher education qualification enjoy an advantage in the labour market. Their likelihood of being unemployed should be low and when it does occur, the period of unemployment should be relatively short. When graduates are employed, the employment opportunities are often relatively better paying jobs and these employees would quickly gain knowledge and work experience, which would further benefit them in the job market. However this is not experienced by all higher education graduates (Moleke:2005). The reality is that unemployment among graduates grew from 6.6% in 1995 to 9.7% in 2005, (University World News, 4 November 2007).

If the unemployment rate is to be halved by 2014, (the government’s stated objective) then five hundred thousand jobs a year will need to be created (South Africa: The Good News, 27 September 2007). Thus we can see that each party involved namely, education, graduates and government need to work together to accomplish the goal of reducing graduate unemployment in South Africa. Graduate unemployment is not only a South African issue but a global one. Global competitiveness seems to distinguish the well performing countries from the less successful ones. The distinguishing factor is their human capital and their capacity to obtain, apply and generate knowledge. In successful countries skills, technology, education and the economy interact in important ways to create a worthy cycle of productivity each feeding on the other (Wasserfall, 2009:1). In the same instance the job skills acquired in higher education institutions in South Africa should be relevant and recognised globally.

The Times of London, 14 Feb 2009 mentions that unemployed graduates should be prepared to stack shelves or work in a bar rather than travel the world or undertake further study, according to a report that predicted the first fall in recruitment in six years. The Association of Graduate Recruiters which represents hundreds of leading employers in the United Kingdom (UK) said that it expected graduate vacancies to decline by 5.4% in 2009. The findings are likely to come as a shock to many of the 2009 graduates. Even those who do secure a job in 2009 will find that for the first time in more than 30 years, starting salaries are frozen. The year 2009’s median graduate starting salary is stuck at the 2008 figure. The article stated that it will be very hard for graduates to secure their dream job the first time around. The key was to get any sort of job or an unpaid internship. In 2005 there was approximately 1, 4 million skilled South Africans overseas who may want to return home, but fear that they will battle to find jobs. Perhaps they’ve bought into the scare stories of the ‘pale male’ syndrome, that it’s almost impossible for white male professionals to find work in South Africa, and that the practice of Broad Based Black Economic Empowerment Codes of Best Practice are ‘reverse discrimination’. There is pressure on the corporate community to ‘transform’, but nonetheless there is huge opportunity in SA for skilled workers. It is
estimated that for every returning skilled professional who sets up shop in SA, at least six new jobs are created (South Africa: The Good News, 15 April 2005).

Employers can afford to be more stringent in choosing employees now that there are so many graduates available. If one has had experience doing any sort of job, you would have gained skills and contacts and that will make you more attractive in the job market. South Africa needs to tackle the weaknesses within its education system and companies should absorb more graduates and provide them with additional training where necessary.

2.5 Graduate skills

Before embarking on a course of study, graduates should consider their skills and the shortages in the workplace. By doing this graduates will ensure that they find a job because they will have the knowledge and skills that potential employers are looking for.

2.5.1 Graduate employment opportunities

When employers have jobs to fill, they advertise positions. As a result they recruit applicants. Recruitment is the process of acquiring applicants who are available and qualified (Carrell et al. 2006:166). Recruiting methods are as varied as the companies doing the recruitment. Some companies rely on word of mouth and some are required by law to place a written advertisement in specific publications. Accepted methods include classified ads in newspapers or trade journals, walk-ins, job fairs, campus recruiting and other clever activities recruiters can devise (Brannick et. Al 2002:219). Selection on the other hand is the process of choosing from a group of applicants the individual best suited for specific positions (Carrell et al. 2006:166). Employers are often unaware that when searching for potential employees they are applying the trait-and-factor theory of matching individual characteristics called traits to the job. The trait-and-factor approach is a development of the matching men and jobs approach.

In the study conducted by Cosser, the aim was (Cosser et al. 2003) to find out exactly how graduates went about looking for work. An important study when trying to determine why graduates are unemployed is to first determine how they went about trying to secure a job.

Below are a few techniques graduates adopt when seeking employment. These are true for everyone and some techniques are more effective than others. These are:

- personal contacts,
- relatives,
- newspaper advertisements,
• an employment agency,
• an employer visiting the academic institution recruiting employees,
• working for the same employer for whom the graduate worked for before studying,
• working for a family business,
• holiday jobs during the study period,
• self-employed,
• paying back a study loan received by an employer to study and
• placing an advertisement in a newspaper stating the availability to work.

Below are factors that helped graduates secure their first job as mentioned by the graduates themselves (Cosser et al. 2003):

• Having the qualification,
• the confidence which the qualification gave the graduate,
• references,
• work experience acquired during the course of study and
• help which the institution gave the graduate for the job interview.

People understand that attaining a higher education is what gets the job. Possessing a higher education qualification will help open doors for entering the world of work and competing with many other graduates for the job you want (Wasserfall, 2009:1).

In the same study graduates were asked which other factors besides having a formal qualification helped them secure their first job and it was surprising to note that something as simple as having a driver’s license were among the responses.

Below are factors graduates indicated helped secure them their first job. These are:

• having a driver’s license,
• having a qualification,
• having leadership qualities that were developed during the higher education period,
• having obtained good results,
• having been motivated by lecturers,
• being skilled,
• having a strong work ethic,
• having gone through co-op education,
• being bilingual in English and Afrikaans,
• having strong communication skills,
• having previous job experience,
• having a post tertiary qualification,
• having received computer training,
• being self-confident and
• parental support.

A graduate tracer study was conducted by the Association of African Universities on graduates of the University of Makerere in Dakar, Senegal (Mayanja:2002) which investigated the match between the university qualification and the job requirement and the destinations of graduates. According to this study the job opportunities are diminishing. The periods for searching for a job are increasing and self-employment doesn’t seem to provide a viable alternative as very few graduates venture to establish their own enterprises. In a study conducted by Bruwer, which is still applicable today, the higher education policy in South Africa is placing increasing emphasis on institutional accountability with reference to employability of graduates. These indicators aim to measure the success in the different academic disciplines in obtaining a satisfactory first destination employment after graduation (Bruwer, 1998). Bruwer found that a graduate’s first destination permanent employment position gives an indication of the matching process that takes place between the employer and the employment seeker, the graduates’ employability and the state of the labour market.

The study was conducted from a sample frame of all known 1984-1997 former Cape Technikon now CPUT Cape Town campus, alumni. The findings were as follows:

• Newly qualified young graduates spent an average of 1.9 years in their first destination position.
• Graduates do not all begin seeking employment immediately after graduation, they start when they are motivated enough to do so which averages 1.1 months after graduation.
• The active job search period is on average 1.8 months.
• Graduates aspire to be employed in positions with the best remuneration, job conditions and prospects for advancement.
• More than half of the graduates in this study perceived their current job position to be highly related to their field of study.
• It was also found that a total of 88.4 percent of the graduates in this study indicated that the institution was effective in providing them with the knowledge and skills required for their current job position with 51.2 percent emphasizing that the preparation they received was exceptionally high or more than adequate (Bruwer, 1998).
Throughout the world different countries are trying to create closer synergies between the needs and purposes of their education and training systems, their local and regional labour markets, and their national economies. This is largely due to an international consensus which, though contested, argues that people and organizations need to embrace new skills and knowledge at regular periods in order to meet the challenges of a much more dynamic and unstable economic climate (inter alia, Ashton & Green 1996; Brown, Green & Lauder 2001; Field 2000; Nieuwenhuis & Nijhof 2001 in Cosser et al. 2003). In addition, more workplaces require their employees to use their cognitive skills in order to engage in decision making, problem solving and teamwork. Such developments ask important questions of education systems in terms of curriculum content, teaching and learning processes, assessment and qualification structures and the expertise of educational professionals.

The study conducted by Cosser found that the extent to which the graduates used the knowledge and skills acquired during their studies in their jobs varied (Cosser et al. 2003):

- 28 percent of the graduates indicated that they used their skills to a small extent or not at all.
- 56 percent said they used their skills to a large extent.

The study found that nearly two out of five graduates employed had to accept employment in an area not linked to their education.

Improving the success of graduates’ employability at the undergraduate level remains one of the key challenges in the South African higher education system. Continually improving graduates’ employability will ensure that graduates have the necessary skills to do the job and also ensure that graduates do not migrate away from what they have studied when entering the job market. According to Stats SA focusing on the unemployment rate by education level it was stated that lower unemployment rates are associated with higher levels of education. From Q1:2008 the unemployment rate for persons without matric was higher than for those with matric or a higher education level (Stats SA website at www.statssa.gov.za/glfs/index.asp).

2.5.2 Graduate employment not linked to higher education qualification

It was found that 60 per cent of students chose to study something because they were interested in it, and only 23 per cent chose it because of the employment opportunities. It appears there are too many commerce degree-holders (who account for 28% of jobless graduates) and an oversupply of black African graduates, whose numbers have grown massively and who accounted for 85% of the tertiary unemployed in 2005. There is a
shortage of mid-career staff in critical industries, such as civil engineering, which is contributing to growing levels of graduate unemployment in South Africa (South Africa: The Good News, 27 September 2007).

Graduates in positions not appropriate to their qualification accepted these jobs for the following reasons, according to Cosser (Cosser et al. 2003):

- not able to find a better job linked to the qualification,
- the job will improve future job opportunities,
- do not mind having a job not linked to the qualification,
- had to accept a first job that wasn't linked to qualification,
- job allowed me to take care of family needs,
- could earn more money,
- the job was more interesting,
- the job allowed for working part-time,
- promoted to a position not closely linked to qualification and
- job allows for working anywhere.

According to Schreuder & Coetzee (Schreuder & Coetzee, 2006:163) the early career is the period of career establishment or stabilization. The organisation must assist new employees in fitting into their jobs and provide the necessary training, while employees should be willing to learn about the job and themselves in order to evaluate their job match.

2.6 Employer satisfaction with graduates

The labour market, like every other market, is subject to the laws of supply and demand. The Human Resource department understands the cost of replacing staff. Marketing people know that some customers are more valuable to the corporation than others. Companies have almost always tried to fit people to jobs. Fitting people to jobs generally fails to serve the individual employee’s primary interest, which is to fit the work into his or her life situations and future plans. So when supply and demand in the labour market favors the employees, companies should think of current and potential employees as customers and make an effort to recognize and satisfy their needs. Job customization considers the product and services aside of the economy (Luecke, 2002 88-99).

Moleke (Moleke, 2001:215) writes: While the education institutions produce a considerable number of graduates, the skills they possess do not match the skills the economy needs to make great strides…
Once all candidates have been interviewed the hiring decision must be conducted. An objective evaluation of each candidate must be done. After the candidates have been employed and have settled in the new work situation, employers will form opinions with regards to the graduates’ performance. It is important to make mention of and try and ascertain the levels of satisfaction employers have with new graduates in their employ. Every year graduates need to make the transition from tertiary study to the world-of-work. With three years of higher education behind them and a National Diploma in hand, marketing graduates set out to find themselves a job. Marketing graduates will make decisions regarding career choices, undergo job searches and, if successful, will then progress to what may be their first career position.

It was noted in the University World News: The global window on higher education, that graduates are not always employable (University world news: 4 November 2007). A survey that was done by the Development Policy Unit of 20 of South Africa’s top companies revealed that the companies were not always able to use graduates to meet the skills requirements. This was due to the following reasons:

- graduates have the qualifications but not always the practical skills and experience,
- the wrong types of graduates are being produced (there are too few technical graduates),
- frequently graduates are not suited to fill shortages at management level,
- skilled staff are often poached by other companies or emigrate and
- graduates are not always of a high enough quality.

Taking cognisance of the above mentioned points, in a graduate tracer study conducted by Cosser, (Cosser et al. 2003) an employer satisfaction survey was also conducted and was intended to complement the information collected through the tracer study, with the aim of providing more information about the higher education to work transition. Its overall aim was to ascertain the levels of satisfaction employers had with technical college graduates in their employ. To achieve this aim the study looked at employer familiarity and satisfaction with, in this instance:

- Technical colleges themselves,
- Technical college graduates,
- Technical college graduate courses,
- Graduate work skills.
In this study 83 percent of employers indicated that they were either satisfied or very satisfied with the contact established with technical colleges. Employers were satisfied with relevance of graduates’ course content to business needs. Most employers also regarded the competency of college lecturers as satisfactory. The extent to which college courses balanced theory and practice seemed to be the least satisfactory element of graduates’ courses. Although most employers seemed satisfied with the relevance of the graduates’ course content to business needs, they also indicated that such relevance is an area that still warrants some improvements. This was, however for technical college graduates and not for university or university of technology graduates.

Most of the employers surveyed seemed to value employees' positive attitude towards work, practical job skills and problem solving the most. Below are the kinds of skills that employers viewed as extremely important in their working environments:

- oral communication skills,
- a professional approach to work,
- the ability of employees to use their initiative and work with minimal supervision,
- the ability to adapt to changes in the workplace and
- the ability to use current technology in the workplace.

When the study moved on to look at the graduates' work skills there were a number of areas employers felt could still improve. The most important work skill here again was the graduates’ problem solving abilities. This is an area employers rated as being extremely important and in which graduates emerging from technical colleges needed to improve.

The other two skills employers felt needed improvement were:

- practical job skills and
- ability of graduates to use their initiative.

Some of the skills sought by employers in marketing graduates as stated in the conference (ANZMAC, 2002) range from generic skills such as critical thinking skills and communications skills to those mentioned below,

- literacy skills,
- numeracy skills,
- basic computer skills,
- time management skills,
- written business communication skills,
- oral skills,
interpersonal skills,
problem solving skills and
overall comprehension of business processes.

In addition to the above mentioned skills, graduates also need to learn and develop personal attributes that employers look for when recruiting new graduates.

Such as:

- enthusiasm
- motivation,
- ambition,
- maturity and
- personal presentation.

The CPUT marketing graduate tracer study is intended to assist the Marketing department of CPUT in determining the level at which its programmes are adequately preparing graduates for the job market. The findings of the tracer study may thus be used as input during recurrículation. Questions that will be asked of the Marketing graduates will help to determine if the marketing programme is adequately preparing them for the job market. Below are examples of the type of questions that will be asked:

- the extent to which they use the knowledge and skills acquired from the marketing course,
- areas that are important but were not included in the Marketing course programme,
- suggested changes in the Marketing course content and
- the importance of practical training as part of the course.

2.7 The need for graduate tracer studies

Koen (Koen:2003) supports conclusions made by Moleke & Albertyn (Koen:2003) that where national graduate studies are concerned, several studies conducted have defined high graduate unemployment as the main employment problem. Studies have focused on graduate outputs and outcomes and the existence of a distinct knowledge gap. A core feature of graduate tracer studies is that they typically place graduate employment, unemployment and skills and competency results in their wider political and policy contexts and attempt to establish whether higher education institutions provide graduates with the attributes, knowledge, skills and competencies required in the labour market (Koen:2003). Academic institutions such as CPUT require a major research database from which graduate samples could be drawn. The onus should be on every academic institution to undertake
their own graduate tracer study and not only rely on the Human Science Research Council (HSRC) to assume the responsibility for graduate tracer studies. Ideally, academic institutions should conduct tracer studies within the institution and the HSRC could perhaps conduct national studies. Therefore this research database provides for a valuable research resource that can be used to record annual graduate output, trend analysis and a tool to track graduate job changes and mobility in the labour market over different decades. What this may highlight is that over and above qualification output, a serious deficiency exists in attempts to understand the labour market contribution of graduates (Koen:2003). CPUT does however conduct bi-annual alumni surveys but the body of research is uneven in terms of depth and analysis and merely provides tabular results on the characteristics of graduates, their employment uptake and satisfaction levels. Alongside the graduate tracer studies the employer satisfaction and perception studies is conducted. The justification for employer perception studies relates to the labour market relevance of the knowledge and skills currently being acquired at higher education institutions. Graduate tracer studies and employer satisfaction studies are an attempt to obtain feedback on the usefulness and quality of graduates produced by higher education institutions. This kind of research will help highlight the quality of qualifications and student competence and will also show employers requirements of knowledge, skills and competencies that students lack.

2.8 Concluding remarks

This chapter sought to describe the status of research on graduates and the value that graduate tracer studies could hold. An important finding was that researchers have not sufficiently appraised the knowledge yielded by graduate studies and have not sufficiently explored links between educational study, the curriculum, higher education training, the world of work, graduate career trajectories and the changing labour market characteristics. One indicator of the current state of affairs is the absence of debate about graduate unemployment despite the fact that the South African Graduate Development Association (SAGDA) has for many years suggested that unemployment figures are higher than those suggested by national graduate studies. It was found that the key graduate employment problems relate to the demographics of graduates, mismatches between graduate skills and labour market needs, shortages in key fields and bias in terms of institutions attended.

Moleke (Moleke:2005) said that a graduate tracking system can provide prospective and current students and their employers with in-depth information in the way in which the graduate labour market works, thus helping them to make realistic plans. Prospective students or students that are currently studying Marketing at CPUT may find the results of the tracer study useful as it could provide them with an indication of the numerous directions
that graduates take after completing their qualification. Above all there is little known about the lives of graduates and the results of this study will yield fascinating insights into the aspirations of graduates. The value of the data is that it casts some light on differences in the workforce size in different employment sectors and different types of industries within the marketing sector.

The situation today is of such a nature that more and more graduates enter into the world of work in a field for which they did not study. It has become difficult for graduates to secure their dream job the first time around.

In the following chapter the researcher will explain the research to be conducted. This research will investigate the research question and the research methodology will be explained. In Chapter Three the researcher will clarify how to follow a process in which data needs to be collected while maintaining the validity and reliability of the information obtained. This data will add value to the Marketing department as it will reveal whether or not CPUT marketing graduates are working in a marketing-related industry and provide insights into the Marketing course. The questionnaire ultimately is a tracer study which will help determine the alignment between what is learnt at CPUT and what is actually done at work.
CHAPTER THREE
RESEARCH PLAN AND DESIGN

3.1 Introduction

Conducting research to investigate a hypothesis or research question requires data to be collected from the objects of enquiry in order to solve the problem concerned (Welman & Kruger, 2002:46). The research design is the plan of going about obtaining research participants and collecting the relevant information from them. The researcher will describe what will be done with the participants with the view to reach conclusions about the research problem.

The researcher will undertake a mixed methods study primarily in the form of a graduate tracer study and the research plan and design will adopt a quantitative and qualitative approach. The quantitative research by means of a survey will trace whether National Diploma Marketing graduates' first work destination is in a Marketing-related field. This project will use research gathered by means of a convenience sample based on telephone numbers obtained from CPUT alumni office. Respondents were contacted first via telephone and thereafter the survey was administered via print or e-mail, whichever was more suitable for the respondent. Respondents could also complete the survey by means of a survey link emailed to the respondents which was developed by the statistician. If the respondent preferred the survey to be concluded via telephone, the researcher concluded the survey in this manner. A total of 50 respondents were contacted.

Two qualitative surveys were administered after the quantitative research. The first survey was intended for the employers of graduates and this was conducted telephonically. The second survey was intended for the lecturers who trained the graduates and this was administered electronically. The researcher incorporated a qualitative aspect to the research in order to encompass a holistic view of the study and to mitigate the effects of the small quantitative sample. This confirmed whether, what the graduates were taught, was relevant and needed in industry. It also proved what employers looked for when employing graduates. The qualitative study entailed a telephonic interview with a sample of employers of the graduates surveyed, who was found to be in a Marketing-related field. A questionnaire was e-mailed to the lecturers who trained the graduates. This research yielded interesting insights into the study.

3.2 The aims of the research

The responses added value to the Marketing department as it revealed whether or not CPUT marketing graduates are working in a marketing-related industry.
The aim of the research was to find out the destinations of a sample of full-time Marketing graduates of CPUT who have graduated between the years 2001 to 2008 but was later extended to 2010. The aim was to determine the nature of employment after graduation and to discover possible reasons why the marketing diploma graduates of CPUT first work destination is, or is not, in a marketing-related field. For the purpose of this tracer study the focus was on graduates with a National Diploma in Marketing and to identify the nature of first destination employment. Some respondents were completing or had completed further studies in Marketing at the time the survey was conducted. Respondents were full-time students who had successfully completed the three year Diploma course at CPUT. This study incorporated a sample of students who graduated between the years 2001-2008 later extended to 2010. The tracer study helped determine the alignment between what was learnt at CPUT and what was executed at work and also whether or not the graduates are given the opportunity to apply what was learnt.

3.3 Research methodology

The most appropriate structure and methodology was followed in order to yield the most accurate results. Criteria were established and data was gathered and collected. Data was handled in an appropriate manner to maintain its validity and reliability.

3.3.1 Population and sample

A sampling frame or sample frame is the actual set of units from which a sample has been drawn. For the purpose of this study the researcher conducted a non-probability sample in the form of a convenience sample. The advantage is that convenience samples are less complicated and more economical in terms of time and financial expenses than probability samples and is especially useful in pilot studies (Kruger & Welman 2002:62). Pilot studies are a preliminary form of questionnaire testing. The researcher undertook a pilot study to ensure that the questionnaire is accurate and easily understandable by the respondents.

One of the most common types of non-probability samples is called a convenience sample. Convenience samples are common not because such samples are necessarily easy to recruit, but because the researcher uses whatever individuals are available, rather than selecting from the entire population. In this study the researcher used a convenience sample based on telephone numbers. With convenience sampling, or more specifically non-probability sampling, population elements are selected on the basis of their availability (e.g. because they volunteered or are available) or because of the researcher’s personal judgment that they are representative. The consequence is that an unknown portion of the population is excluded because some members of the population have no chance of being sampled. The extent to which a convenience sample, regardless of the size, actually represents the entire population cannot be known. In the case of a convenience sample the researcher
chooses the individuals that are easiest to reach or sampling that is done easily. Convenience sampling does not represent the entire population, so to an extent it is considered biased. (http://psychology.ucdavis.edu/rainbow/HTML/fact_sample.html).

A convenience sample was taken from CPUT marketing graduates. This project used research gathered by means of a convenience sample as the necessary lists were readily available in the form of student profiles. Student profiles are data collected about the student at the beginning of each year by the Marketing department. The convenience sample will be based on telephone numbers and class lists received from the CPUT Alumni office and the Marketing department. Both sources are useful in that the CPUT Alumni office is in possession of student numbers whereas the lecturers in the Marketing department will have class lists.

The sources used to compile the convenience sample are listed below:

- student profiles,
- class lists,
- e-mail addresses,
- telephone numbers,
- alumni lists and
- social network site

3.3.1.1 Advantages and disadvantages of a convenience sample

The researcher examined the positives and negatives of the convenience sample. For the purpose of this study the convenience sample was a suitable method as the researcher selected the students at the convenience of predetermined lists accessible to the researcher (http://argyll.epsb.ca/jreed/math9/strand4/4106.htm).

Advantages:
- easy to access,
- cost-saving and
- time saving

Disadvantages:
- lends to sampling bias,
- representation of the population can be inaccurate,
- cannot be generalized to the population as a whole and
- the telephone numbers might be out of date

Some of the disadvantages of this sampling method were experienced by the researcher as the researcher used only resources that were available and the telephone numbers were out
of date which lent to the researcher having to come up with alternative methods to contact respondents.

3.3.2 The quantitative research

All research designs which focus on the analysis and prediction of the composition, dynamics and behavior of individuals, teams and organizations using numerically expressed data is known as quantitative research. Structured questionnaires were used incorporating mainly closed questions, viz. questions with set responses (Welman & Kruger, 2002:68).

3.3.2.1 Research instrument

A questionnaire is a research instrument that contains a series of questions for the purpose of gathering data from a specific group of respondents. Questionnaires are used in survey research (Babbie, 2007:246). The researcher first assembled the questions then presented it to the respondents in the form of structured questions. Thereafter the questions took the form of attitude scales in terms of “agree” and “disagree” questions also known as the Likert scale. Attitude scales is a temperament towards a particular issue known as the attitudinal object (Welman & Kruger, 2002:84). The Likert scale was introduced in 1903-1981. It is at present the most popular type of scale used (Welman & Kruger, 2002:150). It is easy to compile and can be used for multi-dimensional attitudes, which is not possible with other scales. The Likert scale consisted of a collection of statements regarding the graduates’ perception about the Marketing course. In respect of each statement, the respondents indicated the degree to which they agree or disagree with the content.

During the actual study respondents were contacted first via telephone and thereafter the survey was administered via print or e-mail, whichever was more suitable for the respondent. Respondents could also complete the survey by means of a survey link emailed to the respondents which was developed by the statistician. If the respondent preferred the survey to be concluded via telephone, the researcher concluded the survey in this manner. Surveys are useful for documenting studies of a quantitative nature and can provide a broad overview of representative samples of a large population (Mouton, 2001:152).

3.3.2.2 Advantages and disadvantages of survey questionnaires

Advantages:

- relatively inexpensive as it will be self-administered,
- anonymity is possible,
- can be administered from remote locations
- many questions can be asked, giving flexibility to the analysis and
- standardised questions make measure more precise.
Disadvantages:
- standardization forces the researcher to develop general questions,
- low control over responding and
- response rate may be low

The survey was directed by first contacting respondents via telephone and thereafter the survey was administered via print or e-mail. Respondents could also complete the survey by means of a survey link emailed to the respondents which was developed by the statistician. If the respondent preferred the survey to be concluded via telephone, the researcher concluded the survey in this manner.

3.3.2.3 Advantages and disadvantages of e-mail

Advantages:
- fast,
- cheap,
- easy to use,
- efficient,
- effective in providing instant answers to yes or no type questions and
- information can be distributed quickly to many people in the time it takes to e-mail one person simultaneously.

Disadvantages:
- e-mail can become time consuming for answering complicated questions and
- misunderstandings can arise.

(http://wiki.answers.com/Q/What_are_advantages_and_disadvantages_of_e-mail).

3.3.3 The qualitative research

The aim of qualitative research is to uncover the general laws of relationships. It seeks to understand social and psychological phenomena from the perspectives of the people involved (Welman & Kruger, 2002:181). Qualitative research seeks out the ‘why’, not the ‘how’ of the topic through the analysis of unstructured information such as interview transcripts, feedback forms, photos and videos. The researcher chose to conduct telephonic interviews with employers of those graduates who are employed in a marketing-related industry. The questions for the interviews where predetermined and could be issued to the employer beforehand if they so requested. The employer interview consisted of a list of five questions posed to the employers regarding their satisfaction level with the graduates. The
responses were captured by the researcher and the information was analysed by the statistician and the researcher using a thematic analysis approach.

A questionnaire was administered to lecturers who trained the graduates with specific questions pertaining to the relevance of their training. This information was analysed using a thematic analysis approach.

Looking at the employer, the researcher used this to gain insight into the employers’ attitudes, behaviors, concerns and motivations. The researcher was able to ascertain from the employer why they chose the CPUT marketing graduate above all the other candidates.

The researcher used the lecturer questionnaire to determine from them how they ensured that their training was current and suitable for industry.

Mention is made that the researcher adhered to the ethical principles during data collection by informing the respondents upfront who and why the research is being conducted and the responses would be recorded anonymously and kept in the strictest confidence and no identifiable information would be collected from the participants and no identifiable responses would be presented in the final form of this study. Thereby, granting the respondents equanimity in participating in the research.

3.3.3.1 Advantages and disadvantages of the telephonic interview method

Advantages:
- They are time and cost effective.
- No need to spend time travelling.
- A number of different people can be reached in a relatively short period of time.
- Some may feel less uncomfortable disclosing information over the telephone than face-to-face.

Disadvantages:
- A substantial amount of pre-planning is required.
- The researcher will have to take into consideration all of the ethical and legal issues and requirements involved.
- A respondent could terminate the interview by simply putting down the phone.
- The researcher will not be able to see the respondent to read the non-verbal communication.
3.3.4 Data analysis procedure

Once the overall data collection strategy was determined the researcher decided how the information would be collected, managed and analysed. The researcher indicated different methods in which to logically look at the data and observe the themes, trends and patterns in the research findings. The researcher then evaluated and categorized the information. This analysis was guided by the purpose of this study. (Reid & Smith, 1981:242). The qualitative data was analysed by means of a thematic analysis the researcher identified common themes emerging from the research findings. These themes were categorized and interpreted.

3.3.5 Validity and reliability

Validity answers the question whether the instrument that was used measures what it is should to measure. The correct instrument and procedure should be used to get the correct result. For this reason the researcher chose to use a questionnaire for this research study. The researcher designed the questionnaire keeping in mind the aims and purpose of the research. The statistician also reviewed the instrument as to ensure validity and to help confirm the results obtained meet all the requirements for research. The researcher ensued randomization by incorporating a convenience sampling method.

Reliability is critically important to ensure that the instrument used is reliable and safe and that the findings of the data are a true reflection of the original objectives of the research. The researcher should be certain that the results will be the same under the same conditions by someone else and at a different time. The researcher ensured the reliability by looking at the hypothesis and designing the research to be inherently repeatable.

3.3.6 Limitations

- The study was conducted within the Cape Peninsula University of Technology only.
- The study only incorporated graduates residing in Cape Town.
- The study focused on National Diploma Marketing full-time students only.
- Initially, full-time Marketing students who graduated between 2001-2008 but was extended to 2010 were included in the research.
- Views and perceptions were sought from the main subject lecturers in the Marketing department only.
- Only opinions of employers of graduates who have been employed in a marketing-related field were sought.
3.4 Research and data collection procedure

3.4.1 Introduction

The methodology followed was to first pilot the questionnaire and observe the effectiveness of obtaining responses and thereafter proceed in completing the research. Research gathered by means of a survey will trace whether National Diploma in marketing graduates’ first work destination is in a marketing-related field. The research was gathered by means of a convenience sample based on telephone numbers and e-mail addresses.

3.4.2 Piloting the questionnaire

The questionnaire was piloted to respondents. The aim of the pilot study was to conclude whether or not the chosen method of obtaining feedback via telephone numbers and e-mail addresses would be sufficient and effective.

The researcher chose a sample of random respondents that graduated between the year 2001 and 2008 to pilot the questionnaire. The sample was randomly chosen on the basis that both the telephone numbers and e-mail addresses were available. The researcher proceeded to first contact the respondents via telephone and discovered that the telephone numbers were no longer valid. Thereafter, the researcher proceeded to e-mail the questionnaire to the stated e-mail addresses. The respondents had one month to answer the questionnaire and e-mail it back to the researcher.

This method of obtaining feedback from respondents proved to be ineffective. The researcher then adopted a new and innovative method of obtaining feedback.

3.4.3 Revised data collection procedure

Due to the difficulty of obtaining responses during the pilot study the researcher chose an alternative method to obtain responses.

After the given period of time had elapsed to conclude the pilot study, the researcher consulted a popular social media tool called Facebook to trace familiar marketing graduates. The researcher left a short message regarding the research and asked the various respondents to forward the researcher their contact numbers. The researcher proceeded to call the respondents and conduct the survey via telephone. The respondents were asked the stated questions and the questionnaire was completed by the researcher on their behalf. The researcher incorporated a snowball sampling technique as once the questionnaire was completed the researcher asked the respondent to refer other marketing graduates. The same procedure was then followed. This snowball sampling technique proved to be effective.
A second method was also adopted by the researcher. When the respondent was unable to complete the questionnaire via telephone or e-mail the respondent had the option to complete the questionnaire online. The statistician developed an online questionnaire using the pro.surveyshack technology. Instead of the questionnaire being e-mailed to the respondent, an electronic version of the questionnaire was created by the statistician and the respondent was e-mailed a link to the survey, which could be completed online. The data entered on the questionnaire using the link, allowed the information to be uploaded automatically. Thus, the statistics were automatically updated each time a respondent completed a questionnaire. This method also proved effective.

The researcher and statistician obtained the feedback immediately and the respondents were more willing to answer the questions via telephone and the automatic link process. These methods were effective as no extra work was required by the respondent other than to complete the questions.

### 3.4.4 Data analysis

This process provided the researcher with an opportunity to evaluate the quantitative and qualitative research and to sort the data into trends. The data was disseminated which assisted in building explanations and the preparation of results. Babbie (Babbie, 2007:450) highlights the fact that there should be a link between the variables of the current results and the original research design and research question. The data analysis is further discussed in Chapter four.

### 3.5 Concluding remarks

The lists available from the Marketing department and the Alumni office provided a suitable platform to start the research. Alumni tracer studies are notorious for producing smaller than ideal sample sizes therefore the researcher incorporated a qualitative aspect to the research in order to encompass a holistic view of the study and to mitigate the effects of the small quantitative sample. Consulting the social media tool and then administering the questionnaire via telephone proved to be more advantageous than via e-mail. The researcher was able to clearly explain the objectives of the research and respondents were more willing to answer the questions. Feedback was immediate and therefore the researcher did not have to wait for a long period of time before responses were received. The ultimate aim of the research study is to use all the data collected and provide a holistic overview of the research question to the value of the CPUT Marketing department. The researcher provided an overview and understanding of the research methodology used in the
quantitative and qualitative research. Tracer study research is essential to help determine the transition from tertiary study to the world-of-work and to ensure the relevance of training.

In the following chapter the researcher analyses the data collected by means of tables and graphs to illustrate the trends that emerged during the data collection process.

The following categories of the questionnaire are explained and interpreted in Chapter four:

- demographic details,
- opinions and
- attitudes.
CHAPTER FOUR
DATA ANALYSIS & RESEARCH FINDINGS

4.1 Introduction

This chapter focuses specifically on whether or not the marketing graduates’ first work destination is in a marketing-related field or not and an exploration of the graduates employment status and type of employment in the various fields of marketing as discussed in the preceding chapters and literature review will be assessed. The findings of the study are subsequently discussed to provide further insight and understanding.

During the quantitative research process questionnaires were administered via e-mail, online survey technology and telephonically. For e-mail responses a specific timeframe was given to complete the questionnaire and return it electronically. Graduates who chose to complete the questionnaires using the online method were e-mailed a link to an online version of the survey which could be completed. The data entered on the questionnaire using the link allowed the information to be uploaded automatically.

The convenience sample selected comprised of 50 graduates belonging to different cohorts between the years 2001-2010 and responses were obtained from 26 graduates using one of the three methods either via e-mail, telephonically or online survey. It is evident that this reflects a small sample size for a tracer study of this nature but Alumni tracer studies are notorious for producing smaller than ideal sample sizes therefore the researcher adopted more innovative methods to try and recruit more participants and also included the qualitative aspect by incorporating the employers and lecturers into the research.

The questionnaire was divided into three sections:

Section A: Demographic factors

Section B: Work experience

Section C: Academic information

Section D: Course experience

Section E: Subject expectations

Section F: Fit between education and work
Results from the 26 respondents were analysed and interpreted in the form of tables and graphs. The findings were further compared with the information recorded in earlier chapters to determine whether it is in line with the objectives of the research.

During the qualitative research process questionnaires were administered via e-mail to the employers before a telephonic interview was held. A short telephonic interview was then held with the employers of those graduates who successfully obtained a job in a marketing-related field. The researcher conducted the interview and data captured the responses of the employers. The list of questions for the employer consisted of 5 opinion questions regarding employer satisfaction with the graduate. The data was interpreted and analysed by means of a thematic analysis.

A questionnaire was also sent to the lecturers for completion. A specific timeframe was given to complete the questionnaires and questionnaires were returned electronically to the researcher. The lecturer questionnaire consisted of 4 questions regarding the relevance of the training of students and the data was interpreted and analysed by means of a thematic analysis.

4.2 Data coding and cleaning

The data coding and cleaning was achieved through data preparation involving the capturing of data into a digital format. It involved checking the data for accuracy and transforming the data where necessary. Missing data was identified and addressed in a consistent manner. The technique used was to enter data into an online survey system which automatically converted the data into a digital format. The advantage of using an online system was that it reduced human error that might have occurred from manually capturing data into a spreadsheet, thus ensuring that the accuracy of the data was kept intact. Missing data was easily identified and accounted for because the online system prevented any incomplete questionnaire responses from being captured.

4.3 Data presentation

This section focuses on the visual presentation of the data by means of graphs and tables which will make it easier for the reader to understand. The original raw data was reworked, interpreted and plotted into a different format, which allowed the researcher to explain responses to individual questions. Trends were categorized in order to assist in the analysis and interpretation of the data.
4.4 Data Analysis

The quantitative technique was employed as part of analysing the data. Bernard, (2000:419) states that most methods used for quantitative analysis is powerful tools for finding patterns and interpreting the data. The next phase evaluated and analysed the collected data.

Descriptive statistics were used to explain the content of the statistics. Graphs and tables explained the data collected. The quantitative aspect of this research focused on finding where students are located within the marketing industry and also their opinions and expectations of the Marketing course.

The researcher also used a qualitative research to collect and analyse data regarding the employer experience with a CPUT marketing graduate and the information regarding the relevance of the training that the graduates underwent. A thematic analysis was undertaken to identify qualitative themes with regards to the reality and experiences of the employers with the graduates who participated in the research and also the lecturers who trained them.

4.5 Interpretation and findings

The researcher interpreted and analysed the problem and sub-problem statement and then compared it to the objectives and sub-objectives of the research. The following was revealed.

Looking first at the main objective the findings were:

Figure 1: Major Fields of education
From the evidence above the researcher found that the majority of respondents were employed in the Marketing sector. Associated sectors were Advertising and the Retail sector. The respondents therefore were in an industry, or related industry for which they had studied. Looking at the findings of the sub-objectives the researcher’s findings were:

**Figure 3: Employment status**

**Figure 4: Finding out about the job**
The majority of respondents were employed. Based on this it can be deduced that employers were satisfied with the respondents’ qualification and training and therefore employed them. The majority found employment via advertisements in the newspaper and from referrals by family and friends. The researcher deduced that even though social networks and the internet exist, newspapers and the referral method are still actively used.

The sub-objectives were to identify the nature of the employment. The researcher discovered the findings were as follows:

**Figure 5: Job is marketing-related**

Most respondents were employed in marketing or a marketing-related job. Graduates are seeking and finding employment in the area for which they studied.

**4.6 Descriptive statistics of each question in the questionnaire**

**Section A: Demographic factors**

**Question 1: Gender**

**Figure 6: Gender**
Based on the above information 26% of respondents were male while 74% of respondents were female. The researcher deduced that more females opt for Marketing as a course of study.

**Question 2: Home language**

**Figure 7: Language**

![Graph showing home language preferences](image)

English was 75% of respondents' home language. The second most common language was Afrikaans and then Xhosa.

**Question 3: Age at completing highest qualification**

**Figure 8: Age at qualification completion**

![Graph showing age distribution](image)
This finding showed that 73% of respondents completed their qualification when they were between the ages of 22 and 24. Based on this finding the researcher deduced that respondents pursued further studies.

**Section B: Work experience**

**Question 4: Employment status**

![Pie chart showing employment status](image)

- **92%** Yes
- **8%** No

**Figure 9: Status of employment**

The employment status showed that 92% of the respondents are employed with the remaining 8% being unemployed. It can be deduced that most respondents with a qualification from CPUT are employed.

**Question 5a: Length of unemployment**

**Figure 10: Period of unemployment**

- **0%** 3-6 months
- **0%** 9-12 months
- **50%** 13-24 months
- **50%** Other

The period of respondents being unemployed is between 13 to 24 months. It was deduced that the respondents' period of unemployment was less than 1 year and not longer than 2
years. This can be related to the study conducted by Bruwer from the former Cape Technikon (Bruwer, 1998) where it was found that a total of 88.4 percent of the graduates in the study indicated that the institution was effective in providing them with the knowledge and skills required for their current job position with 51.2 percent emphasizing that the preparation they received was exceptionally high or more than adequate (Bruwer, 1998).

**Question 5b: What has been done to secure a job?**

**Figure 11: Methods of job finding**

![Bar chart showing methods of job finding]

The most common method of trying to get a job was joining a recruitment agency and applying for a position that was advertised in the newspaper. Both methods were equally popular amongst the respondents.

**Question 6a: Those who are employed**

**Figure 12: Employed**

![Bar chart showing methods of job finding for employed graduates]
The majority found employment via advertisements in the newspaper and from referral by family and friends. The researcher deduced that even though social networks and the internet exist newspapers and the referral method are still actively used. No graduates found employment through word of mouth or social networks. Interestingly, in 2011 employers are more open to social networking as a means of recruiting. This sample however suggests otherwise. The researcher deduced that it needs more time to develop into a mainstream method for recruitment.

**Question 6b: Sector currently employed**

**Figure 13: Sector of employment**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>23%</td>
</tr>
<tr>
<td>Advertising</td>
<td>5%</td>
</tr>
<tr>
<td>Retail</td>
<td>5%</td>
</tr>
<tr>
<td>Administrative</td>
<td>4%</td>
</tr>
<tr>
<td>Research</td>
<td>0%</td>
</tr>
<tr>
<td>Academic</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>18%</td>
</tr>
</tbody>
</table>

Examples of Other responses:
- Sales
- Radio
- Finance
- Public Relations
- Civil Engineering
- Events Management
- Human Resources
- Communications

The above information tells the researcher that graduates are mostly employed in the “other” category. These jobs include sales, radio, finance, public relations and communications. Only 23% of graduates are in the Marketing sector while 5% are in Advertising and Retail. Respondents are in Marketing or an associated sector. For the most part respondents have found employment and perform the job for which they have studied.
Section C

Question 7: Year of obtaining first qualification

Figure 14: Year of qualification

Respondents who were willing to participate in this study graduated between the years 2001 - 2010. This showed that research findings are reliable as responses were obtained from several cohorts.

Question 8: Full title of current qualification

Figure 15: Qualification title

Based on this finding the researcher deduced that respondents pursued further studies and a small percentage may have studied a non-marketing related course after obtaining a National Diploma in Marketing.
Question 9: Type of enrollment

Figure 16: Full-time and part-time enrollment

The majority of graduates were enrolled full-time with a small percentage who studied part-time. The majority who studied full-time went on to do their further studies part-time. The researcher deduced that graduates chose to do their further studies part-time as they might be employed at the time. It can also be deduced that employers may offer to pay for the further studies of respondents in their employ.

Question 10: Major Fields of education

Figure 17: Course majors

It can be concluded from the findings that most Marketing graduates are employed in marketing-related fields. The researcher deduced that employers in the Marketing industry are satisfied with the skills of CPUT graduates.
Section D: Course experience

Figure 18: Overall experience of the course

The responses of the questions below relate to Figure 18. This relates to Section D titled Course Experience in the questionnaire marked Addendum A.

Question 11

According to Figure 18 a high percentage of respondents agreed that course material was relevant and up-to-date and 25% strongly agreed while only 4% disagreed. It can be concluded that lecturers research and make time to ensure that course material is appropriate and current.

Question 12

From the above response 83% of respondents agreed that the course provided them with an overview of marketing and 17% strongly agreed. No respondents disagreed. The high percentage can be attributed to the fact that the course material is appropriate and current.

Question 13

According to this result 75% of respondents believe the course gave them the confidence to develop new ideas while 12% strongly agreed with the statement. 13% of respondents
neither agreed nor disagreed. This confirms the fact that the majority of respondents have found employment in marketing or a marketing-related field as the confidence developed contributed to them acquiring the job.

**Question 14**

From the above finding 54% agreed with the statement that the course improved their written and communication skills and 33% strongly agreed with the statement while 9% neither agreed nor disagreed with the statement. Only 4% of respondents disagreed that the course had improved their written and communication skills. This proves to a large extent that in the marketing industry graduates must possess good written and communication skills and CPUT’s marketing course assists to develop these skills.

**Question 15**

At total of 46% of respondents are of the opinion that the course allowed them to develop their critical thinking skills and 29% strongly agreed with the statement and 13% disagreed while 12% of respondents neither agreed nor disagreed with the statement. The researcher deduced that the aspect of critical thinking skills should be included during recurruculation.

**Question 16**

With regards to the statement that the course developed their problem solving skills 64% of respondents agreed while 17% strongly agreed, 8% disagreed and 13% neither agreed nor disagreed with the statement. Various reasons can be attributed for this finding such as marketing focuses more on writing and communication skills rather than problem solving skills.

**Question 17**

According to the result 50% of the respondents agree that they apply the principles learned in the course to their current job and 17% strongly agree with the statement while 21% neither agree nor disagree and 2% disagree with the statement. It can be concluded that the principles learnt in the course is applicable and appropriate in the job situation.
Question 18

A 67% of respondents agree that they feel confident about tackling unfamiliar problems while only 4% strongly agrees with the statement. A total of 12% disagree that the course made them feel confident about tackling unfamiliar problems and 17% neither agrees nor disagrees with the statement. The researcher deduced that this is an area to look at during recurruculation.

Question 19

A 79% majority of respondents are satisfied with the overall quality of the course. 13% strongly agree with the statement and 8% neither agree nor disagree. No respondent was unsatisfied with the quality of the course. It is evident that the quality assurance undertaken is acceptable. Students feel that they have had a quality learning experience.

Question 20

The majority of respondents found the class discussions and up-to-date case studies to be most beneficial. The comments lecturers made with regards to respondents’ work were beneficial in helping them understand lecturer expectations and improved self-development.

Section E: Subject expectations

Figure 19: Expectations of the subjects

The responses of the questions below relate to Figure 19

Question 21

According to Figure 18, 79% of respondents agreed that the lecturers put a lot of time into commenting on work and 21% strongly agreed with the statement while no respondent disagreed with the statement. The researcher deduced that lecturers make sure that
students are clear about what is expected of them by giving comprehensive and in depth feedback.

**Question 22**

A total of 83% of respondents agreed that lecturers gave helpful feedback and 13% strongly agreed. Only 4% of respondents disagreed. It is evident that lecturers do not want students to repeat mistakes by carefully explaining the correct methods and techniques.

**Question 23**

Based on the information above 67% of respondents agreed that lecturers motivated them to do their best work and 12% strongly agreed with the statement while 13% disagreed with this statement and 8% of respondents neither agreed nor disagreed. It can be concluded that students need to be driven to exceed academic expectations and lecturers play an important role in motivating students. When students understand the purpose of their learning and where lecturers value student input, academic expectations are exceeded and this is evident when looking at throughput rates.

**Question 24**

This finding showed that 83% of respondents agreed with the statement that they understood the standard of work expected and 17% strongly agreed. No respondents disagreed with the statement. It is evident that lecturers clearly state what is expected of students.

**Question 25**

Based on the information above 83% agreed that the lecturers made their subjects interesting and 13% strongly agreed and no respondent disagreed with the statement. Based on this finding it can be confirmed that lecturers want students to enjoy and excel in their respective subjects.

**Question 26**

This finding shows that 79% of respondents agree that they have developed the skills necessary to be adaptable and flexible in the workplace while 13% strongly agree, 4% disagree with the statement while 4% neither agree nor disagree with the statement. One can deduce that it is necessary to be adaptable and flexible in the workplace due the dynamic nature of the industry.
Section F

Fit between education and work

Question 27: Is position marketing-related?

Figure 20: Job position

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job is not Marketing related</td>
<td>18%</td>
</tr>
<tr>
<td>There are aspects of my job that are Marketing related</td>
<td>32%</td>
</tr>
<tr>
<td>My job is to a large extent Marketing related</td>
<td>32%</td>
</tr>
<tr>
<td>My job is is completely Marketing related</td>
<td>18%</td>
</tr>
</tbody>
</table>

From the above graph a deduction can be made that the majority rank their job as to a large extent marketing-related and others feel there are aspects of their job that is marketing-related. A small percentage of the respondents' jobs are not related. The majority of the respondents that studied marketing have found employment in their field.

Question 28: Alignment between tertiary education and the industry

Figure 21: Education and work alignment

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no match between the industry I am in and my tertiary education</td>
<td>18%</td>
</tr>
<tr>
<td>There is a somewhat match between the industry I am in and my tertiary education</td>
<td>27%</td>
</tr>
<tr>
<td>For the most part there is a match between the industry I am in and my tertiary education</td>
<td>23%</td>
</tr>
<tr>
<td>There is a match between the industry I am in and my tertiary education</td>
<td>32%</td>
</tr>
</tbody>
</table>
A total of 32% of the respondents have a match between the industry they are in and their tertiary education. For 23% of the respondents there is a match for the most part while 27% experience a somewhat match. For 18% of the respondents there is no match between the industry they are in and their tertiary education. This concludes that the majority of the respondents that studied marketing have found employment in their field or in a related field.

**Question 29: Skills acquired relevant to first/current job**

**Figure 22: Skills acquired**

Based on the information above 52% of respondents feel that some of the skills acquired are relevant and useful and 26% experienced that the skills acquired are useful while 18% experience that most of the skills are relevant and useful. Only a 4% of the respondents feel that the skills acquired are not useful. It can be concluded that the skills taught are applicable, needed and useful in the marketing field.

**Question 30: Active application of skills taught**

**Figure 23: Application of skills**
From the above graph 41% regularly apply the skills taught, 18% of respondents apply the skills taught on a daily basis while 32% only sometimes apply the skills that were taught and 9% of respondents rarely apply the skills taught and no respondents’ experience that the skills taught are out of date and cannot be applied. It can be deduced that the skills taught are not only useful but that respondents are given the opportunity to apply what they have been taught in the marketing course.

**Question 31: Mismatch between what is taught in the classroom and needed in the workplace**

**Figure 24: Mismatch of classroom and workplace**

A mismatch between what was taught and needed in the workplace was experienced by 48% of respondents while 43% experienced a partial mismatch between what is taught in the classroom and what is needed in the workplace. A 9% experienced a distinct mismatch while no respondents experienced a total mismatch. It seems as though respondents apply the skills taught while there are further skills that are not being taught, but are needed in the workplace. Problem solving, critical thinking and analytical skills may be placed on the list of underdeveloped skills. These skills should be an integral part of the learning process and not seen as something extra to be taught by lecturers.

**Question 32: Improvement of curriculum alignment with industry**

**Figure 25: Curriculum alignment**

The curriculum alignment is mostly satisfactory with improvement needed (35%), the curriculum alignment with industry is satisfactory (52%) and tertiary education can improve on its curriculum alignment (13%).
The majority of respondents found that the curriculum alignment with industry is satisfactory, 35% of respondents found it mostly satisfactory while 13% would prefer it to be improved. Even though the majority of respondents found the curriculum to be aligned to industry it is evident from the research that a recurrículation is needed as there appears to be a disjoint. During recurrículation lecturers need to consider in order for graduates to operate effectively in the world of work they need to participate in and encounter real-world problems and situations to improve their learning experience.

**Question 33: Links with industry to ensure relevant, industry-related teaching**

**Figure 26: Links with industry for teaching purposes**

![Chart showing responses]

A 58% majority of graduates believe that tertiary institutions should have direct links with industry to improve industry-related teaching and 42% feel there should be some contact between the two. This finding shows just how much emphasis should be placed on contact with industry, in order for graduates to have an effective learning experience and to operate effectively in the world of work they must participate in and connect with real-world problems and situations.

**Question 34: Industry visits**

**Figure 27: Class visits from industry members**

![Circular chart showing responses]
All respondents agreed that industry visits to the classroom would be beneficial in helping students decide which direction to take within the various fields of marketing. This is vital to help students decide in which area of marketing they would like to specialise in.

**Question 35: Co-operative (co-op) education**

**Figure 28: Co-op experience**

<table>
<thead>
<tr>
<th>Experience Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The experience had positive and negative attributes</td>
<td>41%</td>
</tr>
<tr>
<td>It was not a good experience because I did not participate in marketing related roles and responsibilities</td>
<td>14%</td>
</tr>
<tr>
<td>It was a good experience because I worked in a marketing related field and fulfilled many marketing related roles and responsibilities</td>
<td>45%</td>
</tr>
</tbody>
</table>

According to the above statistics 45% of respondents had a good experience during the co-operative education period and only 14% had a negative experience while 41% experienced both positive and negative feelings about co-op. This confirms that co-op is a positive aspect of the course and should be further developed into a more meaningful experience for students.

**Question 36: Co-op helpful in helping students put theory into practice**

**Figure 29: Benefits of co-op**

<table>
<thead>
<tr>
<th>Benefit Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is somewhat beneficial</td>
<td>12%</td>
</tr>
<tr>
<td>No it is not beneficial</td>
<td>0%</td>
</tr>
<tr>
<td>Yes it is beneficial</td>
<td>88%</td>
</tr>
</tbody>
</table>
This finding showed that 88% of the respondents agree that it is co-op is beneficial in helping students put the theory into practice. 12% agree that it is only somewhat beneficial in doing so. It is evident that co-op should persist and expand as it is a valued method to help students demonstrate how they would put theory into practice.

**Question 37: Co-op period**

**Figure 30: Period of co-op education**

According to the respondents 54% felt that the current co-op period of 3 months is sufficient and 46% thought that it should be lengthened. It is evident that respondents were satisfied with the length of time specified to co-op but perhaps in future is should be increased.

**Question 38: Networking and business opportunities during co-op**

**Figure 31: Opportunities while participating in co-op**
According to this finding 50% of the respondents was not given an opportunity to network or secure valuable contacts during their co-operative education period, 33% was, however, able to do so and 9% agreed that co-op did give them an opportunity to network but did not help them secure any valuable future contacts, 8% of the respondents did not participate in co-op. Even though co-op did not help the majority of graduates’ network and secure contacts it gave them exposure to the world of work and the opportunity to experience the industry.

**Question 39: Co-op and securing a job**

**Figure 32: Co-op and job security**

Co-op helped secure 21% of respondents a job while it did not assist 71% of the candidates with a job after graduation and 8% of respondents did not participate in co-op. Despite the finding that it did not help ensure employment after graduation the respondents were given exposure to the world of work and the opportunity to experience the industry.

**Question 40: Co-op is useful to integrate business and practice**

**Figure 33: Integration of business and practice**

An overwhelming majority of 92% of the respondents agreed that co-op is useful for integration and the remaining 8% did not participate in co-op. Co-op is a valuable method to help students demonstrate how to put theory into practice.
4.7 Data interpretation and analysis of the thematic research

The researcher conducted a thematic study by conducting qualitative research incorporating two dimensions. The first dimension involves the employers of graduates and the second dimension involves the lecturers who trained them.

The findings were as follows:

4.7.1 Employers

Table 2: Employers experience with graduates

<table>
<thead>
<tr>
<th>Theme</th>
<th>Specifics</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisive factors for employment (Q1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionalism</td>
<td>This candidate presented herself in a very professional and articulate manner.</td>
<td></td>
</tr>
<tr>
<td>Academic record</td>
<td>Her academic record reflects hard work and determination</td>
<td></td>
</tr>
<tr>
<td>Hard working and committed</td>
<td>She exhibited a professional approach and showed she would be committed to her role in the company.</td>
<td></td>
</tr>
<tr>
<td>Industry experience</td>
<td>She had industry knowledge having worked in a marketing environment and previous lecturing experience as a part-time lecturer at CPUT</td>
<td></td>
</tr>
<tr>
<td>Employment criteria (Q2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionalism and competency</td>
<td>Professionalism; potential to apply theory into practice; ambition; must display high levels of confidence and initiative.</td>
<td></td>
</tr>
<tr>
<td>Applying theory into practice</td>
<td>Someone who has the skills to convert the necessary market research information into data for analysis.</td>
<td></td>
</tr>
<tr>
<td>Academic record</td>
<td>Knowledge of the industry in the subject that they are going to teach, academic record and also experience.</td>
<td></td>
</tr>
<tr>
<td>Industry experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likeliness to employ CPUT graduates (Q3)</td>
<td>Yes</td>
<td>Yes. As a new graduate she always exhibited a professional approach to her work.</td>
</tr>
<tr>
<td>CPUT graduate competencies (Q4)</td>
<td>Yes</td>
<td>Yes. We have many lecturers who have graduated from CPUT with a vast array of academic backgrounds, from those who studied Business Management, Marketing and also those who have a degree in Education.</td>
</tr>
<tr>
<td>In-service, co-operative education or learnerships (Q5)</td>
<td>No</td>
<td>I’m afraid that her current job limits her potential and I feel that her skills are not being utilised properly. I believe she is capable of much more than what we can offer her at this stage.</td>
</tr>
<tr>
<td>Job Shadowing</td>
<td>We have, in the past, allowed students to job shadow and assist in the recruitment section of the HR Department.</td>
<td></td>
</tr>
<tr>
<td>Internships</td>
<td>We have internships which candidates need to apply for. They apply online from our website.</td>
<td></td>
</tr>
</tbody>
</table>
### 4.7.2 Lecturers

**Table 3: Lecturers ensuring relevance of training**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Specifics</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects (Q1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>Third year Marketing</td>
<td></td>
</tr>
<tr>
<td>Marketing Research</td>
<td>Third year Marketing Research</td>
<td></td>
</tr>
<tr>
<td>Consumer Behaviour</td>
<td>Second year Consumer Behaviour</td>
<td></td>
</tr>
<tr>
<td>Advertising and Promotions</td>
<td>Advertising and Sales Promotions (2nd year)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Applied promotions (4th year)</td>
<td></td>
</tr>
<tr>
<td><strong>Subject relevance (Q2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extensive Research</td>
<td>Articles in newspapers and magazines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Listening to financial programmes on radio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read industry journals, newspapers, and a wide</td>
<td></td>
</tr>
<tr>
<td></td>
<td>range of publications</td>
<td></td>
</tr>
<tr>
<td>Industry Interaction</td>
<td>Consult industry practitioners</td>
<td></td>
</tr>
<tr>
<td>Interacting with past students</td>
<td>Interacting with past students</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate development (Q3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry feedback</td>
<td>Co-op report backs and surveys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I give the students real-life, industry-based</td>
<td></td>
</tr>
<tr>
<td></td>
<td>projects to ensure that they are prepared for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the workplace.</td>
<td></td>
</tr>
<tr>
<td>Advisory meetings</td>
<td>Shortcomings which are highlighted</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of summative assessments; offering an</td>
<td></td>
</tr>
<tr>
<td></td>
<td>opportunity to correct errors for a small</td>
<td></td>
</tr>
<tr>
<td></td>
<td>amount of marks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeking to connect with students, engaging in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dialogue with and offering formative feedback.</td>
<td></td>
</tr>
<tr>
<td>Discussions with past students</td>
<td>Discussions with past students also indicate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industry needs</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate monitoring (Q4)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal systems</td>
<td>Talking to past students who indicate what</td>
<td></td>
</tr>
<tr>
<td></td>
<td>former students are doing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>We do not have any official systems, but find</td>
<td></td>
</tr>
<tr>
<td></td>
<td>out what students are doing on an informal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>basis</td>
<td></td>
</tr>
<tr>
<td>Formal systems</td>
<td>The university graduate tracking system</td>
<td></td>
</tr>
<tr>
<td>Social media</td>
<td>The possibility of using social media will</td>
<td></td>
</tr>
<tr>
<td></td>
<td>have to be considered in future.</td>
<td></td>
</tr>
</tbody>
</table>

The themes emerging from the research showed that generally the employers are satisfied with the quality of CPUT graduates and they will most likely employ CPUT graduates in future. Employers are satisfied with the professionalism and the respondents' ability to put their knowledge into practice. Employers' general concerns about graduates were their ability to solve problems and perform optimally in a constantly changing work environment.

The training the students received to ensure its relevance is based on extensive research and interactions and discussions with past students although no formal graduate tracking systems are in place to obtain feedback on the quality of graduates learning experiences the
possibility of using social media as a monitoring system has been discussed. See addendum B and addendum C.

4.8 Summary

The researcher found the interpretations below with regards to the determinants of fit between the world of work and tertiary learning for the marketing graduates.

Below are the deductions made of the six sections of the questionnaire.

Section A focused on demographic information. A 74% majority of the graduates in this study was female with English being the main language spoken followed by Afrikaans and Xhosa. The average age of graduates completing their highest qualification was between 22-25 years old.

Section B focused on work experience and how graduates went about securing a job. 92% of the respondents were employed at the time of this study and found employment mostly through newspapers and family and friends. Some graduates found employment via the internet and recruitment agencies and also other means like fulfilling bursary obligations.

The sector in which graduates were mostly employed is marketing. Other relevant examples of sectors in which graduates were employed at the time of this study were sales, public relations, communications and events.

Section C focused on qualifications and enrollment. The majority of respondents, 33%, attained their first qualification in 2006 and studied full-time. The majority of respondents who participated went on to further studies in marketing part-time with a near majority only having a National Diploma in Marketing.

An overwhelming majority considers Marketing to be a major field of study followed by Advertising and Promotions and then Sales Management.

The fourth section referred to the graduates experience with the course and 71% of graduates who responded agreed that course material was relevant and up-to-date, 83% stated the course assisted them in having a broad overview of marketing. The course aided 75% of graduates to investigate new ideas and assisted 62% with developing their problem-solving skills. Due to the marketing course 67% of graduates have the confidence to tackle unfamiliar problems and 79% of graduates were satisfied with the quality of the marketing course.

Section E focused on subject expectations and 79% of graduates agreed that lecturers put a lot of time into commenting on their work and giving feedback which assisted graduates in understanding what was expected of them and 83% of graduates stated that lecturers made
their subjects interesting and 79% of graduates agreed that they have developed skills to be flexible in the workplace.

Section F reflected whether or not there was a fit between the education and work of the graduates who participated. Only 18% agreed that their job was completely marketing-related and 32% agreed that there job was to a large extent marketing-related and 32% stated that only aspects of the job were marketing-related.

Looking at alignment of education and industry, the graduates responded that there is only a 32% match between the industry they are in and their tertiary education. For 23% there is a match for the most part and 27% stated that there was somewhat of a match.

Focusing on the skills, 26% stated that the skills acquired are relevant and useful to their job and 18% found most skills acquired were relevant and useful. A 52% majority stated some of the skills acquired were relevant and useful and only 4% stated that the skills acquired were not useful. 41% of graduates actively apply the skills taught on a regular basis. Looking at the skills taught and the skills applied at work 48% of respondents listed that there is no mismatch between what is taught in the class and what is needed in the workplace while 43% stated there is a partial mismatch, 9% listed a total mismatch.

A 54% listing showed that the co-op period is sufficient. However, 33% of respondents stated that co-op gave them an opportunity to network and secure valuable contacts, 50% was not able to do so and for 71% of respondents co-op did not help secure them a job. Even though co-op did not help the majority of graduates secure a job, 92% still agreed that co-op is a useful tool to integrate teaching and business practice.

The thematic study focused on the employer and lecturer. The employer revealed reasons why the graduate got the job and themes that were common were factors such as professionalism, articulation and academic record. Employers are likely to employ a CPUT graduate in future and opportunities for internships and job shadowing do exist within those companies who participated in this study.

The lecturers ensure the relevance of their training through extensive research and industry and past student interaction. Graduate development is ensured through advisory meetings, and real-life, industry based projects. In terms of graduate monitoring only informal systems exist, but there is room for implementing a formal tracking system through the use of social media as CPUT does have a Facebook page.

Chapter Five, the final chapter, highlights and expands on recommendations in more detail.
CHAPTER FIVE
DISCUSSION, RECOMMENDATIONS & CONCLUSION

5.1 Introduction

In this chapter the researcher reflects on the objectives, arrives at conclusions and lists possible recommendations for future consideration for further research and recurrification.

This graduate tracer study originated from the study conducted by Michael Cosser (Cosser:2003) who conducted research of students at Further Education and Training Colleges. The researcher believed that the principles employed by the other researchers could be adapted and duplicated for the CPUT Marketing department and aid in future curriculum re-design and development as tracking and monitoring of graduates play an essential role in providing information about graduate skills and ideas for recurrification. The objective of this chapter is to present conclusions that are based on the research conducted and make relevant recommendations based on these conclusions. The conclusions and recommendations will highlight and provide guidelines for academic staff in the Marketing department and aid in the recurrification process.

5.2 Discussion of results and findings of main objective.

The results of the findings are compared with how the purpose of the research outlined in Chapter One was achieved.

The purpose of this research was to establish whether or not the marketing graduates' first work destination is in a marketing-related field. The categories that are highlighted and evaluated in this chapter are:

5.2.1 Course experience;

5.2.2 Work experience;

5.2.3 Fit between education and work

5.3 Recommendations

Each of the above categories is discussed and explained independently and uses the results of the respondents as a basis to guide the researcher.
5.2.1 Course experience with reference made to graduates’ subject expectations

The results of the findings of how graduates experienced the marketing course was achieved by means of the questionnaire which highlighted that the majority agreed the course provided them with a broad overview of the marketing industry and the material that they were taught was relevant and up-to-date (Figure 18). The lecturer questionnaire (Table 3) highlighted the fact that lecturers conduct extensive research by reading journals, newspapers, articles and listening to financial programmes in the media. Evidence from the research showed that graduates appreciated the “real time” discussions, real life projects and applicable case studies (Figure 18). Despite this, only 50% of the respondents in this study regularly apply the principles from this course to their current job (Figure 22). The marketing course positively encouraged creativity and the investigation of new ideas. It did, however, lack in the areas such as developing critical thinking, problem-solving, writing, communication and application of theory to their (the graduates) current job as presented in Figure 18 and Figure 21. The research confirmed there is a tendency towards being adaptable and flexible in the workplace. Respondents stated in Figure 19 that lecturers put a lot of time into commenting on their work and feedback was helpful. Graduates stated that although lecturers made their subjects interesting they failed to motivate them to do their best work as in Figure 19. The research highlighted the fact that students need to be driven to exceed academic expectations and lecturers play an important role in motivating students. When students understand the purpose of their learning and where lecturers value their input, academic expectations are exceeded and this is apparent when looking at throughput rates.

5.2.2 Work experience

There is a distinct relation to the marketing course studied (Figure 13) and the employment of the graduates. The research showed that employers (Table 2) are satisfied with CPUT graduate skills and will likely employ a graduate from CPUT in future. In Figure 23, the questionnaire highlighted that graduates are regularly applying the skills taught. Almost all respondents (91%) in this study used the skills that were taught, but the research showed areas such as critical thinking, problem solving and a slight tendency to be flexible in the workplace are underdeveloped skills. These skills should be an integral part of the learning process by developing reliable work-integrated learning programmes.
5.2.3 Fit between education and work

Findings of the research were that some of the skills that graduates acquired are relevant and useful in their current/first job and graduates regularly apply those skills. Most stated that there is no mismatch between what is taught in the classroom and what is needed in the workplace as shown in Figure 24, though a substantial percentage of graduates believe there is a partial mismatch. The lecturer survey as shown in Table 3 highlighted that lecturers ensure the relevance of graduate skills and skills through interaction and having discussions with previous students as well as having partnerships with industry which help identify industry needs, attention needs to be paid to the fact that a substantial percentage of respondents felt there is a partial mismatch. This should be addressed by reviewing the curriculum. Keeping this in mind the majority of respondents felt that their tertiary education did prepare them sufficiently to do their job, but specific skills need to be further developed. Graduates in Figure 26 stated to a very large degree that tertiary education should have direct links with industry or some sort of contact between education and industry should take place. Lecturers could be instrumental in closing this gap by building industry partnerships with the view of developing better work-integrated learning processes in the marketing industry for students. This could provide students with a unique learning experience opportunity.

5.3 Recommendations

5.3.1 Based on the research findings the following recommendations are made:

- Innovative and useful ways of tracking graduates need to be developed to make tracking of graduates easier to aid further graduate tracer studies. This was problematic with the researcher’s sample and in order not to waste time an accurate database of graduates need to be developed.

- The research showed that employers are evidently more open to social networking as a means of recruiting. The research sample suggests otherwise which shows that social media needs more time to become a mainstream method of recruitment.

- Tertiary education should be linked with industry to ensure graduate employability. The researcher identified a gap in critical thinking, problem solving and flexibility skills. Subjects such as business statistics are useful for the development of critical thinking and problem solving skills. This could be further explored.
• Lecturers should have partnerships with organisations in the marketing industry to provide students with unique learning experiences. Creating a platform in which academic institutions and employers could interact will provide access to work-integrated learning opportunities for students. These partnerships could be built through seminars, industry related workshops, industry functions and running industry focus groups with potential employers on a regular basis. The curriculum should be redesigned as respondents felt that a disjoint was present between the curriculum and industry. Industry should have input during the recurriculation process to accurately identify underdeveloped employability skills in graduates.

• Specific industry related class visits would be beneficial in helping students decide which direction to take within the various fields of marketing. This is vital for marketing students to decide in which area of marketing they would like to specialise in. Regular industry visits would help students see how far or how much someone has already achieved in the industry.

• Co-op is a positive aspect of the course as it contributes to the students’ employability and should be further developed into a more meaningful experience. Lecturers should consistently dialogue with the mentor company during the co-op period to ensure that students are performing industry related tasks during their work-based learning.

• Co-op is beneficial but should be utilised more in helping to secure a future job for the student. This could be accomplished by establishing links with marketing companies for internships after graduation. Respondents were satisfied with the length of time of three months allocated for co-op but perhaps in future this should be increased. Three months may be too short to prove your capabilities and exposure to the job. Students may not be able to secure valuable contacts in that short period of time. A period of 1 year could prove to be a suitable length of time to prove your capabilities and secure valuable contacts.

• Specific tasks should be designed for the student that should be executed whilst he/she is on co-op this would more likely help students translate the theory into practice. Tasks can be designed to develop the areas of critical thinking and problem solving skills as respondents stated that these were areas that were underdeveloped. Students need to be more exposed to tasks that will develop their critical thinking, problem-solving skills, writing and communication as graduates felt these aspects were not developed fully.
Employer satisfaction surveys should be introduced to measure satisfaction levels of graduates. An advisory committee consisting of industry leaders and academic staff could be established to facilitate dialogue between the two sectors.

5.4 Problems encountered during the course of the study

Since 2009, the researcher contacted students that graduated between the years 2001-2008 telephonically and electronically and various challenges were experienced in this regard. The research sample frame was extended from 2008 to 2010. CPUT alumni office database and the Marketing department student profiles for these years were not accurate as their e-mail and telephone numbers were either invalid or did not exist any longer. Some graduates simply failed to return the questionnaire to the researcher.

Behavioral patterns in terms of response times, subjectivity and willingness to assist the researcher were key factors in the lack of retrieving responses. Graduates failed to respond immediately to e-mail. Employers were not eager to engage due to time constraints and busy schedules. The lack of responses from the graduates could also be attributed to the questionnaire being too long.

After a lengthy period of time had elapsed, the researcher consulted a popular social media tool called Facebook to track familiar marketing graduates. The researcher left a short message regarding the research and asked the various respondents to forward the researcher their contact numbers. The researcher proceeded to call the respondents and conducted the survey via telephone. The respondents were asked the stated questions and the questionnaire was completed by the researcher on their behalf. After the questionnaire was completed the researcher asked the respondent to refer other marketing graduates. The snowballing method proved to be effective but time consuming.

5.5 Suggestions for future research

Future research in terms of recurriculation in which learning outcomes can be unpacked into essential graduate skills with a focus on tasks which can be incorporated in the curriculum that will develop areas such as critical thinking, problem-solving skills, writing and communication as graduates felt these were areas that were underdeveloped.
• Respondents felt that a disjoint was present between curriculum and industry. Research into workplace learning with a focus on establishing links with the CPUT and industry could hold possibilities for future research.

• Research about learning outcomes with reference to essential, generic and specialised skills, abilities and attributes could be further explored to improve graduates learning experience.

Suggestions to any researcher wishing to undertake a tracer study would be:

• Be in close contact with the CPUT alumni office on a regular basis. Perhaps a mutual partnership would be beneficial in obtaining personal details of graduates.
• Keep the questionnaire short, specific and simple. Graduates lose interest when they are required to complete a lengthy questionnaire.
• Focus research on the most recent cohorts.
• Establish the functions of the research librarian early in the study and utilize the writing consultant in order to not waste time in sourcing external specialists.

5.6 Conclusion

Graduate tracer studies are a useful way of tracking graduates as it helps identify the status of graduates. The value that graduate tracer studies can hold is underestimated by academic institutions. Ideally, every institution should implement a formal tracking system. However, the knowledge yielded by graduate studies and the links between educational study, the curriculum, higher education training, the world of work, graduate career trajectories and the changing labour market characteristics have not been sufficiently explored as yet.

A graduate tracking system can provide prospective and current students and their employers with in-depth information in the way in which the graduate labour market works, thus helping them to make realistic future plan.
List of References


RESEARCH QUESTIONNAIRE

GRADUATE TRACER SURVEY

TITLE OF RESEARCH

THE DETERMINANTS OF FIT BETWEEN THE WORLD OF WORK AND TERTIARY LEARNING: A TRACER STUDY OF CAPE PENINSULA UNIVERSITY OF TECHNOLOGY (CPUT) MARKETING GRADUATES.

You are kindly requested to participate in a research study conducted by Cindy Faith Richter for the Cape Peninsula University of Technology. The purpose of this study is to determine the fit between the world of work and tertiary qualification. This study will contribute to the completion of the researcher's Masters (M-Tech) Degree in Business Administration. The study will determine the destinations of the marketing graduates and reveal the nature of their employment status after graduation.

The results of the research will be presented in a dissertation and individual responses will be recorded anonymously and kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. The researcher retains the right to use and publish non-identifiable data.

Instructions for completion of the questionnaire:

- Please mark responses with an X where appropriate
- Mark only one box unless instructed otherwise
- Please forward completed questionnaire to richtercster@gmail.com within ONE month of receiving the questionnaire.

Researcher contact details:
Cindy Faith Richter
richtercster@gmail.com
072 839 64 87
(021) 987 76 81

If the researcher cannot be reached, please feel free to leave a voice message.
TITLE OF RESEARCH

THE DETERMINANTS OF FIT BETWEEN THE WORLD OF WORK AND TERTIARY LEARNING: A TRACER STUDY OF CAPE PENINSULA UNIVERSITY OF TECHNOLOGY (CPUT) MARKETING GRADUATES.

Section A

a. Demographic factors

1. What is your gender? 
   □ Male □ Female

2. What is the main language spoken in your home?
   - English □
   - Afrikaans □
   - Xhosa □
   - Other □
   Please specify___________________

3. What was your age at the time of completing your highest qualification? ________

Section B

b. Work experience

4. Are you currently employed? 
   □ Yes □ No

5. If you are unemployed please answer the following questions
   
   A. How long have you been unemployed
      
      3-6 months □
9-12 months  □
13-24 months  □
Other, please specify _______________

What have you done to secure a job
Cold calling companies’  □
Joined a recruitment agency  □
Applied for jobs in the newspaper  □
Other  □
Please specify ____________________

6. If you are employed please answer the following questions

A. How did you find out about your current job?
   a. Through co-op  □
   b. Advertisement in a newspaper or other print media  □
   c. Internet  □
   d. Family or friends  □
   e. Approached employer directly  □
   f. Employment agency  □
   g. Word of mouth, social networks  □
   h. Other, please specify ____________________

B. In what sector are you currently employed?
Marketing  □
Advertising  □
Retail  □
Administrative  □
Research  □
Section C

c. Academic information

7. When did you attain your first qualification?
   2001 □
   2002 □
   2003 □
   2004 □
   2005 □
   2006 □
   2007 □
   2008 □
   Other □
   Please specify______________________________

8. What is the full title of your current qualification?
   □ National Diploma: Marketing □
   □ B-Tech: Marketing □
   □ M-Tech: Marketing □
   □ D-Tech: Marketing □
   □ Other □
   Please specify______________________________
Section D

d. Course Experience

Please tell us about your course experience. The term “course” refers to the major field of education. (eg. Marketing)

11. Course materials were relevant and up-to-date .......................................................... □ □ □ □ □ □
12. The course provided me with a broad overview of marketing ........................................ □ □ □ □ □ □
13. The course developed my confidence to investigate new ideas ................................. □ □ □ □ □ □
14. The course improved my written and communication skills ...................................... □ □ □ □ □ □
15. The course allowed me to develop my critical thinking skills .................................... □ □ □ □ □ □
16. The course developed my problem-solving skills ....................................................... □ □ □ □ □ □
17. I learned how to apply principles from this course to my current job ...................... □ □ □ □ □ □
18. As a result of the course I feel confident about tackling unfamiliar problems... □ □ □ □ □

19. Overall, I was satisfied with the quality of this course ......................................... □ □ □ □ □

20. What did you find most beneficial about the course?

Section E

e. Subject expectations

21. The lecturers put a lot of time into commenting on my work.................................. □ □ □ □ □

22. The lecturers gave me helpful feedback on what I was doing .................................. □ □ □ □ □

23. The lecturers motivated me to do my best work ..................................................... □ □ □ □ □

24. I understood the standard of work expected from me ............................................. □ □ □ □ □

25. The lecturers made their subjects interesting......................................................... □ □ □ □ □

26. I have developed the skills necessary to be adaptable and flexible in the work place? □ □ □ □ □

Section F

f. Fit between education and work

27. Is your current job in any way marketing-related?
   - My job is completely marketing-related □
   - My job is to a large extent marketing-related □
   - There are aspects of my job that are marketing-related □
   - My job is not marketing-related □

28. In your opinion was your tertiary education aligned with the industry you now find yourself in?
   - There is a match between the industry I am in and my tertiary education □
For the most part there is a match between the industry I am in and my tertiary education

There is a somewhat match between the industry I am in and my Tertiary education

There is no match between the industry I am in and my tertiary education

29. Do you feel the skills you acquired during your course of study were relevant to your current job/first job after graduation?

The skills I acquired were relevant and useful to my job

Most of the skills I acquired were relevant and useful

Some of the skills I acquired were relevant and useful

The skills acquired were not useful

30. Do you actively apply the skills that were taught to you in the classroom in your place of work? You may tick more than one box.

I apply the skills I was taught on a daily basis

I regularly apply the skills I was taught

I sometimes apply the skills I was taught

I rarely apply the skills I was taught as those skills weren’t needed

The skills I was taught was out of date and could not be applied

31. Looking at your first job after graduation do you think there is a mismatch between what is taught in the classroom and what is needed in the workplace?

There is no mismatch between what is taught in the class and what is needed in the workplace

There is a partial mismatch between what is taught in the classroom and what is needed in the workplace
There is a distinct mismatch between what is taught in the classroom and what is needed in the workplace

There is a total mismatch between what is taught in the classroom and what is needed in the workplace

32. In your opinion, can tertiary education improve on their curriculum alignment with industry?
   - Tertiary education can improve on its curriculum alignment
   - The curriculum alignment with industry is satisfactory
   - The curriculum alignment is mostly satisfactory with improvement needed

33. Should tertiary education have direct links with industry in order to ensure relevant industry related teaching?
   - Tertiary education should have direct links with industry to improve industry related teaching
   - There should be some contact between tertiary education and industry
   - It is not necessary for tertiary education to have direct links with industry to improve industry related teaching

34. Marketing-related industry visits to the classroom would be beneficial in helping students decide which direction to take within the various fields of marketing.
   - Yes
   - No

35. The co-operative (co-op) education period in the 3rd year of study was a good experience.
   - It was a good experience because I worked in a marketing-related field and fulfilled many marketing-related roles and responsibilities
   - It was not a good experience because I did not participate in marketing-related roles and responsibilities
   - The experience had positive and negative attributes

36. Is co-op beneficial in helping students put the theory learnt in the classroom into practice?
Yes it is beneficial
No it is not beneficial
It is somewhat beneficial

37. The co-op period is too short and should be lengthened.

Yes, it should be lengthened in order for student to attain more practical knowledge
No, the current co-op period is sufficient

38. Co-op allowed me to network and meet business people that could possibly be useful in the future.

Yes co-op gave me the opportunity to network although I did not secure valuable contacts
Yes co-op gave me the opportunity to network and I was able to secure valuable contacts
No I was not given an opportunity to network or secure valuable contacts
Did not participate in co-op.

39. Co-op helped me secure my first job after graduation.

Yes
No
Did not participate in co-op.

40. Co-op is a useful tool to integrate teaching and business practice.

Yes
No
Did not participate in co-op. □

THANK YOU FOR YOUR PARTICIPATION.

Please forward completed questionnaire to richtercster@gmail.com
Addendum B: Employer survey

GRADUATE TRACER SURVEY

Title of research:

The determinants of fit between the world of work and tertiary learning: A tracer study of Cape Peninsula University of Technology (CPUT) Marketing graduates.

You are kindly requested to complete the questions below. These questions are in addition to a broader survey that will contribute to the completion of the researcher’s Masters (M-Tech) Degree in Business Administration. The study will determine the destinations of the marketing graduates and reveal the nature of their employment status after graduation.

Please complete the questions below and e-mail back to the researcher. The e-mail address appears at the end of the survey.

Name of company: _____________________________
Name of graduate: ______________________________
Name of manager: ______________________________

1. Why did this candidate get the job?

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

2. What do you look for when employing new graduates?
3. Will you employ someone that has graduated from Cape Peninsula University of Technology (CPUT) again?

4. As an employer are you satisfied with this CPUT graduate? Do you feel his/her skills match what is needed for the job?

5. Does your company have any links with educational institutions in terms of in-service, co-operative education or learnerships?

Thank you for your participation.

richtercster@gmail.com
Addendum C: Lecturer survey

GRADUATE TRACER SURVEY

Title of research:

The determinants of fit between the world of work and tertiary learning: A tracer study of Cape Peninsular University of Technology (CPUT) Marketing graduates.

You are kindly requested to complete the questions below. These questions are in addition to a broader survey that will contribute to the completion of the researcher’s Masters (M-Tech) Degree in Business Administration. The study will determine the destinations of the marketing graduates and reveal the nature of their employment status after graduation. It will also reveal how these graduates of been trained and help determine the efficacy of teaching and learning styles.

Please complete the questions below and e-mail back to the researcher to the e-mail address below.

Name of lecturer: __________________________

QUESTIONS:

1. What subjects do you lecture and at what level?

2. How do you ensure that what you teach in the classroom is up to date and relevant in the work place?
3. How do you ensure that graduates’ attributes and skills are best developed?

4. What systems do you (or the Marketing department as a whole) have in place to track graduates?

Thank you for your participation.

richtercster@gmail.com
Addendum D: Editing and proofreading

Confirmation of editing and proofreading

5 December 2011

Dear Sir/Madam

This serves to confirm that I have proofread and edited the thesis entitled: “The determinants of fit between the world of work and Tertiary learning: A tracer study of Cape Peninsula University of Technology (CPUT) Marketing Graduates”, and that the candidate has been advised to make the required changes.

Should you have any queries please feel free to contact me on e-mail address blndmiller@gmail.com or cell number 083 476 4646.

Yours sincerely

B. Miller

(Ms) Belinda Miller
Education Specialist
Fundamentals Department
College of Cape Town
Addendum E: Statistician

This serves to confirm that I conducted the statistical calculations and the graphic representations for the thesis entitled “The determinants of fit between the world of work and tertiary learning: A tracer study of Cape Peninsula University of Technology (CPUT) Marketing Graduates”.

Should you have any queries please feel free to contact me.

Yours sincerely

M. Jamaal

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