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**University of Cape Town**

**Faculty of Humanities**

**Assessing information needs of users of the Career Information Centre (CIC),  
UCT: Working towards a framework for promoting better use of Career  
Services, in particular, resources in the CIC.**

**By**

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**A minor dissertation submitted in partial fulfilment of the requirements for the  
award of the**

**Degree of Master of Library and Information Science**

**Department of Information and Library Studies**

**Supervisor: JG Smith**

**2003**

**Declaration**

**This work has not been previously submitted in whole or in part, for the award of any  
degree. It is my own work. Each significant contribution to, and quotation in, this  
dissertation from the work, or works, of other people has been attributed, and has been  
cited and referenced.**

**Signature.....**

**Date.....**

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## ABSTRACT

This study is an assessment of the career information needs of users of the Career Information Centre (CIC), at the University of Cape Town. The study was conducted because it was clear to the CIC staff that the CIC was under-utilised by the student community. A thorough investigation of the literature on career needs and needs assessment was conducted in order to get an overview of issues that would characterise the study.

The study was based on a survey of 100 UCT students, 67 being potential users and 33 actual users. For the purpose of this study, students who had never used the CIC were labelled “potential users” while those who had used the centre at one point or another were “users.” Data was collected through questionnaires and interviews. Two types of questionnaires and interview schedules were designed for each group. The data collecting instruments addressed, among others, students’ views and opinions on the following issues:

- Are students’ awareness of services offered by the CIC
- Can they articulate their career-related needs
- Are there barriers to effective career information access and dissemination
- How can the current information services and resources be refined to suit students’ particular needs.

The data was prepared and analysed using the STATISTICA and Excel software programs. The results of the study show that an overwhelming number of potential users were not aware of the services the CIC offered. Some of the students had not even heard of the CIC before the survey. Despite this, all the students who participated in the study were conversant with their career needs, and had experienced problems when they had to perform various career-related tasks. Students suggested ways in which the CIC can make its existence and services known to the student population.

The study findings prompted the researcher to recommend that the CIC consider the following:

- To embark on a rigorous awareness campaign and a promotional tour of career services that involve all UCT campuses
- To constantly carry out surveys to identify potential users and actual users’ career needs.
- To liaise with academic departments on how career programmes can be offered in an academic set-up.

## **CHAPTER ONE**

### **1 INTRODUCTION**

#### **1.1 Research Topic**

The research topic that informed this study is: Assessing information needs of users of the Career Information Centre (CIC), UCT: working towards a framework for promoting better use of Career Services, in particular, resources in the CIC.

#### **1.2 Research problem**

It was while the researcher was working at the CIC that he realised that a study should be conducted on UCT students' career information needs. There was a general consensus among CIC staff that the CIC and its resources were vastly under-utilised by the student population. The researcher believed that to effectively address this under-utilisation, there was a need to explore the needs of the students who were using the centre, and those who had not used it as yet. The researcher thereupon approached the CIC staff with the proposal and they then gave him their full support to undertake the study.

This motivated the researcher to conduct a career needs assessment study to determine students' career-related needs, identify problems they may have encountered or are likely to encounter in using career resources and services. The study will further enable the researcher to make recommendations to the CIC to develop comprehensive career resources and services that will adequately address students' needs and help them make informed career choices. The researcher believes that through identifying career needs of users, the root cause of under-utilisation can be established and a remedial solution found.

### **1.3 Needs assessment study**

Needs assessment is one of the client-centred series of techniques and tools that can be put to use by information centres to refine and improve their services with demonstrable outcomes. The results of a needs assessment study can enable information professionals to provide services in a responsible way and justify changes they implement based on the data gathered. Although a needs assessment study seems to be the answer to improved services and resources provision, Nicholas (1996:2) laments its neglect by the information profession in the past, and concludes that nobody has benefited from this. Even today, where we have information systems such as the Internet gracing our information centres and libraries, we still do not use suitably modern and effective management methods to ensure that these systems are providing users with what they need (Nicholas, 1996:2).

Nicholas (1996) mentions several factors that may have contributed to the reluctance of the information profession to carry out needs assessment studies. He mentions the school of thought that believes there is very little point in consulting the users – they do not know what they are talking about, why ask them, far better to trust professional judgement. Abate (2000) believes that for years librarians have subscribed to this school of thought by relying on their knowledge of resources or simply on intuition to provide what they think to be the appropriate services to meet the needs of their particular user group. She points out that, of late, library administrators however put the needs of users at the centre of library services, and the needs of users now drive both the support of existing services and experiments with new services.

### **1.4 Career Information Centre (CIC), University of Cape Town (UCT)**

The CIC is a self-help resource centre catering mainly for University of Cape Town students. It also acts as a resource for

- Supporting career counsellors and for preparing the career office programmes
- Staff and students' professional development

- New and current information for all career-related work
- A community resource centre that maintains links with other professionals

Students approach the CIC with a variety of career-related queries, some of which are:

- Searching for facts or information on career possibilities, relevant study fields, companies and job search strategies
- Dealing with complex career issues such as salary negotiations, bursary applications, job and company targeting, researching career and course changes or options
- Seeking help in the compilation of a CV, covering letter or preparing for job interviews and screening tests, job applications, vacation work, etc
- Seeking help with self-assessment and learning about career development

The CIC is mainly marketed by word-of-mouth to students; through 'Careering magazine'; career-counselling services; job search and CV seminars and workshops; the annual Graduate Opportunities Programmes; and through brochures and pamphlets. Many students visit the CIC to prepare for the Graduate Placement Programme, and when nearing graduation and the world of work becomes a more urgent reality.

### **1.5 Significance of the study**

It is hoped that the findings of this research will enable career professionals managing career centres in institutions to better understand the career needs of their users. Career professionals will have a framework through which they can:

- Establish career-related needs of users
- Develop accurate and up-to-date resources that address the needs of their users
- Address users' queries with confidence and gauge their ability in service provision

The best place to look for comprehensive job and career resources eludes most people. This research project hopes to bring the CIC to the fore as a reliable service provider for job and career resources. A resource centre has to attract users by tailoring information and resources to meet the needs of those users. Resource centres have to justify their existence especially in this era where services are being rationalised. This research project is basically looking for ways to improve resources and services of the CIC by amongst others, integrating findings of the research project with information found in the literature to satisfy the career needs of its users. Knowing the career needs of their users will help them to determine how best to serve them.

#### **1.6 Research objectives and research question**

The research project will enable users to give their own views and explanations on how the CIC can reach most of its intended users, and how it can be utilised to its full potential. This will entail:

- Establishing if users are aware of services the CIC offers and if they are able to articulate their career-related needs
- Determining barriers to effective career information access and dissemination
- Finding out how the current information services and resources should be refined to suit users' particular information needs

The core research questions that will thus serve as a framework for this investigation are as follows:

- Are students aware of services the CIC is offering?
- What are students' career-related needs?
- In meeting their career needs, have they encountered or are they likely to encounter problems in finding and accessing the information they need?
- Do students have confidence in the way the CIC staff is handling their queries and networking with potential employees?
- What should the CIC do to effectively and efficiently improve on service delivery to meet users' needs?

## **1.7 Overview of the thesis**

The body of this dissertation has been structured in the following way:

- Chapter 1- introduces and outlines the research problem
- Chapter 2 – outlines and discusses the literature reviewed
- Chapter 3 – discusses the methodology and approach to the research procedures followed, and explains the type of analysis adopted
- Chapter 4 – deals with data presentation and analysis
- Chapter 5 – discusses the findings and concludes the dissertation.

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## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Ascertaining information needs of users is undoubtedly a complex phenomenon. Even users themselves often have difficulty in clearly defining and expressing their information needs. Dervin and Nilan (1986:7) have observed that users frequently have trouble stating their information needs, particularly when pressed to specify what resources will fulfil these needs. This complexity thus makes it imperative to carry out an extensive review of earlier information needs studies, and if such an investigation is conducted appropriately, it may help to inform the present study in answering such questions as;

- What type of improvements are needed for the effective utilisation of existing career services in the Career Information Centre?
- What should be done to make the career resources and services better known to users?
- What kinds of new programmes may be initiated to bring the career services in harmony with the career information needs of users?

Although a significant body of literature exists on the information needs and needs assessment of user groups across various disciplines, the literature on career needs and assessment was found to be insufficient. The researcher however believes that the Career Information Centre can be viewed as a special library in an academic setting and that other studies and findings relating to users in general can also be applied to career centres' activities. Libraries of most institutions have been found to have resources on career development somewhere in their collections. It is, furthermore, essential to clarify concepts for this study in order to establish the underlying concepts that define the study, and select appropriate definitions. The literature reviewed thus provided a structure of concepts that refer to the major phenomenon that were studied.

## **2.2 Clarification of key concepts**

The researcher believes that by defining terms such as information, users and other related terms, a basis for concept clarification for this study can be established. These definitions will form the foundation for a discussion of the information needs concept, which in turn, will provide an understanding of the main topic, career information needs and assessment.

### **2.2.1 Information**

Access to appropriate information, according to Karelse (1994:22), allows information users to take informed decisions as well as to act to change their conditions and shape the course of their lives. The term 'information' has had divergent and numerous definitions even within the discipline of information science itself, a fact that Wilson (1981:3) and Buckland (1991:351) acknowledge. The problem, as Wilson (1981:3) sees it, seems not so much with the lack of a single definition but with the failure to use a definition appropriate to the level and purpose of the investigation. Since information has to do with being informed, with the reduction of ignorance and uncertainty, Buckland (1991:351) finds it ironic that the term 'information' is itself ambiguous and used in different ways. Despite the proliferation of differing definitions of the term 'information', there has been a remarkable similarity in most definitions. The word 'information' denotes a physical entity or phenomenon (as in the case of questions relating to the number of books read in a period of time, the number of journals subscribed to, etc), the channel of communication through which messages are transferred (as when we speak of the incident of oral versus written information), or the factual data, empirically determined and presented in a document or transmitted orally (Wilson, 1981:3).

The Oxford English Dictionary (1989:944-946) identifies three principal uses of the word 'information' as:

- The action of informing; communication of the knowledge or news of some fact or occurrence; the act of telling or fact of being told something.

- Knowledge communicated concerning some particular fact, subject or event; that of which one is appraised or told; intelligence, news
- Having the quality of imparting knowledge or communicating information; instructive

Buckland (1991:351) in turn has resonance with the Oxford English Dictionary's uses outlined above and refers to information as follows:

- Information-as- process: when someone is informed, what he or she knows is changed
- Information-as-knowledge: information is used to denote that which is perceived in information-as-process. Information-as-knowledge is seen as intangible- one cannot touch or measure it in any direct way
- Information-as-thing: the term 'information' is used attributively for objects such as data and documents, that are referred to as information because they are regarded as being informative.

Rowley and Farrow (2000:5) summarise five distinct definitions of information :

- Information as subjective knowledge
- Information as useful data
- Information as a resource
- Information as a commodity
- Information as a constitutive force in society

Numerous definitions of the term 'information' have been proposed with differing versions of the term emerging. Information should not be concerned only with being informed, with reduction of ignorance or uncertainty. Information should also take into consideration the context and purpose of the information sought. The researcher therefore views information as data, documents and the communication process that results in an individual gaining knowledge. Information is what a person hopes to

acquire when he/she interacts with information resources and consults information professionals in his/her quest to satisfy a need.

### 2.2.2 Users

In information need, seeking and user research, individuals have commonly been perceived as users (Bystrom, 1999:82). According to Julien (1999:206), the concept 'user' has its origins from the users of libraries and other information systems, and participants or respondents in research studies. They add that the scope of the concept has widened over the years although it remained ambiguous in its use from being universal on one hand and being extremely specific on the other. The Oxford English Dictionary (1993:3532) defines 'user' as:

- A person who or thing which uses something
- A person who takes narcotic drugs
- A person or organisation making use of a computer or system
- A person who manipulates others for personal advantage

Information professionals do not employ 'user' in a pejorative sense as stated above, but refer to contexts in which individuals make use of information services.

Julien (1999:207) is of the opinion that in the literature of Information Science, information professionals construct users as novices who require help from experts to provide information solutions thereby shaping an unequal power relationship. If information seekers find information systems impenetrable, information professionals focus on instructing in its adequate use, instead of re-designing systems to suit the information behaviour of users thereby closing their information gaps. Because of the way in which the concept of 'user' has been constructed and applied, Julien (1999:206) calls for a worthy replacement that can enlarge the scope of our understanding of the concept. Julien (1999:206) dismisses the terms 'clients', 'customers', or 'patrons' as replacements for 'users'. Client suggests a particular type

of professional relationship that is not universally endorsed in information management, and patron excludes considerations of those individuals who do not interact with a formal information system or source. A customer in turn, is associated with a business model of service provision.... (Julien, 1999:208-209).

Devadason and Lingam (1997:45) distinguish four types of users of information services:

- Potential user: the person who needs information which might (or might not) be provided by specific services of the information facility
- Expected user: the person who is known to have the intent of using certain information services
- Actual user: the person who has actually used the information service regardless of whether any advantage was derived from it
- Beneficiary: the person who derives measurable advantage from the information services.

The typology provided by Devadason and Lingam is interesting and thought provoking but this study has chosen to employ 'potential users' and 'actual users' as categories for identifying and labelling participants. Further categorisations may be carried out in the light of the results of the study, if different patterns of information use emerge.

### **2.2.3 Information need**

#### **2.2.3.1 Definition**

Every individual in an information society has basic needs that have to be met. Individuals therefore work towards satisfying their most important needs in order to maintain their development and survival. Line (1974:87) defines a need as what an individual ought to have, for his work, his edification, his recreation, etc. A needed item will then be what will enable an individual to accomplish the task at hand. Cronin (1981:40) views a need as a gap in one's current knowledge, and that, lack of self-sufficiency on one's part constitutes his or her need. Marcella and Baxter

(2002:198) cite Wilson and Walsh's (1996) identification of certain categories of need, as the need:

- For new information
- To elucidate information held
- To confirm information held
- To elucidate beliefs and values held
- To confirm beliefs and values held

According to Devin and Nilan (1986:17) the term 'information need', has been universally considered troublesome. Its elusiveness has led to the emergence of different definitions being used or implied. Line (1969:6) sees information need as the information that would further a job or research, and would be recognised as such by the recipient. Dervin and Nilan (1986:21) view an information need situation as one in which the individual's internal sense has run out. In this state, movement is prevented by some kind of gap, which the individual must bridge by creating new sense. Dervin and Nilan (1986:21) named this situation, the 'situation-gap model'. The model can be operational when individuals describe moments when they get stopped, how they saw themselves stopped, what questions they had in their minds, what strategies they found useful for answering these questions, and how they used the cognitive bridges once they built them (Dervin and Nilan, 1986:21).

Belkin and Oddy (1982:62) consider information need as an anomalous state of knowledge where information need arises from a recognised anomaly in the user's state of knowledge concerning some topic or situation and in general, the user is unable to specify precisely what is needed to resolve that anomaly. Nicholas (1996:7) views information need as the information that individuals ought to have to do their job effectively, solve a problem satisfactorily or pursue a hobby or interest happily. The implied value judgement in Nicholas' definition is that the meeting of a need is beneficial to the user. Wilson (1981:8) feels that it may be advisable to remove the term 'information need' from our professional vocabulary and speak instead of information seeking towards the satisfaction of needs. Frants and Brush (1988:87), who view information need as a primary concept to designate a certain psychological

human state, are of the opinion that the boundaries of the mental state constituting information need can, in practice, never be defined in precise terms. Information needs can never be understood by others in the same way as the user experiencing them, but can be appreciated if the context within which the user seeks information is understood.

The definitions of information need advanced here are remarkably similar and relevant to this study. For the purpose of this study, and with the insight gained from investigation of the body of relevant literature on information needs, the researcher sees information need as a situation that arises when students seeking career information encounter a problem. They realise that there is a gap in their knowledge structure that prevents them from resolving the problem, and decide that acquiring relevant information pertaining to the problem might close the information gap.

#### **2.2.4 Levels or Categories of information needs**

Various levels or categories of information needs have been identified by the literature reviewed. Cronin (1981:40), Devadason and Lingam (1997:41) and Nicholas (1996:8) identify three categories of information needs. The first category is the expressed need, where the users articulate or state their information needs. The second category is the unexpressed need, a state that presupposes that the users are aware of their needs but do nothing about them, either because they cannot or they will not (Nicholas, 1996:8). To convert unexpressed needs into expressed needs requires users to break out of mental sets, or it requires the intervention of an information provider. Often people are not aware of their information needs. They do not know they have an information gap for they are not aware that there is information out there that could help them (Nicholas, 1996:8). This is what is termed a dormant need. Dormant needs are best determined in conjunction with information professionals as they are often positioned to know what is available (Nicholas, 1996:8). Information professionals' knowledge of subjects and information sources can direct users to information or sources previously unknown to them.

Smith (1991:90) submits that information needs operate at two basic levels:

- A general level, at which the main need is to be kept aware of current developments in work- related areas, in other words, to maintain a certain level of competence
- A specific level, at which information is required for clearly demarcated applications, such as finding solutions to specific problems or responding to questions generated by the user's professional tasks.

According to Smith (1991), because of the nature of users' information requirements, the need for information at both levels may or may not be viewed as articulated. Only a subset of the total corpus of information of potential use available to a person is perceived as being relevant by him, therefore, there could be a domain of information needs that are relevant to a specific task at a given point but which are regarded as dormant (Smith, 1991:90).

Frants and Brush (1988:88) describe information need according to the cyclic nature of the continuity of the need. They distinguish between concrete and problem-oriented information need. In the concrete information need situation, the subject of the information need has a well defined boundary, so that the information need can be expressed precisely, while in the problem-oriented information need situation, the boundaries are not well defined and the information need cannot be expressed precisely (Frants and Brush, 1988:88). To satisfy concrete information needs, often only one pertinent document is necessary and sufficient while in the problem-oriented information need situation, all available documents are often not sufficient (Frants and Brush, 1988:88).

Menzel's (1964:10) categorisation is based on the delineation of distinct needs that the information system has to satisfy. These needs should:

- Keep the user abreast of developments in his predetermined area of attention (current awareness function)
- Furnish him/her with the most up-to-date answers to specific questions when called for (reference function)
- Furnish him/her, on demand, with all the information on a given subject

- (exhaustive search function)
- Provide information for familiarisation in a given area or a new set-up  
(comprehensive function)

The categories of information need discussed here have direct relevance to this study. The researcher acknowledges that a gap in an individual's knowledge structure constitutes an information need and that individuals may choose to articulate or not articulate their information needs if they are aware of such needs. Users may require information so as to maintain a certain level of competence or require information to address a specific problem in order to accomplish a professional task. The level of information need depends to a great extent on the type of information, its purpose and the extent to which it is used.

#### **2.2.5 Career information**

Information about the self and occupations are the key elements that assist an individual to make career choices. Akhurst and Jassat (1999:180) are of the same opinion when they declare that career information services have a vital role to play in an individual's career development, namely in the exploratory phase, in developing and investigating options, and in making career decisions. They cite Isaacson and Brown's (1996) distinction between different types of career information as follows:

- There are comprehensive information systems which may broadly be termed 'labour market information'
- There is career information which is used as intervention in its own right and distributed as one means of influencing career development
- There is career information which is incorporated into other career interventions (e.g. as part of career counselling)

Different types of career information will be of value at different stages. The career practitioner must be able to identify the most suitable type of career information and determine the time in the life stage of an individual at which career information

should be introduced. In South Africa, research has shown that school leavers have very limited career knowledge and this will clearly impact on effective career decision-making (Akhurst and Jassat, 1999:181). Akhurst and Jassat (1999:181) further point out that there seems to be inadequate career education in secondary schools which has led to many students making career choices that are based on trial and error. Those who drop out of school and are unemployed have no access to career services. This is also the case with individuals who never went to school and are unemployed.

The National Career Development Association (NCDA) in America recommends that the following areas should be covered to provide adequate career information (Akhurst and Jassat, 1999:193):

- Duties and the nature of work
- Work settings and conditions
- Preparation requirements
- Special requirements and considerations
- Method of entry
- Earnings and other benefits
- Usual advancement possibilities
- Employment outlook
- Opportunities for experience and exploration
- Related occupations
- Sources of additional information.

Literature on career information in South Africa consists of information on the description of careers, personal checklist, the necessary education and training required, prospects, and sources of additional information, but lacks information regarding earnings and other benefits which many clients enquire about (Akhurst and Jassat, 1999:194).

### 2.2.6 Career information needs

The career information needs of young people arise from basic human needs for self-esteem and self-actualisation, and career planning is therefore linked to young people's developmental needs (Fourie, 1999:69). The significance of young people's need for information about work and study is borne out by various empirical studies which show that jobs, careers, education and personal development are more pressing future concerns than relationships, money issues and leisure. The youth in South Africa generally attach high value to work and they aspire to be educated, successful and prosperous (Fourie, 1999:69). Fourie (1999) further asserts that young people experience needs for more and better information that will guide future decision-making about education and employment. The transition from school to employment entails a series of activities, one of which is choice for a career. Fourie (1999:70) views career choice as a series of short and long-term decisions made over a period of years. The student should possess self-knowledge, be conversant with knowledge of the various career options, and be able to make an informed choice of the study programme related to the career field he/she intends to follow.

Students in pursuit of career needs go through the same stages as an individual seeking to acquire information. Firstly, the student is confronted with a situation and becomes aware of a need. He/she recognises the need as an information problem and realises that he/she needs to acquire knowledge, clarification and understanding in order to overcome the problem. According to the Information Services for Young People (Fourie, 1999:70), information needs occur at both cognitive and affective levels, and they come to the conclusion that:

- The need for information may be short or long-term depending on the purpose for which information is required.
- The student may not perceive the need as urgent

The kinds of information required could range from introductory information for the purpose of orientation and awareness, to complex information for problem-solving.

Many people therefore require assistance in recognising their immediate and long-term needs so that they have the needed information even before a problem occurs. They need to talk to someone who is approachable, they need to trust the information source, and to have privacy in expressing and specifying their needs (Fourie, 1999:72).

Information Services for Young People have shown that young people need career information for the following purposes (Fourie, 1999:73):

- To be aware of training programmes
- How to search and apply for job vacancies
- To understand the world of work and work conditions
- To have knowledge about specific job requirements
- How to choose educational courses and plan a career
- Search for other career options open to them.

Access to and use of career information can be viewed as an integral part of the career decision-making process. It is evident that most students in secondary schools are exposed to limited career knowledge, and this impacts on effective career decision-making. Provision of appropriate career information therefore becomes a necessity at the university where students have to make decisions about their choice of programme of study and work prospects. Students generally require career information on services and resources that will enable them to

- Find a match between their interests, skills and background
- Labour market needs
- Help them find out what other career options are available and develop career plans that fit in with their needs

### **2.2.7 Information needs assessment**

Research into the needs for and use of information under any setting is referred to as information needs assessment. Witkin and Altschuld (1995:4) define needs assessment as a systematic set of procedures undertaken for the purpose of setting priorities and making decisions about the programme or organisational improvement and allocation of resources. They further assert that needs assessment can be seen as a series of procedures for identifying and describing both present and desired states in a specific context, deriving statements of needs, and placing the needs in order of priority for later action (Witkin and Altschuld, 1995:10). To elaborate on their definitions, they set forth the following statements:

- Needs assessment is a systematic approach that progresses through a series of phases
- It gathers data by means of established procedures and methods designed for specific purposes
- The kinds and scope of methods are selected to fit the purposes and contexts of the needs assessment study
- Needs assessment sets priorities and determines criteria for solutions so that planners and managers can make defensible decisions
- Needs assessment leads to actions that will improve programmes, services, organisational structures and operations, or a combination of these elements
- Needs assessment sets criteria for determining how best to allocate available money, people, facilities and other resources.

Kaufman and English (1979:8) view needs assessment as a formal process that determines the gaps between current outputs or outcomes and required or desired outcomes or outputs; places these gaps in priority order; and selects the most important for resolution.

#### **2.2.7.1 Needs assessment studies**

A selection of the information needs assessment studies that the researcher believes inform this study will be discussed in this section. Fidzani's (1998) study seeks to determine information seeking behaviour and use of information sources by graduate

students at the University of Botswana. Fidzani's (1998) study targeted masters students who were given open- and close-ended questionnaires that were structured to elicit information pertaining to information seeking behaviour, library use, students' awareness of library services, library instructions, and respondents' views on issues related to library services. The findings showed that students need guidance in the use of library services and resources for them to meet their information needs (Fidzani, 1998). Haruna and Mabawonku (2001) conducted a related study that examined the information needs and seeking behaviour of lawyers in Lagos, Nigeria. The study selected lawyers who had access to fairly good law libraries and adopted a stratified random sampling method. Data was collected by administering questionnaires, by conducting interviews, and by means of personal observation. The respondents expressed the need for the latest decisions of supreme courts, recent legislation, obtaining information on local and international seminars and conferences (Haruna and Mabawonku, 2001:33).

Marcella and Baxter's (1999, 2000) studies were questionnaire-based surveys and personal doorstep interviews of a sample of the UK population designed to elicit data on their use of and need for citizenship information. The findings of these surveys showed that the majority of respondents have sought information in the past. Face-to-face communication and reading books were the most popular means of accessing information (Marcella and Baxter, 2000:136). Marcella, Baxter and Moore (2002) have carried out an investigation that examined the impact of new technology on the communication of parliamentary information to the general public. This study consisted of a series of interviews to gather data on the objectives and strategies of the services, and information access and dissemination activities. The project investigated the robust and effective use of technologies in real human situations and the organisational and social context within which the technology is used (Marcella, Baxter and Moore, 2002:204).

The purpose of carrying out a needs assessment for the CIC was to identify career needs of its user population as well as to find out the extent to which career resources and services are being utilized, and suggest ways of aligning new and existing career resources and services with the constantly changing career needs of its users.

### 2.3 Identifying career information needs

Devadason and Lingam's (1997) work on a methodology for the identification of information needs is beneficial to this study. It is of vital importance to understand the process of identifying information needs because this process acts as a link in the chain of operations from information gathering to dissemination. Devadason and Lingam (1997:42) view information needs identification as a complex process that is impacted on by the following factors:

- The same information is perceived differently by various users in accordance to their differing information needs
- Information is put to different uses by different users
- A need is satisfied by having access to identified information in a particular package and form at a suitable time
- Individual preferences and behavioural aspects differ
- A user may not like to reveal his/her need as he/she may like to show that he/she is above any requirement and that he/she knows his/her sources

Information professionals are sometimes faced with the problem of distinguishing the desires of users and their actual needs because they cannot prescribe the needed information to their clientele in the same way other professions would. This is compounded by the fact that clients of information professionals are mostly specialists in the area in which they seek information or advice.

Devadason and Lingam (1997:43-50) have provided useful guidelines in the form of a step-by-step procedure that the researcher can use to identify information needs:

- Study the subject area: the subject area should be studied with specific focus given to definitions from different authoritative sources, noting similarities and differences; historical development of the subject, and important sources consulted
- Study the organisation and its environment: there is a need to know the type of organisation under investigation and the environment in which it works

- Study the user's specific environment: it is important to delineate the categories of users whose information needs are to be identified.
- Study the user: the information needs identifier should attempt to perceive the user's problem as holistically as possible.

#### **2.4 Barriers to meeting career information needs**

From time-to-time people encounter problematic situations that they cannot resolve and that require some form of assistance. When such problems arise, there may be a need to look beyond personal or internal resources of information in order to resolve these problems. Young people face career-related decision-making at one point in their lives. They need to actively seek information about their own skills, attitudes, values, interests, and educational and career opportunities. In the process of searching for information, young people may encounter difficulties that impede access to this information. Harris and Dewdney (1994:2-4) provide a valuable summary of barriers to information access that is based on an interdisciplinary review of information behaviour research in many contexts:

- Not knowing precisely what information is needed to solve the problem
- Not knowing where to locate the information that one realises that he/she needs
- Unaware of the existence of sources of information relevant to one's problem
- Non-existence of information needed
- Lack of communication skills and self-confidence
- Delays encountered in obtaining information
- Receiving inappropriate or inaccurate information which may lead to a course of action that may not be best for them

These roadblocks, according to Harris and Dewdney (1994:3), can be generalised to most jurisdictions. Young people find themselves in situations described above when they have to make career-related decisions, and may not understand the extent of the body of knowledge required to make rational decisions. These career decisions may

be self-knowledge, educational opportunities and prerequisites with regard to content and achievement, sources of financial assistance, sources of personal support, how to obtain and improve skills in job searching, resume preparations and interviewing, identification of possible barriers to career development, and the likelihood of the need to be the sole supporter of oneself or one's children (Julien, 1999:39). Young people may be faced with all or some of Harris and Dewdney's (1994) barriers. This study intends to find out which barriers exist in students' career decision-making.

Julien (1999) conducted a study that explored the difficulties faced by young people who are in the process of making decisions related to their future careers, and who are searching for information relating to these decisions. Julien's study was informed by Dervin's (1983, 1992) sense-making theory of communication. Sense-making has been used to study human sense-making in situations where humans reached out for something they called information, used something they saw as potential source of information, and judged whether it helped or not, or created an idea about an institution based on experience with the institution (Dervin, 1992:68).

Julien (1999:40) conducted an analysis of the barriers faced by interviewed respondents using a framework developed by Dervin, and categorises barriers to information seeking as follows:

- Societal: those that impede the availability of resources necessary to satisfy needs in the social system
- Institutional: those that arise from an incapacity or unwillingness of an institutional provider to deliver needed information to a certain type of information seeker
- Psychological: when an individual is unable to perceive his/her needs as informational in nature, unable to obtain needed information from appropriate providers or accept the possibility that an information gap may be overcome
- Physical: such as the absence of physical accessibility for a disabled person
- Intellectual: when the individual lacks the necessary training or expertise to obtain necessary information

The results of Julien's (1999) study show that

- Respondents lacked confidence to actively seek helpful career information
- 40% of the respondents indicated that they did not know where to go to get help to make their decisions, and a similar proportion felt that there were many places to go to for help
- A large proportion of respondents claimed not to know where to obtain information about financing future educational endeavours
- Young people did not know which decisions they had to make for their future.

Nicholas (1996:36) outlines the following five factors that prevent people from meeting their information needs:

- **Personality:** psychological factors play a major role in determining whether needs are successfully met, and indeed may exert the greatest influence on information seeking
- **Time:** People work harder, faster and undertake a wider range of activities than ever before, which leave them with no time to obtain and digest information they need
- **Access:** information sources and systems may be out of reach of users which makes access impossible
- **Resources/costs:** the best channels of information are often unaffordable to the majority of people
- **Information overload:** people are feeling the pressure of the huge mass of information they are bombarded with. They tend to spend more time chasing information than absorbing it.

With more information being produced and less time to absorb it, people are faced with a situation where much more information is passing them without it being accessed or used. Many of the findings explored here may be of assistance to information professionals and service providers in better understanding their clients' perspectives and needs.

## **2.5 The role of Career information Centres in providing career information**

The task of finding a job is still something many people have to figure out on their own. The need for information that can enhance individuals' lives, and locations where this information can be delivered play a crucial part in an individual's well being. Libraries are one of the logical service providers for this role, and librarians, one of the resources that assist people in the access and delivery of the needed information. According to Fourie (1999:75), career information could be provided in the school library but these collections cannot be expected to fulfil the demand for information on personal information needs while at the same time retaining the current emphasis on the curriculum. She adds that school libraries in South Africa are inadequately resourced, and most schools have no media collection. Learners tend to visit public and community libraries for their information needs, a trend that was noticed in an exploratory survey of schools and public libraries in Gauteng, where librarians reported frequent use of public libraries for career-related information requests (Fourie, 1999:75). Fourie (1999) also observed that the role of public libraries in serving the vocational information needs of learners in South Africa is limited. The lack of career information provision by school libraries and the limited provision by public libraries would mean that young people enter university with partial, and in some cases, complete lack of career development of their career prospects.

Every university has resources on career development available somewhere, frequently in more than one place (Lorenzen and Batt, 1992:61). However, most students do not know where to locate career resources or how to effectively use them for their career information fulfilment, once they stumble upon them. Lorenzen and Batt (1992:63) are of the opinion that even when they have a general career direction, students rarely know what resources they want or need in order to accomplish their goals. They acknowledge that career professionals are good resources for defining needs and trends, and they further know how to locate information, a task that would be a challenge to someone not actively involved in the field of career development. Career Information Centres' primary goal is to provide access to information. The

Career Information Centre should facilitate individuals' access to career information and enable them to use that information to meet their career-related needs. To meet the goals of the Career Centre, it is necessary to gather information about the population the centre serves through discussions with students, staff and Faculties. This information will determine the needs and perception of potential users. Anderson (1992:18-19) points out that a Career Centre should provide resources and services on as many of the following career/job-related categories as possible:

- Self-identity: knowledge of self; knowledge of skills; exploration of career interests in varied formats and comprehensiveness; awareness of different workplace requirements; choice of career implications; internship and apprenticeship; sources of financial aid
- Job search: professional organisations and their relationship to career and jobs; company, agency and industry information; current job listings; networking with job search resources
- Career/job preparation: resumes, cover letters, and interviews; salary surveys; cost of living comparisons

The Florida Atlantic University Career Development Centre (2000) has outlined the major functions that a career centre should fulfil as follows:

- To assist undergraduates in clarifying their career goals so that they can make effective and informed decisions in relation to choosing a compatible academic major
- To prepare undergraduates and graduates for professional employment opportunities with increasing emphasis given to electronic job search databases
- To establish, maintain, and enhance internal and external relations with academic divisions of the university and corporate recruiters for the purpose of developing viable work experience opportunities
- To integrate efforts with academic divisions to provide services and

programs that meet the needs of a diverse student population

These functions can be generalised to activities of Career Centres in universities, where students' career development and future work prospects are a priority.

Akhurst and Jassat (1999:188-189) have cited Durrance (1992) and listed the types of work professional staff at Career Centres may do, and those that are relevant to this study are mentioned below:

- Use a variety of techniques to respond to clients' needs
- Collect and analyse evaluation and research studies to learn more about the specific career needs of people in a particular setting
- Market and advertise career services to encourage potential clients to make use of them
- Focus on and learn about the employment and education environment
- Gather, evaluate, systematise, store, retrieve, and update multimedia career information
- Meet with administrators, organisational decision-makers and other people who can provide funds and resources to help develop and improve career programmes.

The researcher views the Career information Centre (CIC) at the University of Cape Town (UCT) as a centralised location which provides the opportunity to systematically organise all career materials into workable and efficient units. The CIC should bring into focus the career-related programmes and career resources, and align them with the objectives of the institution it serves. The CIC at the University of Cape Town should put in place methods for promoting acceptance of career-related programmes among students, staff, Faculties and administration. This entails, among others, encouraging a variety of members of the institution to participate in career development programmes, and evaluating the CIC materials and facilities. The CIC's role is to provide services that are geared towards clients who need to locate and process information for career problem solving and decision-making. Its objectives and operational procedures will, to a large extent, depend on the resources available and the needs of users in the university. If the university community has confidence in

accessing career information, and the CIC provides a conducive environment to do so, then the university community will visit the CIC when career-related problems or indecision arise.

## **2.5 Reasons for undertaking a needs assessment study**

Nicholas (1996:3) believes that the information profession is system driven, and it shows enormous interest in the processing and storing of information, to the general neglect of the users. Developers of information systems are bent on outdoing each other in producing complex information systems that are not user friendly and cannot be subjected to user evaluation because of the speed at which they are replaced by more complex systems. Nicholas (1996) has observed that information professionals sometimes show marked reluctance to question their users, a factor that constitutes to poor communication and leads to lack of consultations between service providers and users. Nicholas (1999:4) also believes that other reasons for neglecting information needs assessment is that it is expensive to collect data for this type of study, and that there is no easily understood, practical framework within which to explore people's needs, and no single method for collecting data.

There are similarities in benefits advanced by different authors for undertaking a needs assessment study. According to the University of Tennessee libraries (1994), needs assessment provides libraries with information about user awareness and satisfaction with existing services, as well as interest in new services, and an ongoing needs assessment programme determines priorities among limited resources for library programmes of the future. In carrying out a survey of the needs of users, organisations hope to validate or enrich their own existence and policies. Needs assessments are used to collect data on the need for or current use of services, products and information, and the information gained from needs assessments is typically used to make decisions about the allocation of programme resources and services (Soriano, 1995:2). A needs assessment determines how well an information centre is currently meeting the needs of its user community, and what other types of information resources and services it can provide in the future. The results of a needs assessment study can be used to determine the following:

- How extensively the collection is being used and to identify gaps
- Who uses the information centre and ways to reach non-users
- How successful the services are and how they can be improved to reflect the users' needs
- Whether the space and the physical building are adequate for providing services
- How the user community is changing( e.g. socio-economic status, demographics, etc)
- Whether staffing patterns and hours of operations are adequate

Biblarz and Bosch (2001:7) have outlined the benefits of undertaking user needs assessment for collection development and management uses as follows:

- Maximising the potential of programmes, collections and services to support user needs
- Providing data that assist in the allocation of resources
- Providing data that support programme planning
- Supporting the development of verifiable performance and quality measures
- Ensuring that the resources are serving the clients' objectives
- Providing justification for reducing collecting activities in subject areas where materials are not heavily used.

One of the underlying factors that motivated this study is that a needs assessment survey is intended to lead to action, change and improvement, and that if done well, it should lead to measures that will directly benefit the needs of individuals in a particular set-up.

## **2.6 Limitations of needs assessments**

Although needs assessment has been credited for improved services and resources provision, Soriano (1995:2-3) argues that no assessment is able to quantify perfectly

the specific service requirement for any programme, and he attributes this to one or a combination of the following:

- Reluctance of needs assessment participants to truly admit the current use of services or reveal personal concerns about the need for services
- Opposition to disclosing to agencies a need for services, regardless of recognised need for them
- Lack of access to respondents
- Unwillingness by people in general to participate in any survey or study
- Purposely deceptive responses given by some
- Poorly written questions
- Erroneous interpretation of responses

Most of Soriano's (1995) assertions ring true to information needs assessment studies scenarios. Collecting information from participants can prove to be difficult and strenuous. The wording of a question is critical to collecting valid data. Most users are suspicious of answering honestly or even participating in surveys that might hinder them in their work.

## **2.7 Conclusion**

Conducting the literature review has proven to be very useful in informing this study. It has provided the foundation from which the researcher can map his research. The literature surveyed has made it possible for the researcher to embark on this study with a clear understanding of the main components that constitute an information needs assessment study. The concept of information need is embedded in the studies of users, their environment and information use. It is thus necessary to delineate the categories of users whose information needs are to be identified. The researcher has used "potential user" and "actual user" in classifying respondents in this study. A potential user is a person who needs information that might be provided by the CIC – but never used their services, and an actual user is the person who has actually used the CIC's services and resources.

There is also a need to study the subject area, to focus on definitions from different authoritative sources, and to note similarities and differences. The researcher was able to derive a set of definitions for the main concepts under investigation. The investigation of previous studies and their result could thus form the basis for this study. With the insight gained from these studies, the researcher can confidently conclude that:

- Provision of appropriate career information is necessary to assist students' in their choice of programme of study and work prospects
- For the researcher to identify information needs of students, he should study the subject area, the organisation and its environment, the user and his/her specific environment
- For information professionals and service providers to better understand the needs of their users they should eliminate barriers to information use
- The Career Information Centre is ideally situated to systematically organise all career materials into workable and efficient units
- Undertaking a user needs assessment study maximises the potential of programmes and services to support user needs; provides data that support programme planning and performance and quality measures; and ensures that the resources are serving the clients' objectives
- Collecting information from participants can be a difficult and strenuous exercise.

The researcher believes that undertaking a needs assessment study should result in action, change and improvement, and that users stand to gain from this exercise. A needs assessment study should maximise the potential of programs and services to support user needs. It should provide data that assist in the allocation of resources, and support program planning. The study should ensure that the resources are serving the clients' objectives, and are supporting the development of performance and quality measures. A needs assessment study, however, is not an easy task to undertake. Data collection can prove to be difficult and strenuous to conduct. Questionnaire wording is not easy either. Participants may be economical with the truth when questioned or interviewed. These are some of the problems the researcher realized he would likely face in his investigation.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY AND DESIGN**

#### **3.1 Introduction**

This chapter covers the research methodology and research design that the researcher decided to adopt for this study. It outlines the benefits of survey research methods and discusses survey population, sampling concepts, sampling procedures, data collection methods, and data processing and entry.

#### **3.2 Research methodology and design**

Research involves searching or investigating exhaustively with the aim of discovering information about a particular subject area, and interpreting facts. Scientific research is a type of decision making process which, according to Mouton and Marais (1990: 15) requires a researcher to make a series of decisions of the following nature: which theory or model is likely to be the most appropriate for investigating a given subject? which measuring instruments and data collecting methods can be used?; how should the collected data be analysed?; what does the findings mean and how do they relate to the original formulation of the problem? Research methodology is viewed as the study of the research process in all its broadness and complexity, as well as the various methods and techniques that are employed, the rationale that underlies the use of such methods, the limitation of each technique, the role of assumptions and presuppositions in selecting methods and techniques, the influence of methodological preferences on the type of data analysis employed, and the subsequent interpretation of the findings (Mouton and Marais, 1990:16). Bailey (1982:32) describes research methodology as the philosophy of the research process as distinct from research method, which he views as the research technique or tool used to gather data.

Research design can be viewed as a plan that guides the researcher through various stages of the research process. The aim of a research design is, therefore, to plan and structure a given research project in such a manner that the eventual validity of the research findings is maximized (Mouton and Marais, 1990:33). Mouton and Marais'

(1990) emphasis does not just reflect the design and planning involved in a research project, but takes into consideration the elimination of factors that threatens the validity of the research project. While research methodology concerns itself with investigating exhaustively with the aim of discovering, collecting information and interpreting facts, research design is concerned with the planning of the enquiry and designing strategy for making discoveries.

### **3.3 Survey research method**

After studying the literature of methods in social research, the researcher decided to adopt the survey research approach as the most appropriate method to use for this study. Survey research has often come to be associated with research design because of its highly structured sample design techniques. Surveys, according to Polland (1998:2), are a systematic way of asking people to volunteer information about their attitudes, behaviour, opinions and beliefs. The success of survey research rests on how closely the answers people give to survey questions matches how people really think and act. The basic assumption of survey research is that, by carefully following certain scientific procedures, one can make inferences about a larger group of elements by studying a relatively small number selected from the larger group (Powell, 1991:53). Busha and Harter (1980:54) share Powell's (1991) assumptions when they state that survey research allows investigators to gather information about target populations without taking a complete enumeration. It allows one to select a small proportion of the population and then generalize the findings to the larger group. Survey research techniques can save time and money without sacrificing efficiency, accuracy, and information adequacy in the research process (Busha and Harter, 1980:54). This assumption, of course, presupposes that a well-designed sampling method is used in the process.

Babbie (1973:58) has described the purposes for undertaking survey research as description, explanation and exploration. Polland (1998:2) mentions description, explanation, evaluation and prediction as the uses to which survey research can be subjected. Exploratory studies are usually used in unknown areas to gain insights and comprehension while descriptive studies provide measurement of phenomena being

studied. Explanatory studies on the other hand, aim to discover and measure relationships among different aspects of the phenomena under study. Surveys may be conducted for the purposes of making descriptive assertions about some population by discovering the distribution of certain traits or attributes (Babbie, 1973:57-58). Polland (1998:2) asserts that descriptive surveys are an appropriate way of describing phenomena and summarising them to get a precise measurement. Surveys however can also be used to make explanatory assertions by examining relationships between variables and explaining why one variable is preferred over the other. This is what Polland (1998:2) refers to as the measurement of associations between things so as to provide causal explanation to phenomena. Exploratory surveys in turn relate to a research device when the researcher is only beginning his/her enquiry into a particular topic (Babbie, 1973:59). Powell (1991:55) cautions that exploratory studies merely suggest insights or hypothesis; they cannot test them, and they must always be regarded as simply a first step. Prediction survey data is used to forecast future events (Polland, 1998:2). In deciding which category of survey to use, the decision should be based on the degree to which a desired objective is attained as a result of a planned program.

The researcher views the survey research method as the most suitable technique with which to assess career information needs of actual users and potential users of the Career Information Centre (CIC). Survey research techniques will be used in this study to discern among others:

- The kinds of information needed by CIC users and potential users, and the sources of information they are most reliant on
- Whether users of the CIC are satisfied with the CIC resources and services
- Attitudes and opinions of users and potential users towards refining of the current resources and services to suit their career information needs.

Although the study will be mostly descriptive and exploratory by nature, the researcher will also attempt to explain the respondents' views on their career information needs and resources requirements.

### **3.4 Unit of analysis**

When undertaking survey research it is vital to identify the object of investigation. A thing or things under study in a given survey are units of analysis. The unit of analysis can consist of individuals, groups, organisations, social objects, and so forth. Data are collected for the purpose of describing the individual units of analysis, and those descriptions are aggregated and manipulated to describe the population they represent (Babbie, 1973: 60). Units of analysis for a given survey may be described on the basis of their components. Thus individuals could be categorised by conditions such as sex, age, occupation, educational level, or orientations such as opinions, attitudes, preferences, needs, or by actions such as library use, reading and so forth. Babbie (1973:61) cautions that whatever the nature of data used to describe the unit of analysis, it is important that they be identified in advance. Otherwise the sample design and data collection methods may prohibit the analysis appropriate to the study.

The units of analysis for this study are University of Cape Town students chosen from the five faculties of Humanities, Commerce, Engineering, Science and Health Sciences. These students are described on the basis of their year of study; faculty they are registered in; their needs; opinions; attitudes and preferences in relation to their careers; as well as their use and non-use of the CIC.

### **3.5 Basic survey designs**

After specifying the units of analysis, the researcher has to choose a survey design that is appropriate to his study. When deciding on a research design, time dimension should be considered. Babbie (1973:62) identifies the following two survey designs that emphasises time factor as cross sectional surveys and longitudinal surveys. Cross sectional surveys involve collecting information at a single point in time from a sample selected to represent the total population (Polland, 1998:2). Such a survey, according to Babbie (1973:62), is used not only for purposes of description but also for the determination of relationships between variables at the time of the study. Longitudinal survey design on the other hand, analyses data over a period of time. The primary longitudinal designs are trend studies: where trends may be studied at

different points in time; cohort studies: where the focus is on the same specific population each time data are collected; and panel studies, which involves the collection of data over time from the same sample of respondents (Babbie, 1973:63-64).

The researcher views the cross sectional survey design as the most suitable for assessing career information needs of UCT students. The researcher's study is a single time description where a population relevant to his interests was identified, a sample of respondents from that population was selected, and the survey conducted. Such a study would reflect the attitudes, opinions, needs, preferences and so forth, prevalent at that particular time.

### **3.6 Survey population, sampling concepts and procedures**

#### **3.6.1 Survey population**

The concept of population in research has often been a source of confusion because the concept can be viewed differently in different circumstances. In statistics, population refers to a group of numbers, and in quantitative data collection population is the mathematical nature of data, while in qualitative data collection researchers view population as the source of data. Population is defined by its characteristics and so this study will view population as the group of people to be studied and which are assigned on the basis of common characteristics. Powell (1991:61) sees population as the total of all cases that conform to a specified criterion or set of criteria. The selection of the population, according to Powell (1991:61), must precede the selection of a sample, assuming a sample is to be drawn, and is crucial to the success of the sampling stage. He further adds that, in selecting the population, selection criteria, desired size, cost, availability of members of the population, and time should be considered if the researcher aims to collect relevant data.

The population for this study is the University of Cape Town students in the faculties of Humanities, Commerce, Engineering, Science and Health Sciences. The first four of these faculties are located on the main campus, and that is where the Career

Information Centre (CIC) is also located. The researcher believes that since these faculties are situated in the same location as the CIC, students from these faculties would be aware of CIC services and could have used them at one point or the other. The faculty of Health Sciences, which is not at the main campus, was included in this study to establish if CIC services are known or used by students in specialised areas and in faculties other than those on the main campus.

### **3.6.2 Sampling**

A sample is a subset of a population whose properties are studied to get information about the larger population. When researchers are unable to obtain or analyse an entire population, they will need to take a sample of the population. Mugo (2002) views sampling as the act, process, or technique of selecting a suitable representative part of the population for the purpose of determining the parameters or characteristics of the whole population. Inferential statistics can then be used to determine the total population's characteristics even when only a portion of the population was observed. Sampling enables the researcher to obtain a manageable collection of objects to study. The economic advantage of sampling in research is that fewer resources are required. The researcher, however, must guard against taking a sample that is too small as this may yield results that cannot be generalised to the larger population. Mugo (2002) provides the following reasons for undertaking a sample:

- A sample provides you with the needed information quickly
- Many populations about which inferences must be made are quite large and the big size of the population makes it impossible to conduct a census
- There are some populations that are so difficult to get access to, that only a sample can be used
- A sample may be more accurate than a census

#### **3.6.2.1 Sampling frame**

Babbie (1973:81) describes a sampling frame as the actual list of sampling units from which the sample or some stage of the sample is selected. The sampling frame usually

provides a means of identifying and locating the population elements. Samples that are properly drawn provide appropriate information for describing the population if the elements were drawn from an accurate sample frame. It is necessary to make this point in view of the tendency for researchers to select samples from a given sampling frame and then make assertions about the population similar to, but not identical to the survey population defined by the sampling frame (Babbie, 1973:89).

### **3.6.2.2 Sampling methods**

Survey samples must represent the population from which they are drawn if they are to provide useful estimates about the characteristics of that population (Babbie, 1973:78). Powell (1991:62) and Babbie (1973:76) distinguish two major types of sampling methods – probability sampling and nonprobability sampling. Probability sampling provides a method for enhancing the likelihood of accomplishing this aim, and for estimating the degree of probable success (Babbie, 1973:83). Probability sampling is based on random selection, a technique that allows the selection of samples so that each individual has an equal chance of being selected (Busha and Harter, 1980:60). Babbie (1973:92) discusses three major types of probability sampling: simple random sampling, systematic sampling, and stratified sampling. Simple random sampling gives each element in the population an equal chance of being included in the sample (Powell, 1991:65).

Once a sampling frame has been established, the researcher assigns numbers to each of the elements in the list – assigning one and only one number to each and not skipping any number in the process. A table of random numbers could then be used in the selection of elements for the sample (Babbie, 1973:92). In systematic sampling, every *k*th element in the total list is chosen for inclusion in the sample, for example, if the list contains 10,000 elements and a sample of 1,000 is desired, every tenth element of the sample will be selected (Babbie, 1973:92). Stratified sampling is a method for obtaining a greater degree of representativeness – decreasing the probable sampling error (Babbie, 1973:94). When investigators have a frame or list of members of a population, and can accurately place individuals into homogeneous categories or

strata, random samples may then be selected from each stratum (Busha and Harter, 1980:60).

In nonprobability sampling, the researcher cannot be assured that a specific element of the population has any probability of being included in the sample (Powell, 1991:62). The assertion here is that a nonprobability sample does not permit accurate generalising from the sample to the population because the researcher has no assurance that the sample is representative of the population. A researcher relying on a nonprobability sample cannot evaluate the risk of error involved in making inferences about the population (Powell, 1991:63). Powell (1991), however, gives credit to nonprobability samples in terms of being cheap and easier to obtain than probability samples, and that, in some cases they may be the only feasible method. Nonprobability sampling can be divided into three types: convenience or accidental sampling, quota sampling and purposive sampling. In using the accidental sample, the researcher simply selects the cases that are at hand until the sample reaches a desired, designated size (Powell, 1991:63). There is hardly any assurance that this kind of sampling is reasonably representative of the population. Quota sampling, on the other hand, is the same as accidental sampling except that it takes steps to ensure that the significant, diverse elements of the population are included in the sample in the proportions in which they occur in the population (Powell, 1991:63). Purposive sampling ensures that the effect of the independent variable is in fact present in the sample, and can be measured.

### **3.6.2.3 Sample size**

The question of how large a sample should be is a difficulty one. Sample size can be determined by a number of factors. Bailey (1982:100) asserts that the correct sample size is dependent upon the nature of the population and the purpose of the study. According to Mugo (2002) sample size depends on the nature of the analysis to be performed, the desired precision of the estimates one wishes to achieve, the kind and number of comparisons that will be made, the number of variables that have to be examined simultaneously, and how heterogeneous the population that is being

sampled is. Bailey (1982:100) argues that around 30 cases seem to be the minimum for studies in which statistical data analysis is done. However, when there are several subpopulations to study, many researchers regard 100 cases to be more appropriate (Bailey, 1982:100).

#### **3.6.2.4 Sampling method and procedures used in this study**

This study conforms to stratified non-probability sampling in that it allowed the researcher to select respondents who were readily available and were willing to participate. The sample was obtained by separating the university population into faculties, year of study, users, and potential users of the CIC. The focus of sampling in this study was to select twenty undergraduate students from each of the five faculties chosen to make up the required sample size. The students were selected from different departments within each faculty.

The current study did not derive its sample from a sampling frame such as a published list of the population. The researcher found that it was impossible to obtain an up-to-date published list of all the 16 000 registered UCT students. It would also be difficult to go through such an extremely long list of elements had it been available in order to obtain a sample frame. The university would further be unwilling to provide access to its computerised student records. All these factors precluded the researcher from using a sample frame. The researcher instead randomly approached individual students in their departments and places of residence and asked them if they would be willing to participate in the study. Those students who were willing to participate were briefed on the purpose of the study before being given the questionnaires to complete. Students from the same departments and faculties as the participants facilitated the identification of the participants. The researcher decided to set the sample size for this study at 100 participants to ensure an adequate sample size for statistical analysis purposes. The researcher assumed that this number would generate a valid, meaningful and representative sample.

Questionnaires were issued to participants on a daily basis until the required sample size was obtained. Students were asked whether they have used the CIC or not so that

they could be given the appropriate questionnaires to fill. Questionnaires were distributed equally among participants from the designated faculties in that participants from each faculty had 20 questionnaires to complete. The researcher was able to get 67 potential users and 33 actual users to make up the required number of 100 participants.

### **3.7 Data collecting methods**

Once the researcher has decided on a particular research design and has obtained participants or units of analysis, he/she has to choose the most appropriate data collecting method in the light of the research problem and the population that is being investigated. The kinds of data the researcher collects and the way in which it is collected affects how the researcher can use that data. That is why he/she has to decide before hand what will be measured and how it will be measured. The types of data the researcher may collect are data pertaining to respondents' personal information and demographic attributes (factual data); what people say they want (attitudes); what people think might be true (opinions); what people know is true (beliefs); what people actually do (behaviour); what people are (attributes); and what people would choose. Each type of data may require a different question to get at the information needed.

There are a number of data collection methods available for use by social scientists. For this study, the researcher opted to use questionnaires and interviews as the appropriate methods for data collection. Interviews were conducted after the questionnaires were administered. Questions asked in both instruments addressed information pertaining to respondents' attitudes, opinions, needs and other factual information that characterised the individual participants' need for career-related information.

#### **3.7.1 Questionnaires**

Questionnaires are forms of securing answers to questions. The aim of a questionnaire is to get information from people, usually by asking questions. Questionnaires are

often used in surveys as the primary data collection instruments. The purpose of research, according to Busha and Harter (1980:61) is to obtain valid and reliable information so that specific hypothesis can be tested or research questions answered. It is for this reason that the researcher must aim at developing the kinds of questions that accurately measure what he wants to know. This is possible if a thorough search and review of all the literature related to the topic under study is conducted. Examination of the underlying theories, methods, and conclusions of related studies allows a better understanding of the research problem and contributes to the conduct of a better study (Busha and Harter, 1980:62). As with other research methods, the questionnaire has both advantages and disadvantages. The researcher weighed these carefully before deciding that questionnaires were the most appropriate method for collecting the required data.

Gillham (2000:6-7) has outlined the advantages of survey questionnaires and those that are applicable to this study are as follows:

- If it is efficiently organised, responses to even a large – scale questionnaire can be manipulated within a matter of weeks
- Respondents can complete the questionnaires when it suits them but within time limits set by the researcher
- Respondents' anonymity is assured in order to encourage them to disclose information that they would otherwise be unwilling to disclose

Busha and Harter (1980:62) contend that through the preparation of a formal instrument, researchers are encouraged to clearly define the research problem, the implication of the problem, and the nature of the needed research data. Busha and Harter (1980:62) also outline the disadvantages of questionnaires as follows:

- Questionnaires do not allow respondents to qualify ambiguous questions
- If the prepared instrument does not arouse respondents' emotions, valid responses might not be elicited.

However, there is a way to overcome the above problems. Ambiguous or misleading questions and those that do not elicit responses can be picked up and eliminated

through careful pre-testing and piloting. Investigators thus have a professional responsibility to

- Carefully analyse and understand the research problems, and relate the question to the problems
- State their questions clearly
- Request only information that can easily be provided by the respondents
- Be brief and consider participant effort, but still treat the subject adequately (Busha and Harter, 1980:64).

Researchers should word all items in a questionnaire in such a way that questions are conceptually valid, promote understanding and accuracy, and encourage respondents' participation in the research.

#### **3.7.1.1 Construction of questionnaires**

Both structured or close-ended questions and unstructured or open-ended questions were used in this study. Structured questions are characterised by the provision of a series of fixed responses and survey participants are allowed to choose among several answers that are designed to reflect various views, beliefs or feelings (Busha and Harter, 1980: 70). According to Bailey (1982:123), the advantages of fixed alternative questions are:

- The answers are standard, and can be compared from person to person
- The answers are much easier to code and analyse, and often can be coded directly from the questionnaires, saving time and money
- The respondent is often clearer about the meaning of the question, thus there are less frustrated respondents who answer 'don't know' or fail to answer at all.

The greatest disadvantages of close-ended questions are that they can encourage respondents to guess appropriate answers if they do not know the response.

Unstructured questions on the other hand, allow the respondents to reply freely without having to select one of several responses (Busha and Harter, 1980:70). The advantages of open-ended questions are as follows:

- They can be used when all of the possible answer categories are not known
- They allow the respondent to answer adequately, and to clarify and quantify his/her answer
- They can be used when there are too many potential answer categories to list on the questionnaire
- They allow respondents to convey their own opinions (Bailey, 1982:125).

Data for open-ended questions are often not standardised from person to person, and coding is often very difficult.

As mentioned, the researcher used a mixture of closed-ended and open-ended questions to utilise the advantages of both questioning strategies. The researcher wanted to solicit responses from two categories of students and thus, designed two tailored questionnaires. The first questionnaire was addressed to students who had not used the UCT Career Information Centre before and were labelled as 'potential users' for the purpose of this research project. Questionnaire items for potential users were mostly open-ended because it aimed at obtaining information about respondents' opinions, needs, attitudes, and preferences. The second questionnaire was addressed to those students who had actually used the Career Information Centre at one point in time, and were known as 'users'. Items in the questionnaire to users were mostly close-ended because they required respondents to give information pertaining to their experiences while using the centre, and asked about things they were familiar with and could thus be more formatted.

The language used in the questionnaires was concise and easy to understand. Questionnaires were kept as short as possible and ambiguous questions were avoided. Exhaustive and mutually exclusive response alternatives were provided for close-ended questions. Questions with similar content were placed together in the survey instruments, and the researcher made sure that the questions asked were relevant and reflected the objectives of the study.

### 3.7.1.2 Administration of questionnaires

Administration of questionnaires can be done in a number of ways. Mail surveys can be used to distribute the same instrument to a wide number of people and respondents are then given time to fill in the instrument at their own convenience before asking them to return the items by post. Response rates from mail questionnaires are, however, often very low. Group-administered questionnaires is another possibility where the sample of respondents is brought together and asked to participate. Each respondent is handed a questionnaire and asked to complete it while in the room.

A third possibility, and the one used in this study, is the household drop-off method. The researcher went both to the respondents' places of residence and to designated departments, and handed the instrument to them. Respondents were asked to complete the instrument at their convenience but were required to hand them in by a date set by the researcher. For example, if participants were given questionnaires to complete on a Monday, they had to hand them in by that Friday. The collection of instruments was done in two ways. The researcher went back to collect the instruments from the respondents, especially those staying in UCT residences, while questionnaires issued in other residents and in departments were collected by designated persons who stayed in those residents, and who belonged to the different departments. These persons had accompanied the researcher while distributing the questionnaires and were known to the participants. The household drop-off survey attempts to blend the advantages of the mail survey and the group administration questionnaire. Like the mail survey, the respondents work in private, when it is convenient, and as in the group administration questionnaire, the researcher makes personal contact with the respondents and can give clarification on what is to be done. A further advantage is that the percentage of people willing to participate in a household drop-off survey is usually high.

The distribution and collection of questionnaires took five weeks to conduct. Questionnaires were issued each week until the required sample size of 100 was

reached. The researcher ensured that each faculty was equally represented and twenty questionnaires were thus given to undergraduate students in each of the designated faculties. Questionnaires were issued to students according to whether they had used the Career Information Centre or not. The researcher did not attempt to balance the number of actual users with that of potential users because during the piloting exercise there were cases where responses from one department or even the whole faculty had never used the CIC. Tracing the actual users would further have been an almost impossible exercise.

### **3.7.2 Interview survey**

An interview is a conversation where one person- the interviewer - is seeking responses for a particular purpose from the other person: the interviewee (Gillham, 2000:1). The researcher conducts interviews in order to gain information from respondents who are able to provide research data. Interviews have been credited for attaining higher response rates than self-administered questionnaires (Babbie, 1973:171). If properly designed and executed, the interview survey can achieve a high completion rate. Interviews prevent users from being confused by questions. If the respondent misunderstands the intent of a question or indicates that he/she does not understand, the interviewer can clarify matters, thereby obtaining relevant responses (Babbie, 1973:172). However, interviews can be time consuming and expensive.

To ensure that this interview survey was a success, the researcher adopted Busha and Harter's (1980:78) guidelines for a successful interview:

- "Be thoroughly prepared in advance; know the topic and purpose of the survey
- Be friendly and courteous, and put the respondent at ease
- Assure respondents that their views are valuable and significant to the survey being conducted
- Ask one question at a time, making sure that each is concise and clear
- Do not attempt to put words into respondents' mouths
- Do not react directly to respondents' replies by expressing approval, disapproval, surprise, or shock

- Do not directly dispute respondents even though you may know or suspect that their responses are inaccurate
- Be neutral in recording responses so that the collected data are accurate and objective
- Express gratitude to participants for their assistance and co-operation”

Well-planned and carefully designed interviews usually produce the desired information, insightful observation and opinions from respondents.

The survey interview method was used in this study to supplement and clarify certain survey items that may have been misunderstood in the questionnaires. It was also meant to explore issues discussed in the survey questionnaires in greater depth.

#### **3.7.2.1 The interview process**

The researcher made appointments with students who indicated willingness to participate in the interviews, and set the date and place of the interviews. Before the start of the interviews, participants were made aware of the purpose of the study. Participants who had not used the Career Information Centre (CIC) were briefed on the CIC, and asked to be as objective in their responses as possible. The researcher personally carried out the interviewing of all participants. The interviews were tape-recorded and participants were informed beforehand about the tape recording and were given the following reasons for doing so:

- If you write things down during the interview, it interrupts the flow of the interview process
- By tape recording, you do not miss anything said by the interviewee, and you can go over the recorded interview several times

To make the interview survey representative, two interviewees were selected from the five designated faculties to make up a total number of ten participants. The ratio of potential users to users was 8/2. The interviews were carried out over a period of two weeks.

### 3.8 The pilot study

A pilot test is useful for establishing the research instrument's reliability, the practicability of procedures, the availability of volunteers, the variability of observed events and testing investigator's skills (Polland, 1998:18). Babbie (1973:211) describes a pilot study as a miniaturised walkthrough of the entire study from sampling to reporting. A proper pilot study is one where you simulate the main study but it involves fewer people. The pilot study should involve the administration of the research instrument identical to the one intended for the final survey and should investigate the same kind of units of analysis as in the target group.

In order to test the validity of the questionnaires, a pilot study was carried out before the final printing of the questionnaires. The researcher was particularly concerned with collecting data and how long the procedures would take, what actions facilitated or inhibited the operation of the study, whether the instructions were understood, and whether the information the respondents provided showed understanding of the questionnaire items. The researcher also wanted to eliminate errors in wording so as to promote clarity in questions and increase the chances that all questions would be attempted. The pilot study was made up of twenty-five participants from the faculties chosen for the study. Respondents were given questionnaires that they had to fill in individually and were told to ask questions concerning items they wanted clarified. Responses from participants indicated that the survey items and instructions were well understood and it was not necessary for the researcher to make any changes. The researcher was also able to establish the length of the questionnaire exercise so as to notify participants well in advance before the main survey was conducted. The researcher also conducted a pilot run of the interview by asking a friend to act as an interviewee, and help the researcher to spot potential problem areas of the interview.

### 3.9 Reliability and validity

In order for information to be useful, it has to be consistent, dependable, and most of all, true (Polland, 1998:9). In survey research, these criteria are represented by the concepts of reliability and validity. The concept of reliability presupposes that we can expect to obtain the same information time after time. A measure is reliable if the measurement does not change when the concept being measured remains constant in value (Bailey, 1982:73). Reliability can for example be applied to sampling in that if we repeatedly draw a random sample of equal size from a population, we can expect to get the same sample value each time. If a sample being measured changes in value, the reliable measure will indicate that change.

Validity relates to the degree to which the research has measured what it was supposed to measure. According to Bailey (1982:68), the definition of validity has two parts:

- That the measuring instrument is actually measuring the concept in question and not some other concept
- That the concept is being measured accurately

The researcher improved the accuracy of his survey instrument by using both questionnaires and interviews as data collection tools to compensate for the individual shortcomings of each method. The researcher carefully worded the questionnaire and interview items so as to avoid bias and ambiguity. The researcher carefully went through the data collection instruments to make sure that the major dimensions of the subject matter under study were covered. A pilot study was used to test the validity of the questionnaire items. The pilot study was derived from the same population that the actual study was going to be conducted on. The researcher also conducted a pilot run of the interview. The researcher asked a friend to play the role of the interviewee. This was done in order to identify potential problem areas of the proposed interview.

### 3.10 Data processing and entry

Social researchers use computers to analyse data. Computers can calculate at an immense speed using huge amounts of data. Data must, however, be prepared in a form acceptable to the computer. To systematically analyse data there is a need to convert it into a format that can be manipulated and this process is known as coding. Coding is the first step in preparing data for computer analysis. Punch (1998:204) views codes as tags, names or labels, and coding as the process of putting tags, names or labels against pieces of data. These pieces may be individual words, small or large chunks of data. The purpose of assigning labels is to attach meaning to the pieces of data. Most close-ended questions can be coded very easily. Researchers may assign numeric codes to the range of possible responses resulting from close-ended questions through the pre-coding process. A number indicating the respondent's answer is marked with an x in the questionnaire containing the predetermined range of responses. These questions are referred to as "closed" precisely because the range of responses is predetermined (Rose and Sullivan, 1993:36). Most of the data elements that made up close-ended responses in this study were characterised by words and phrases while a few were made up of numerals.

In open-ended questions the researcher left the responses entirely to the respondents. Nevertheless, it is important to stress that the researcher asks an open-ended question with some definite purpose in mind, and therefore should be able to classify the answers according to his original purpose in asking the question (Rose and Sullivan, 1993:36). The open-ended questions that were asked in this study were asked in order to make in-depth observations and gain more insight from respondents' understanding and perceptions of the purpose of the study. For open-ended questions to be analysed via a computer, numeric codes have to be assigned to them. According to Rose and Sullivan (1993:36), such analysis will involve a certain loss of information, which we choose to trade against the advantages of computer analysis. It is thus understandable why the transformation of such observations into numeric codes is referred to as the degradation of data. The uniqueness of each respondent's answer is lost but the ability to compare different responses on the same scale is gained. Responses from open-ended questions were presented as words or phrases representing related views and

opinions of respondents. The data elements were then entered into Microsoft Excel to prepare them for analysis.

### **3.11 Conclusion**

The researcher adopted the survey research method as the most appropriate method to use in this study. Survey research employs highly structured sample design techniques that make the outcome of the survey more credible. Survey research allows researchers to make inferences about a larger group of elements by studying a relatively small number selected from the larger group. In this way money and time can be saved without sacrificing efficiency, accuracy and information adequacy in the research process. The researcher intended to use survey research techniques to discern among others; the kinds of career information needed by UCT Career information Centre users and potential users; whether users are satisfied with the services and resources in the CIC; attitudes and opinions of users and potential users towards refining services and resources, and implementing ways of bringing services and resources in harmony with students' career needs.

The concepts of reliability and validity have significance in the outcome of the survey results. These concepts presuppose that information has to be consistent, dependable and true in order for it to be viewed as useful. The researcher improved the accuracy of the survey by thoroughly examining the survey instruments before using them. Careful wording of questions was carried out to avoid bias and ambiguity. Questionnaires and interviews were used in data collection to compensate for the shortcomings of each research method. The units of analysis for this study were UCT students from the five faculties of Commerce, Humanities, Engineering, Science and Health Sciences. These students are described on the basis of their educational level, faculties, departments, opinions, attitudes, preferences, needs, and Career Information Centre use and non-use. This study subscribed to the cross-sectional survey design in that it involves collecting information within a short time frame (five weeks) from a sample selected to represent the total population. Such a study is primarily used for the purpose of description, and for determining relationships between variables at the time of study. Sampling enables a researcher to obtain a manageable collection of

objects to study. The researcher adopted a stratified non-probability sampling design and twenty undergraduate students, who were either users or potential users, were selected from each of the five faculties to make up a sample size of 100 participants. The ratio of potential users to users was 67/33.

The researcher decided to use questionnaires and interviews as he viewed them to be the most appropriate methods of data collection in this type of study. Structured and unstructured questions were used to elicit responses from participants. The researcher wanted to obtain responses from two categories of undergraduate students and thus, designed two types of questionnaires. One questionnaire was addressed to actual users of the CIC while the other was addressed to those students who had never used the CIC, and were labelled as "potential users". In order to test the validity of the questionnaires, a pilot study was carried out before the final printing of the questionnaires. The pilot study was made up of 25 participants, and the questionnaires were administered to them in the same way as the actual study would be conducted. Participants completed the questionnaires individually and were asked questions concerning items they wanted clarified. The questionnaires were administered by handing them to participants in their residences and departments and requesting that they be returned at a set time after participants had completed them. Responses from close-ended questions and open-ended questions were presented as words or phrases, and related views and opinions were grouped into categories. The data was then entered into the Microsoft Excel programme to prepare it for analysis.

Interview schedules were designed along the same lines as the questionnaires. They were also of two types and addressed to two categories of respondents. Before the interviews, participants were made aware of the purpose of the study. Those who had not used the CIC were given brief background information about the CIC. Interviews were conducted at participants' residences. A tape recorder was used for the interviews and participants were informed before hand about its use. Participants who were uncomfortable with the use of the tape recorder were interviewed without it. To make the interview survey representative, two participants were selected from each of the five faculties to make up the required number of 10 participants. The interviews were conducted over a period of two weeks after all the questionnaires had been collected, processed and analysed.

## **CHAPTER 4**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 INTRODUCTION**

This chapter familiarises readers with the data and provides a foundation for all subsequent analyses. The chapter presents responses obtained from the questionnaires in the form of frequency tables and pie charts. The frequency tables were generated by using the STATISTICA program while Excel software was used in creating the pie and bar charts. These tables and charts were used in univariate analysis to present responses pertaining to career information needs of potential users and users of the Career Information Centre (CIC).

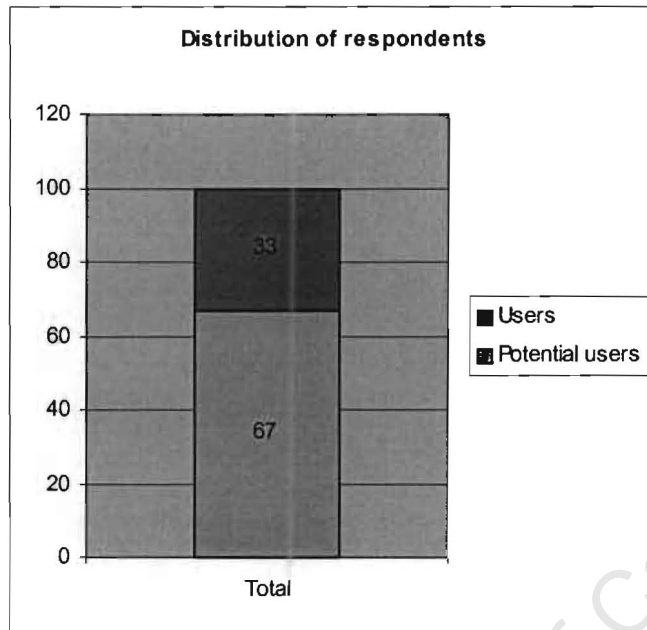
A further analysis of the data was then done to create 2x2 contingency charts and tables to examine the possible effect of the independent variables of faculty and the year of study on the dependent variables of career information needs. STATISTICA was used to establish the chi-square of variables and only those variables that showed a significant chi-square statistic at the .1 or higher level of significance are reported. Chi-square is a statistical test of significance that compares the observed and the expected frequencies. The results of cross tabulation of significant variables were used to create line charts with Excel software.

All 100 questionnaires that were distributed to potential users and users of the CIC were returned. Thus a 100% response rate was achieved.

## 4.2 DISTRIBUTION AND CATEGORISATION OF RESPONDENTS

### 4.2.1 Distribution of potential users and users

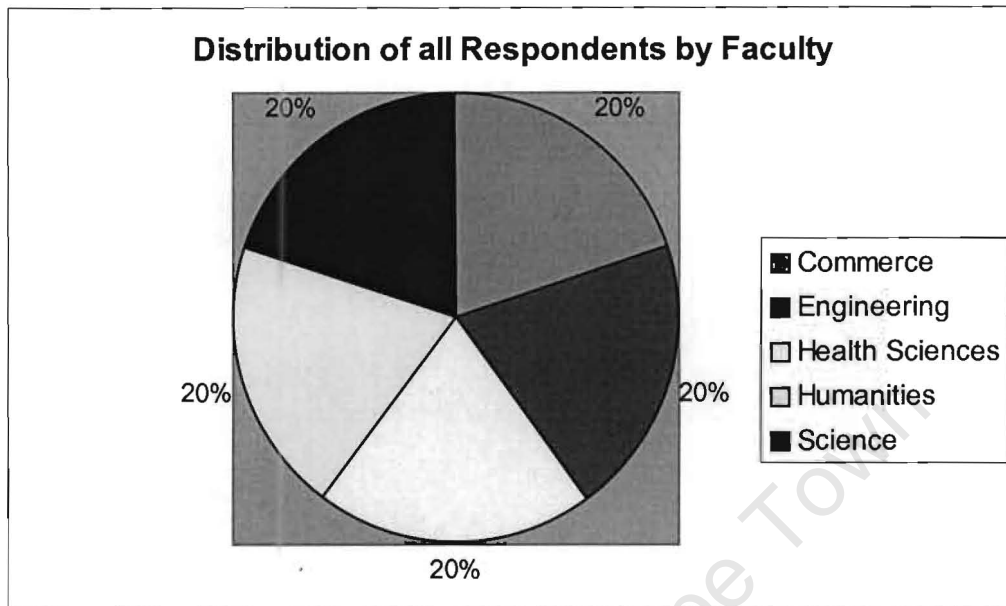
Figure 1: Potential users and users



The chart shows that 67 potential users and 33 users participated in this survey.

#### 4.2.2 Distribution of all respondents by faculty (cf. Appendix 1 and 2, question 1)

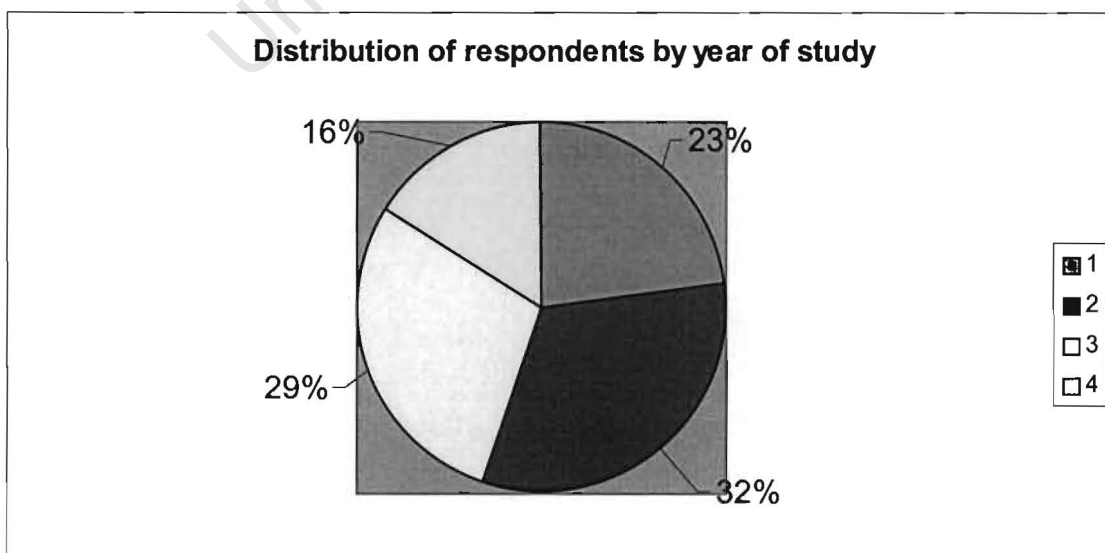
Figure 2: Distribution of all respondents by faculty



The chart shows an equal distribution of students per faculty.

#### 4.2.3 Distribution of all respondents by their year of study (cf. Appendix 1 and 2, question 1)

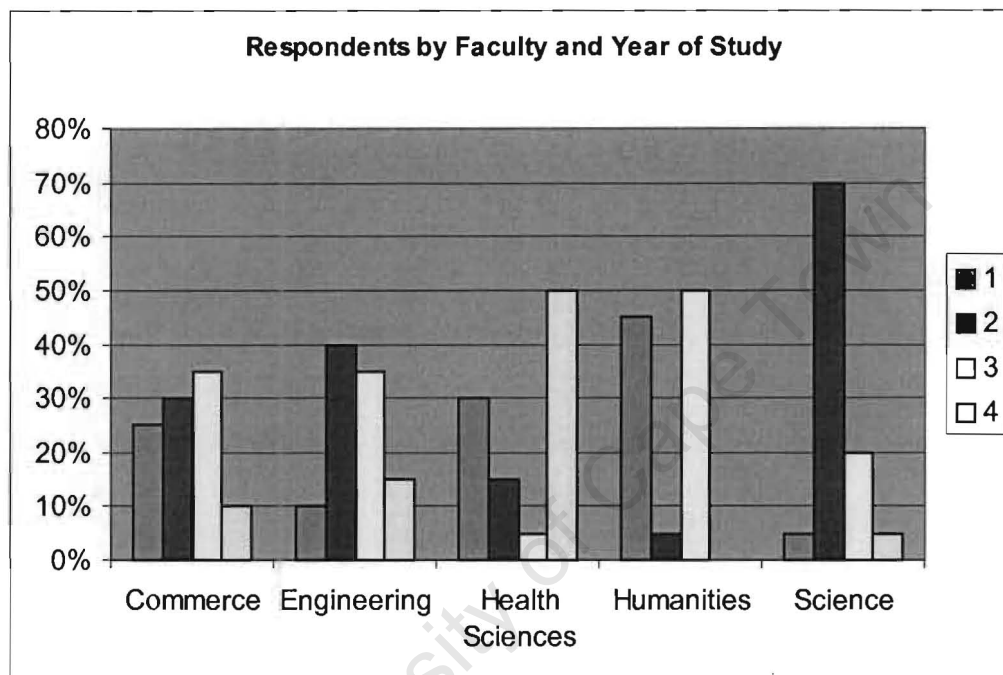
Figure 3: Distribution of all respondents by their year of study



It is evident from the chart that of the students who participated in the study, 32% were second year students, 29% were third year students, 23% were first year students, and 16% were fourth year students.

#### 4.2.4 Distribution of all respondents by faculty and year of study

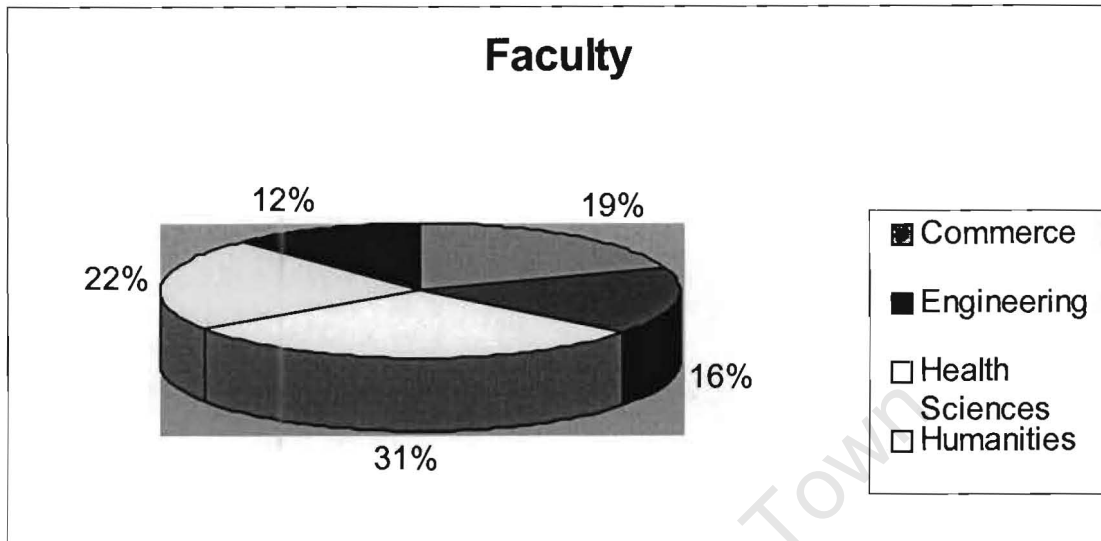
Figure 4: Respondents by faculty and year of study



The chart shows the students who participated in the study by faculty and the year of study. From the Faculty of Commerce, 35% were third year students, 30% were second year students, 25% were first year students and 10% were in the fourth year of study. The Faculty of Engineering had 40% of the second year students, 35% of the third year students, 15% of the fourth year students and 10% of the first year students. The Health Sciences Faculty had 50% of fourth year students, 30% of the first year students, 15% of the second year students and 5% of the third year students participating in the study. From the Faculty of Humanities, 50% were third year students, 45% were first year students, and 5% were second year students. In the Faculty of Science 70% of the students were second year students, 20% were third year students, while 5% of the students were each in the first year and fourth year of study.

#### 4.2.5 Potential users by faculty

Figure 5: Potential users by faculty

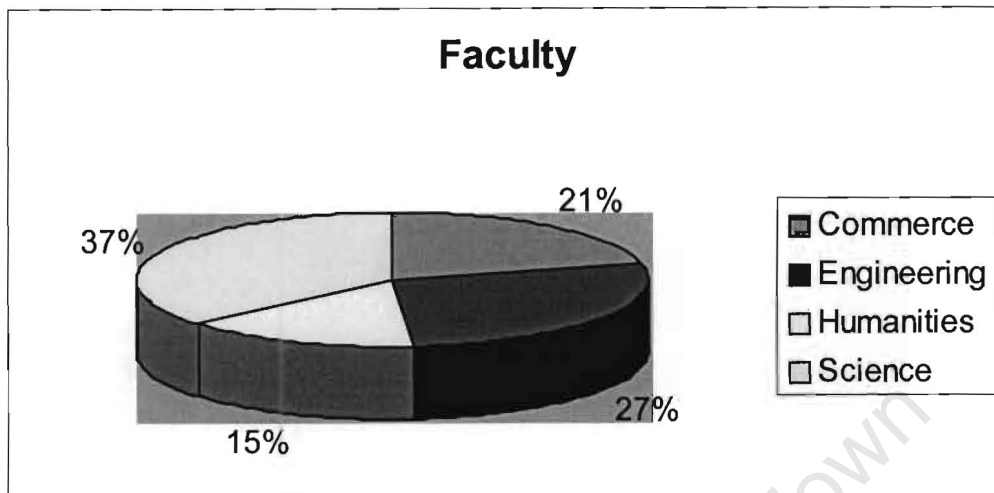


Source: Survey data

From the above chart (figure 5), it is evident that the largest number (31%) of potential users were from the Faculty of Health Sciences. The Faculty of Humanities follows at 22%, then the Faculty of Commerce (19%), Faculty of Engineering (16%), and Faculty of Science (12%). The high percentage of potential users from the Faculty of Health Sciences is due to the fact that all respondents from that faculty indicated that they had never used the CIC, and were thus in the potential user category. Respondents from the faculty of Health Sciences made up 20 of the total number of 67 respondents who constituted potential users.

#### 4.2.6 Users by faculty

Figure 6: Users by faculty

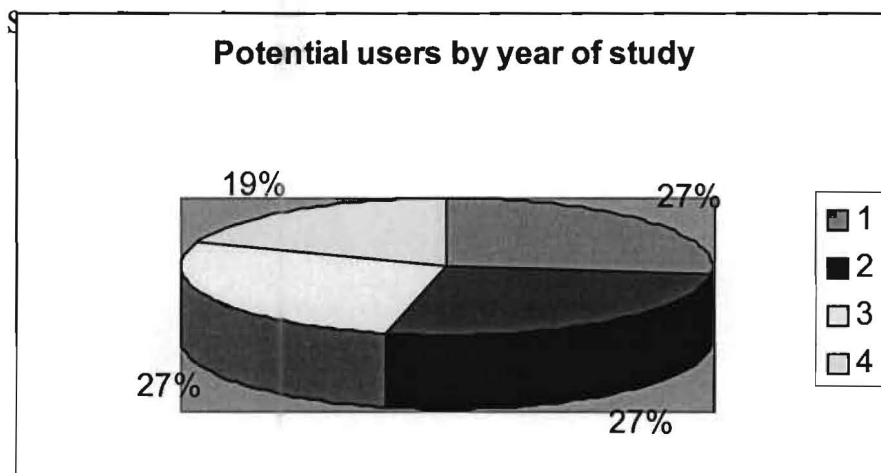


Source: Survey data

The chart shows that the Faculty of Science had the highest number of user respondents (37%), followed by the Faculty of Engineering (27%), the Faculty of Commerce with 21% and the Faculty of Humanities (15%) had the lowest number of respondents. The Health Sciences Faculty did not have any user respondents as none of them had ever used the CIC.

#### 4.2.7 Potential users by the year of study

Figure 7: Potential users by year of study



The above chart shows that of the potential users an equal number of responses (27% each) were from first year, second year and third year students while 19% of the responses were from fourth year students. Fourth year students were made up of fourth year students from all the faculties except Health Sciences where fourth, fifth and sixth year students were also included in this category.

#### 4.2.8 Users by year of study

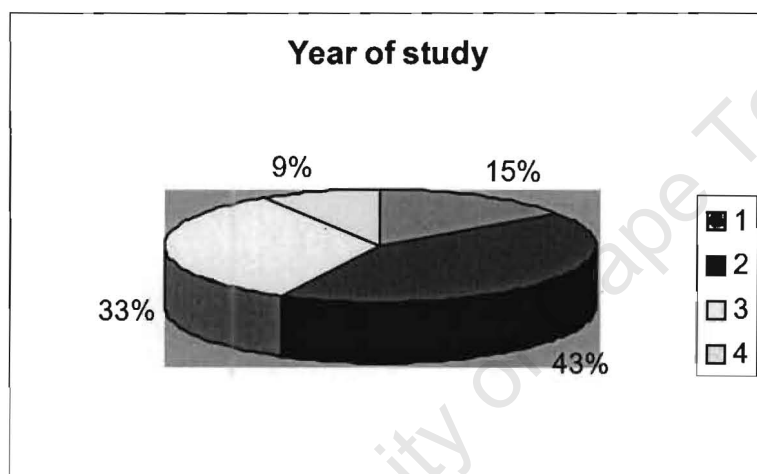


Figure 8: Users by year of study

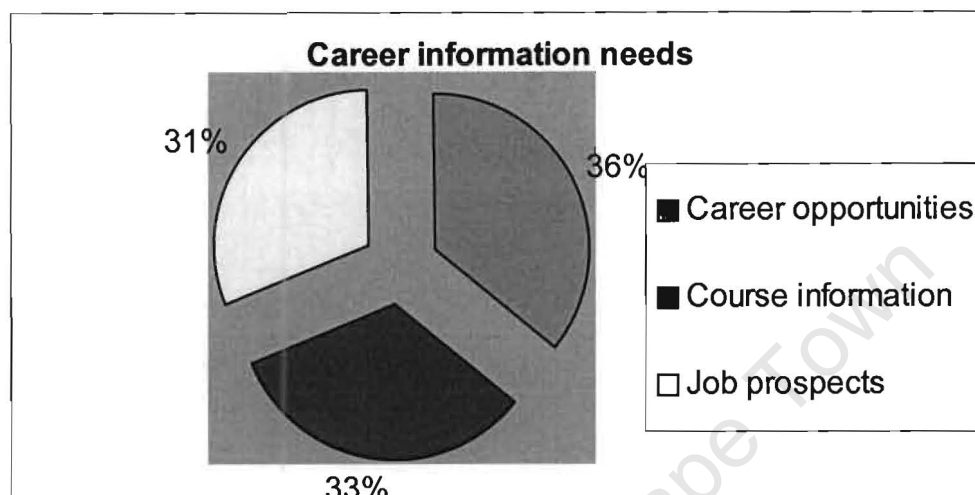
Source: Survey data

Of the user respondents, 43% were in their second year, 33% in their third year, 15% in their first year and only 9% in their fourth year.

### 4.3 QUESTIONNAIRE RESPONSES FROM POTENTIAL USERS (cf. Appendix 1, question 1 -12)

#### 4.3.1 The potential users' career information needs (cf. Appendix 1, question 2)

Figure 9: Potential users' career information needs



Source: Survey data

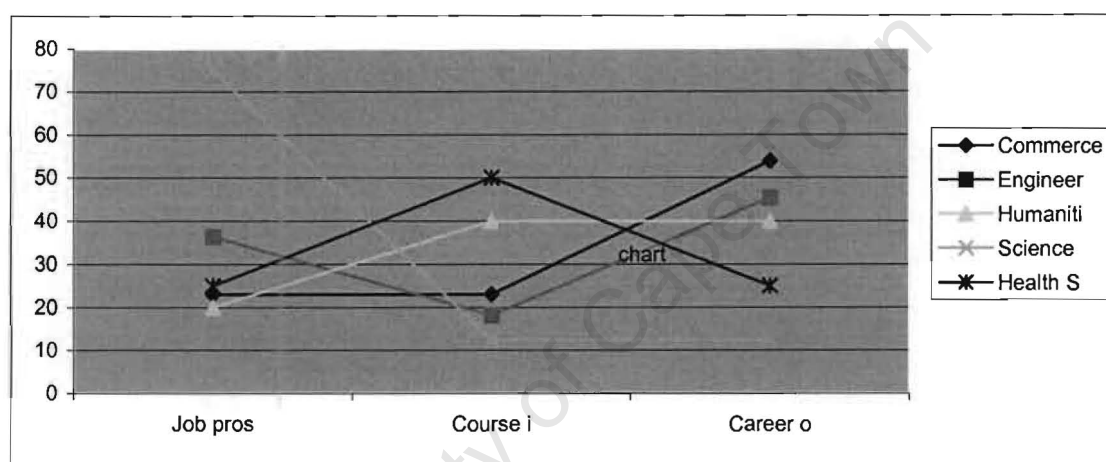
Students were asked to indicate what kind of career information they would need while at the university and the table above shows their responses. There was an almost equal need for the three categories, with 36% of the potential users indicating that they would need information pertaining to career opportunities, 33% expressed the need for information about their course of study, and 31% indicated that they needed information on job prospects. If the data is further analysed to see if the year of study and faculty variables had an effect on the independent variable, only the faculty affiliation variable showed a significant result.

#### 4.3.1.1 Two-way contingency chart showing the effect of the faculty variable on career information needs of potential users

The chart below shows that the students who were by far the most interested in job prospects were the Science students (75%). The students in the other faculties were less interested with 36% of Engineering students and 23% of Commerce students indicating an interest in job prospects. The Health Sciences students (25%), the Commerce students (23%), and the Humanities students (20%) were the least

interested in job prospects. The Health Science students showed a high percentage (50%) need for course-related information, followed by Humanities students (40%). Commerce students (23%), Engineering students (18%) and Science students (13%) showed less interest in course-related information. A high percentage (53%) of Commerce students showed an interest in career opportunities, followed by Engineering students (45%) and then Humanities students at 40%. The Health Science students (25%) and Science students (13%) were the least interested in information pertaining to career opportunities.

**Figure 10: Potential users' career information needs by faculty**



#### 4.3.2 Sources of information used by potential users (cf. Appendix 1, question 3)

**Table 1: Sources of information used by potential students**

Sources of information	Count	Cumul.Count	Percent	Cumul.Percent
Friends	5	5	7	7
Print media	24	29	36	43
Internet	26	55	39	82
Course networking	12	67	18	100

Source: Survey data

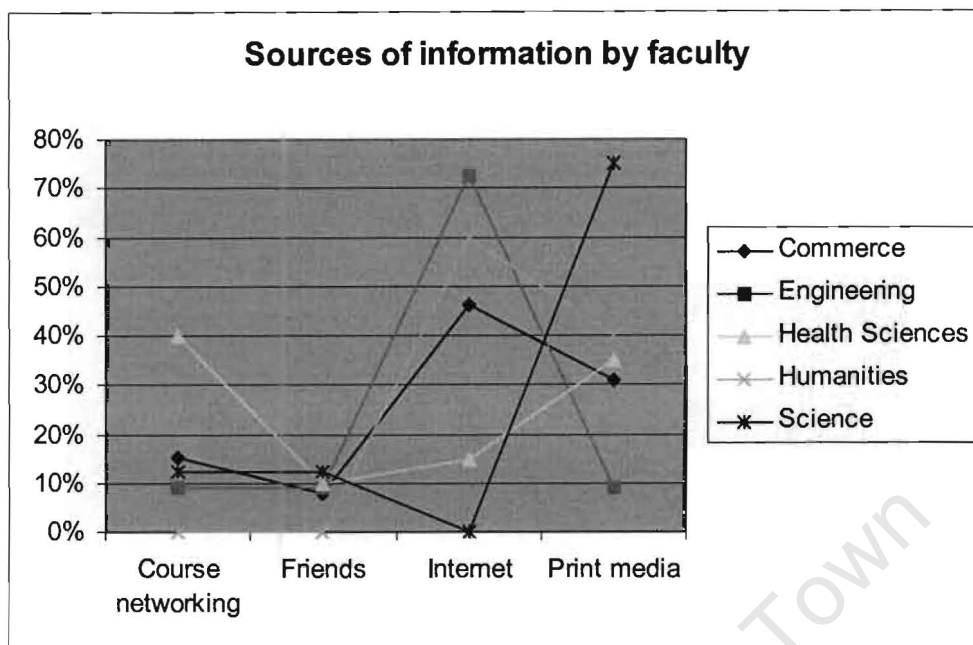
The information depicted by Table 1 indicates the responses from potential users who were asked to name the sources of information they mostly rely on for their career-related information. There was an almost equal indication that they relied on the

Internet for their career-related information (39%), and on print media (36%), while 18% indicated that they relied on course networking for their career information. Only 7% of the respondents mostly relied on friends. If the data is further analysed to see if the year of study and faculty had an effect on the dependent variable, only the faculty affiliation showed a significant result.

#### **4.3.2.1 Two-way contingency chart showing the effect of the faculty variable on sources of information potential users mostly rely on**

Figure 11 below indicates that among the students who preferred to be assisted by friends, the Science students (13%) were the highest, followed by Health Sciences students (10%), Engineering students (9%), and lastly Commerce students (8%) (all more than response aggregate). Humanities (0%) students indicated that they did not rely on friends for their career information. It is evident from figure 25 that an overwhelming number of the Science students (75%) preferred print media as a source of career information. Humanities students followed at 40%. The Health Sciences students (35%) and Commerce students (31%) showed an interest below the aggregate rating at 36%. The Engineering students were the list interested at 9%. The vast majority of Engineering students (73%) preferred the Internet followed by Humanities students (60%), and Commerce students (46%). The Health Sciences students (15%), and the Science students (0%) either used the Internet minimally or not at all as a source of career information. The Health Sciences (40%) students were the only category to rely on course networking more than the aggregate response of 18%. The Commerce students (15%), Science students (13%) and Engineering students (9%), and Humanities students (0%) were all less reliant on course networking for their career information.

**Figure 11: Sources of information consulted by potential users by faculty**



#### 4.3.3 Contact with outside organisations (cf. Appendix 1, question 4)

When asked if they had contacts with organisations outside the university that provided them with career information, 93% of the potential users respondents indicated that they did not have contacts.

**Table 2: Contact with outside organisations**

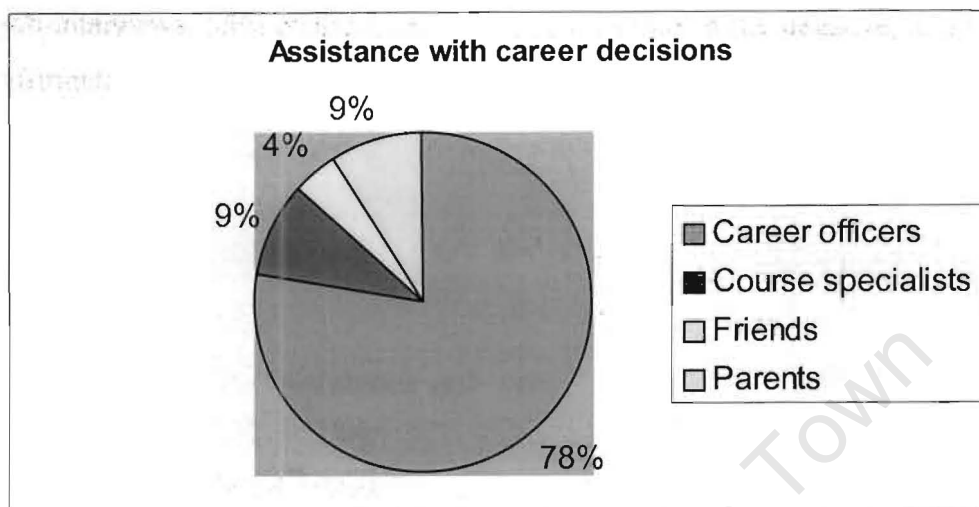
Contact with organisations	Count	Cumul.Count	Percent	Cumul.Percent
No	62	62	93	93
Yes	5	67	7	100

Source: Survey data

The data when further analysed by the independent variables showed no significant results.

#### 4.3.4 The people the potential users preferred to have help them when they required assistance with career decisions (cf. Appendix1, question 5)

Figure 12: Assistance with career decision-making



Source: Survey data

Figure 12 shows that a high number of potential users (78%) indicated that they would prefer career officers to assist them in making informed career decisions while 9% preferred to get assistance from their parents. Those who indicated that they wanted assistance from people who were specialists in students' study-related areas accounted for 9%. Only 4% preferred friends to assist them in career decision-making.

#### 4.3.5 Problems the potential users experienced when various career-related tasks had to be performed (cf. Appendix1, question 6):

The following responses were obtained with regard to the various problems encountered with career-related tasks (cf. Table 3 below):

**Job interviews:** When asked if they have had problems when they had to prepare for job interviews, 55% of the potential users answered in the negative, and 45% in the affirmative.

**Resume writing:** Table 3 shows that there is not much disparity between potential users who experienced problems with resume writing and those who did not with 51% indicating that they experienced problems and 49% not.

**Finding company information:** Table 5 shows that 60% of potential users have difficulty in finding company information.

**Finding information on jobs that prospective employers have to offer:** Responses from 60% of potential users show that it is difficult to find information on jobs that prospective employers offer.

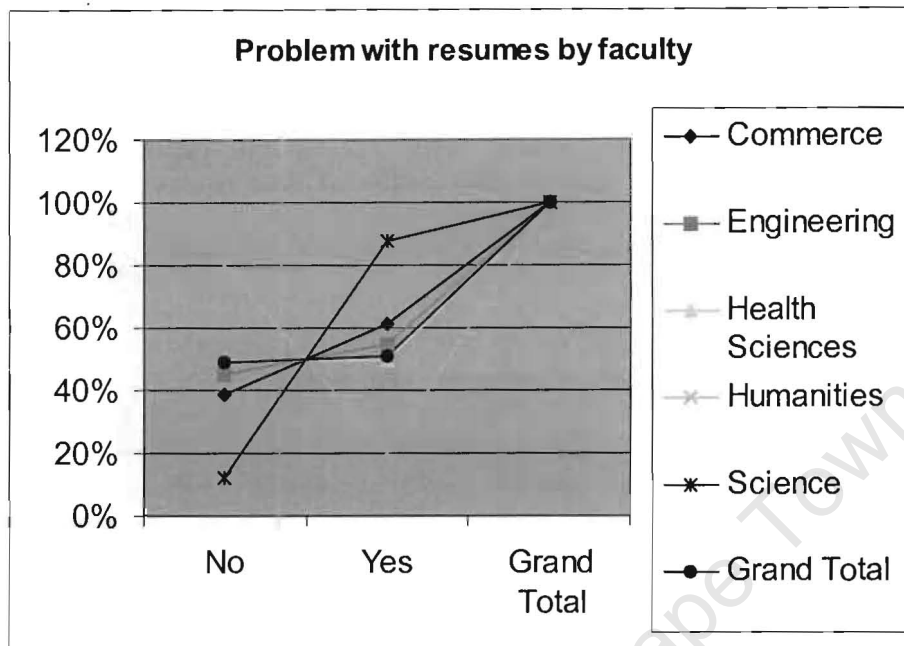
**Table 3: Problems with various career-related tasks**

<b>Problem with interviews</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
No	37	37	55	55
Yes	30	67	45	100
<b>Problem with resumes</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Yes	34	34	51	51
No	33	67	49	100
<b>Difficulty with company info</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Yes	40	40	60	60
No	27	67	40	100
<b>Difficulty finding job offered</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Yes	40	40	60	60
No	27	67	40	100

If the data are further analysed it can be seen that significant results were obtained for the faculty independent variable and resume writing. The year of study independent variable showed significant results when cross tabulated with interview preparation and writing resumes.

**4.3.5.1 Two-way contingency chart showing the effect of the faculty variable on problems potential users faced in resume writing**

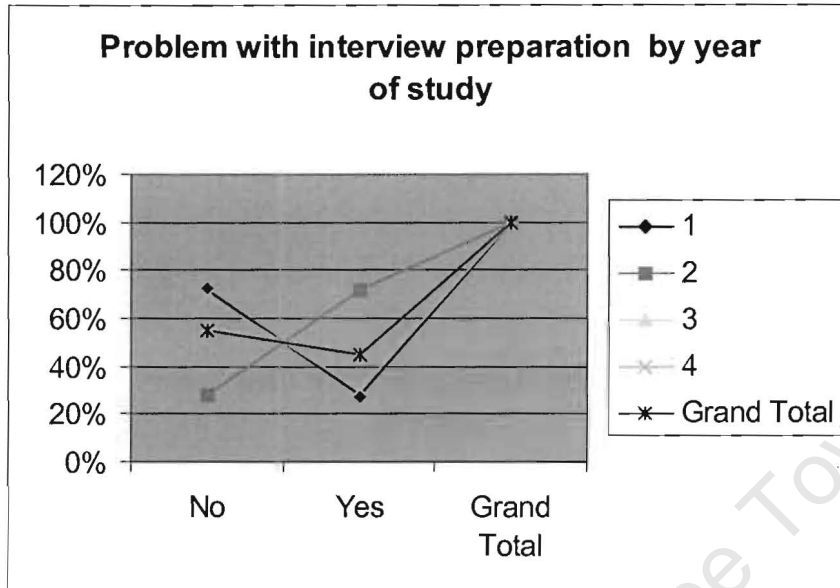
**Figure 13: Problems with resume writing: potential users by faculty**



It is evident from figure 13 that far more Science students (88%) and Commerce students (62%) experienced problems when they had to write resumes than what was found with the aggregate response of 51%. The Engineering students (55%), and the Health Sciences students' (50%) responses were similar to the aggregate 51% while only 20% of Humanities students experienced such problem.

4.3.5.2 Two-way contingency chart showing the effect of the year of study variable on problems potential users faced when preparing for interviews

Figure 14: Problem with interview preparation: potential users by year of study



From Figure 14 it can be seen that a lower than aggregate (45%) number of first year students (28%) and fourth year students (31%) indicated that they had encountered problems with interview preparation. A fair percentage of third year students (44%) have had problems, while a considerable number of second year students (72%) have experienced problems.

### 4.3.5.3 Two-way contingency chart showing the effect of the year of study variable on problems potential users faced when writing resumes

Figure 15: Problem with resume writing: potential users by year of study

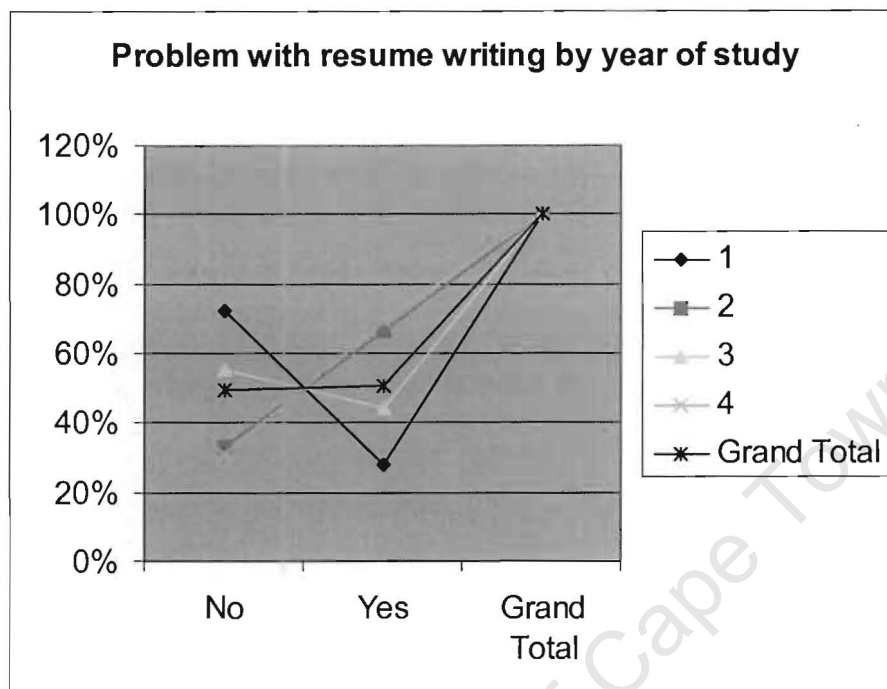


Figure 15 shows that a higher than aggregate (51%) number of fourth year (69%) and second year students (67%) admitted having had problems when they had to write resumes. The third year students (44%) and the first year students (28%) had less of a problem than the aggregate at 51%.

### 4.3.6 Potential users' awareness of services offered by the CIC (cf. Appendix 1, question 7)

Table 4 below shows that a significant number of potential users (78%) indicated that they were not aware of the various services offered by the CIC. This result is not surprising, as these respondents had never used the CIC.

Table 4: Potential students' awareness of CIC services

Awareness of services	Count	Cumul.Count	Percent	Cumul.Percent
No	52	52	78	78
Yes	15	67	22	100

4.3.6.1 Two-way contingency chart showing the effect of the faculty variable on the potential users awareness of CIC services

Figure 16: Potential users awareness of CIC services by faculty

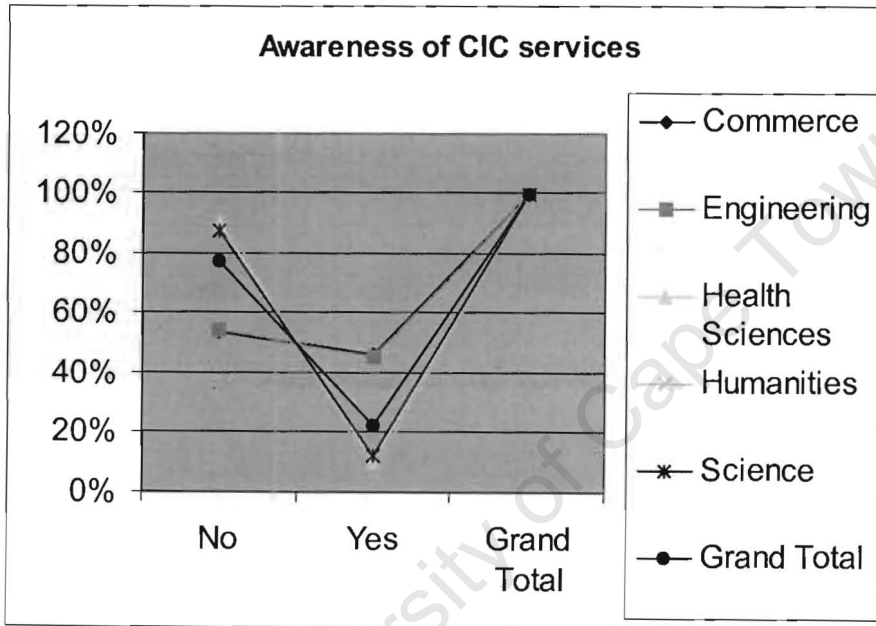


Figure 16 shows that, of the students who indicated that they were not aware of the services offered by the CIC, the Humanities students (93%) were the highest followed by the Health Sciences students (90%) and Science students (88%) (All more than the aggregate of 78%). The Engineering students and the Commerce students at 55% and 54% respectively, showed a higher awareness rating than the other students.

4.3.6.2 Two-way contingency chart showing the effect of the year of study variable on students' awareness of services offered by the CIC

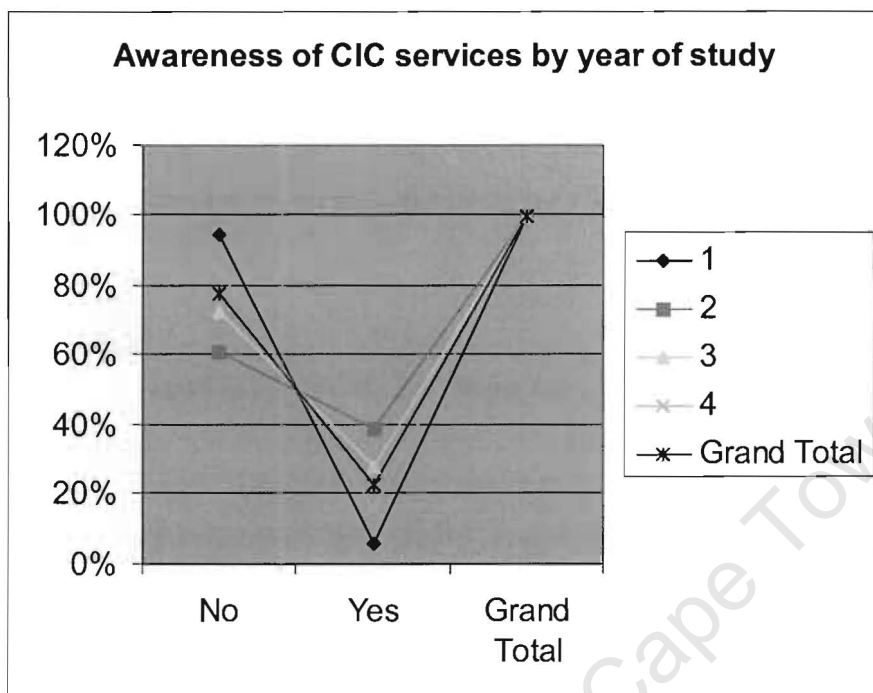


Figure 17: Awareness of CIC services

It is evident from figure 17 that an overwhelming number of first year students (94%) were not aware of services offered by the CIC followed by fourth year students (85%), while the third year students (72%) and second year students (61%) were more informed than the aggregate of 78%.

#### 4.3.7 Information that the CIC should provide (cf. Appendix 1, question 8)

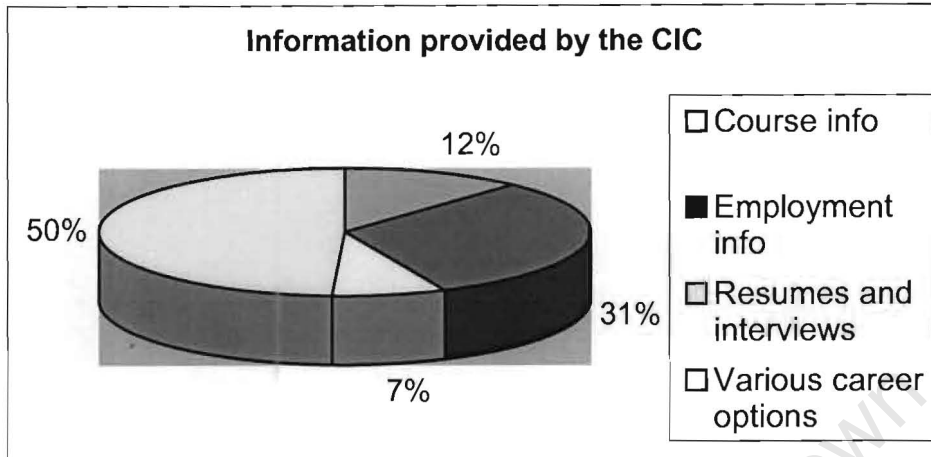


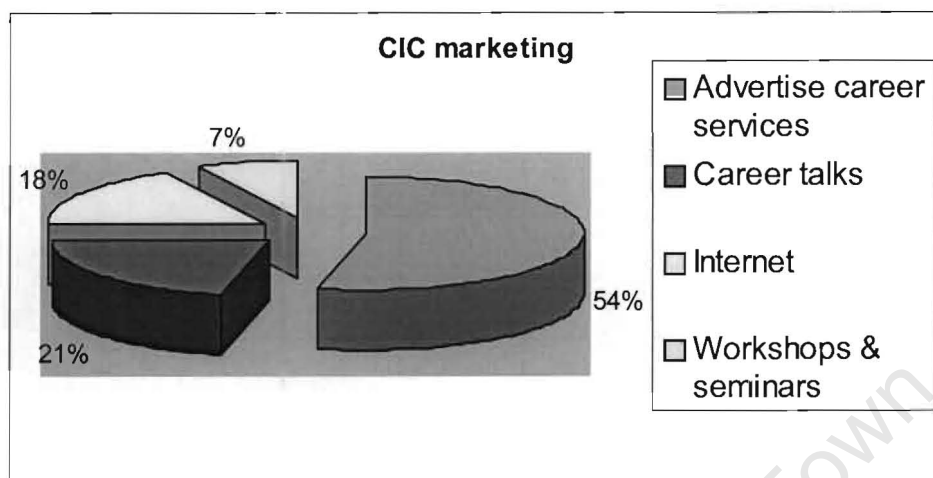
Figure 18: Information that the CIC should provide

Source: Survey data

When asked the type of information they would expect the CIC to provide, potential users came up with the categories shown in figure 18. Fifty percent of them expected the CIC to provide information on career options, while 31% wanted employment information, 12% wanted the CIC to provide information pertaining to their courses of study, and 7% wanted information on resumes and interviews. Further analysis by the independent variables of faculty and year of study did not produce significant results.

### 4.3.8 How the CIC can market its services (cf. Appendix 1, question 9)

Figure 19: How CIC can market its services



Source: Survey data

The results depicted by figure 19 shows that 54% of potential users want the CIC to market their services to the student community by means of advertisements. Twenty-one percent of the potential users suggest that the CIC should give career talks while 18% believe that the information should be made accessible on the Internet. Only 7% wanted the CIC to conduct workshops to let people know of the services they offer. Further analysis by the independent variables did not produce significant results.

### 4.3.9 The ways in which the students would like to be instructed on the CIC operations (cf. Appendix 1, question 10)

Table 5 below indicates that the potential users showed the most support for the use of instructional manuals (67%) as a means of understanding the CIC operation. followed by a 57% positive indication for instruction on a one-on-one basis. Only 39% of the potential users wanted the CIC to conduct training programmes as a means of instruction.

Table 5: Understanding how the CIC operates

Instructional manuals	Count	Cumul.Count	Percent	Cumul.Percent
Yes	45	45	67	67
No	22	67	33	100
Training programme	Count	Cumul.Count	Percent	Cumul.Percent
Yes	26	67	39	100
No	41	41	61	61
One-on-one instructions	Count	Cumul. Count	Percent	Cumul. Percent
Yes	29	67	43	100
No	38	38	57	57

Further analysis of the data by the independent variables only produced significant results for one-on-one instruction and the faculty independent variable.

**4.3.9.1 Two-way contingency chart showing the effect of the faculty variable on one-on-one instructions as a way of teaching potential users how the CIC operates**

It is evident from the chart below that the vast majority of Science students (88%) and Health Sciences students (70%) preferred one-on-one instructions. The Humanities students (53%) and the Engineering students (46%) were slightly less interested than the aggregate of 57% while the Commerce students (31%) and the Science students (13%) were considerably less enthusiastic than the aggregate of 57%.

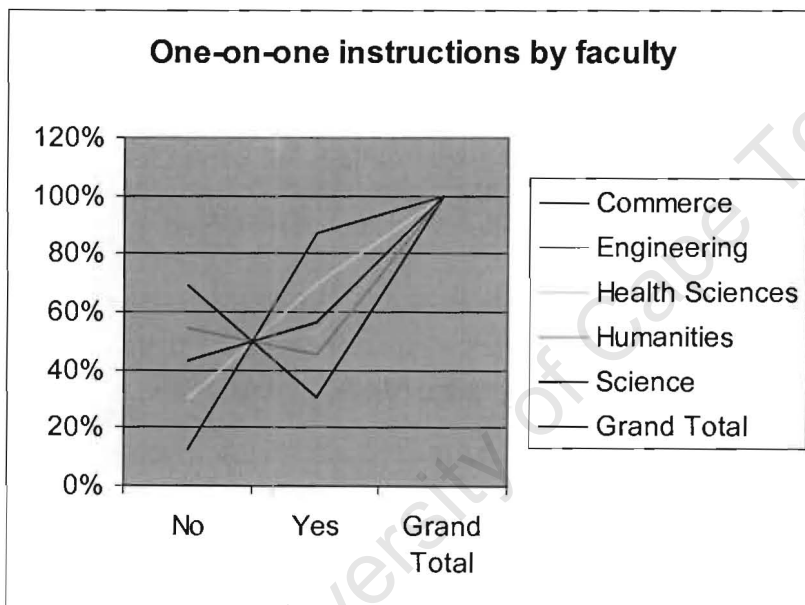
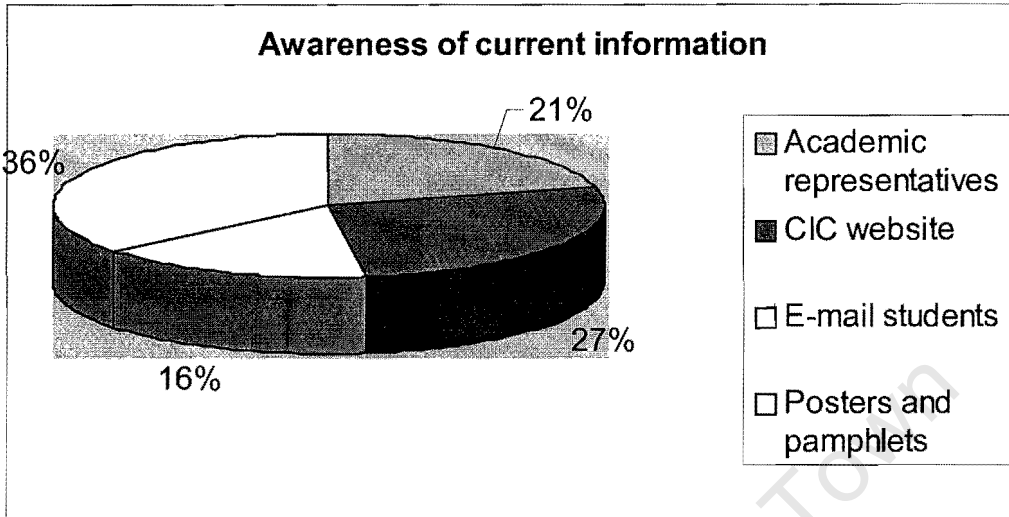


Figure 20: One-on-one instructions

4.3.10 Ways of making students aware of the latest career information (cf. Appendix 1, question 11)

Figure 21: Ways of making students aware of the latest career information



Source: Survey data

There were quite divergent views when potential users had to decide on ways they wanted the CIC to keep them up-to-date with the latest career information. It is evident from the above chart that 36% of potential users preferred to be informed of the latest career information by posters and pamphlets, 27% preferred the information to be posted on the CIC website, 21% of the respondents wanted to be informed by academic representatives, and 16% wanted the information to be e-mailed to them. Further analysis of the data indicated significant results only for the year of study independent variable .

4.3.10.1 Two-way contingency chart showing the effect of the year of study variable on ways of making students' aware of current career information

Figure 22: Ways of making students aware of the latest career information by year of study

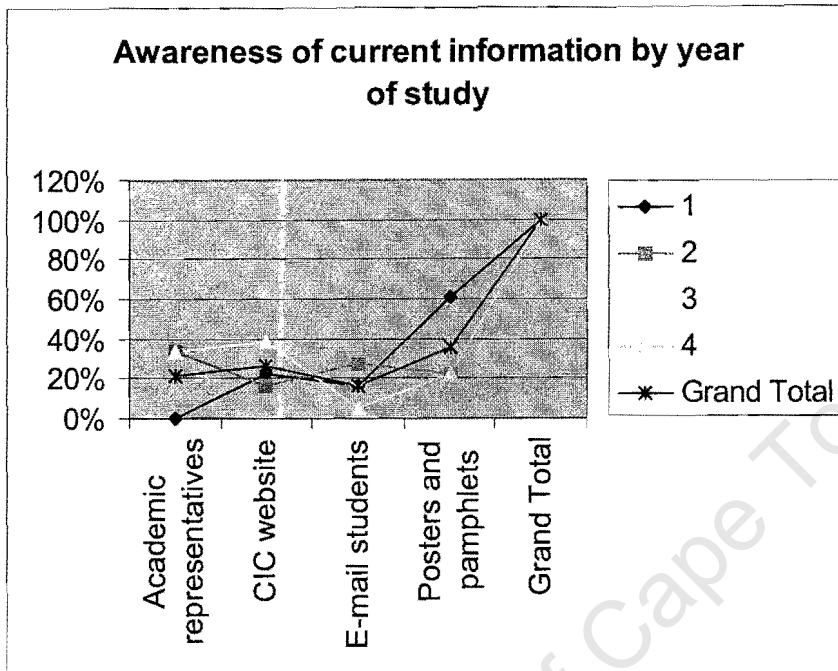
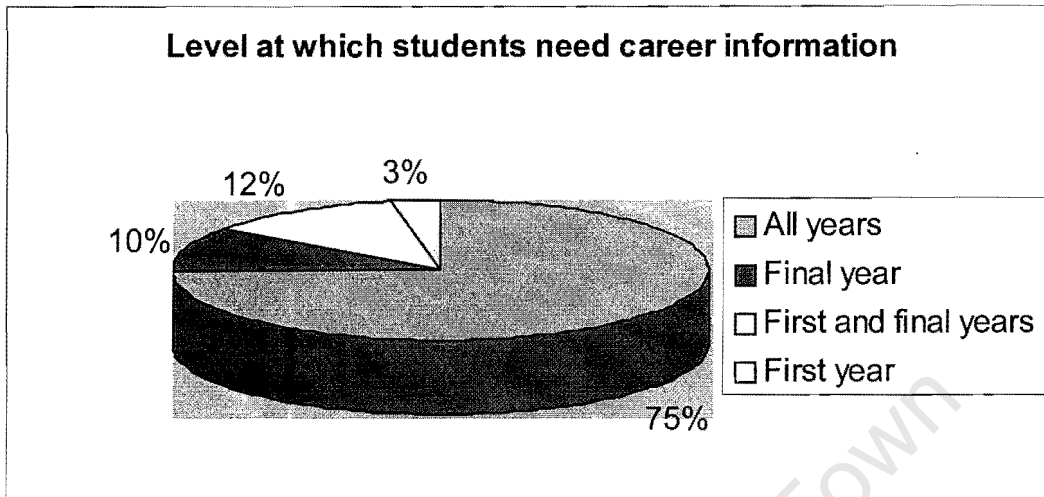


Figure 22 shows that the third year students (39%), and fourth year students (31%) showed an above aggregate (27%) interest in being alerted by means of the CIC website. Second and third year students (both at 33%) gave a higher than aggregate response preference (21%) to academic representatives as an alerting method, while first year students indicated no interest in academic representatives. The students who showed a higher than aggregate response (16%) preference to have information e-mailed to them, were second year students (28%). A high percentage of first year students (61%) preferred posters as an alerting medium, while the fourth year students at 38% were only slightly above the aggregate interest level of 36%.

#### 4.3.11 Academic year at which students need career services most

Figure 23: Level at which students need CIC services



Source: Survey data

When asked the year of study at which they needed career services most, the vast majority of respondents (75%) indicated that they needed career information throughout their stay at the university, while 12% showed that they wanted career information in the first and final years at university, 10% wanted information in the final year, and only 3% wanted career information in the first year only. Further analysis of the data by the independent variables showed no significant results.

#### 4.4 QUESTIONNAIRE RESPONSES FROM USERS (cf. Appendix 2)

This section contains responses from the users of the CIC. Only the Humanities, Commerce, Engineering and Science faculties are represented as none of the Health Sciences students in the sample had ever used the CIC.

##### 4.4.1 Sources of information (cf. Appendix 2, question 2)

Table 6: Sources of information

Sources	Count	Cumul.Count	Percent	Cumul.Percent
CIC	22	22	67	67
Internet	7	29	21	88
Course info	3	32	9	97
Missing	1	33	3	100

Source: Survey data

When the CIC users were asked to name the sources of career information they mostly relied on, the majority (67%) indicated that they were dependent on CIC resources, while 21% were dependent on the Internet, and only 9% relied on course information, and 3% of the respondents did not respond. Further analysis of the data by the independent variables did not provide significant results.

##### 4.4.2 The kind of information that the CIC should provide (cf. Appendix 2, question 3)

The kind of information that the CIC should provide and its importance is outlined in Table 7 below. It can be seen that almost all categories are regarded as important and highly rated. The list of information they require in ranked order of importance is as follows:

Kind of information	Importance rating
'exploring career interests'	82%
'resume writing and interview information'	73%
'internship and apprenticeship information'	70%
'company, agency & industry information'	67%
'in-service-training opportunities'	64%
'information on current job listings'	64%
'workplace educational requirements'	61%
'employer identification information'	48%
'information on financial aid'	45%

Table 7: Information the users want the CIC to provide and its importance

<b>Exploring career interests</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	27	27	82	82
Average	5	32	15	97
Not Important	1	33	3	100
<b>Workplace educ. requirements</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	20	20	61	61
Average	9	29	27	88
Not Important	4	33	12	100
<b>In-service training</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	21	31	64	94
Average	10	10	30	30
Not Important	2	33	6	100
<b>Internship</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	23	23	70	70
Average	7	30	21	91
Not Important	3	33	9	100
<b>Financial aid</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	15	28	45	85
Average	13	13	39	39
Not important	5	33	15	100
<b>Company info</b>	<b>Count</b>	<b>Count</b>	<b>Percent</b>	<b>Percent</b>
Important	22	22	67	67
Average	9	31	27	94
Not important	2	33	6	100
<b>Current job listings</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	21	21	64	64
Average	11	32	33	97
Not Important	1	33	3	100
<b>Employer Id</b>	<b>Count</b>	<b>Count</b>	<b>Percent</b>	<b>Percent</b>
Important	16	29	48	88
Average	13	13	39	39
Not important	4	33	12	100
<b>Creating resumes</b>	<b>Count</b>	<b>Cumul.Count</b>	<b>Percent</b>	<b>Cumul.Percent</b>
Important	24	24	73	73
Average	7	31	21	94
Not Important	2	33	6	100

Source: Survey data

If the data is further analysed by the independent variables significant results emerge only for the year of study cross tabulated with financial aid and job listings:

#### 4. 4. 2. 1 Two-way contingency table showing the effect of the year of study variable on financial aid

Figure 24: Financial aid

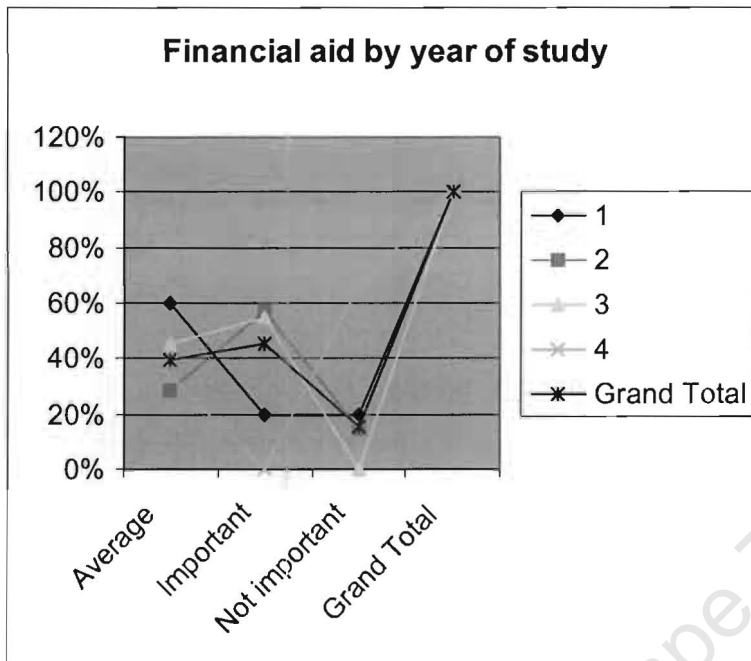
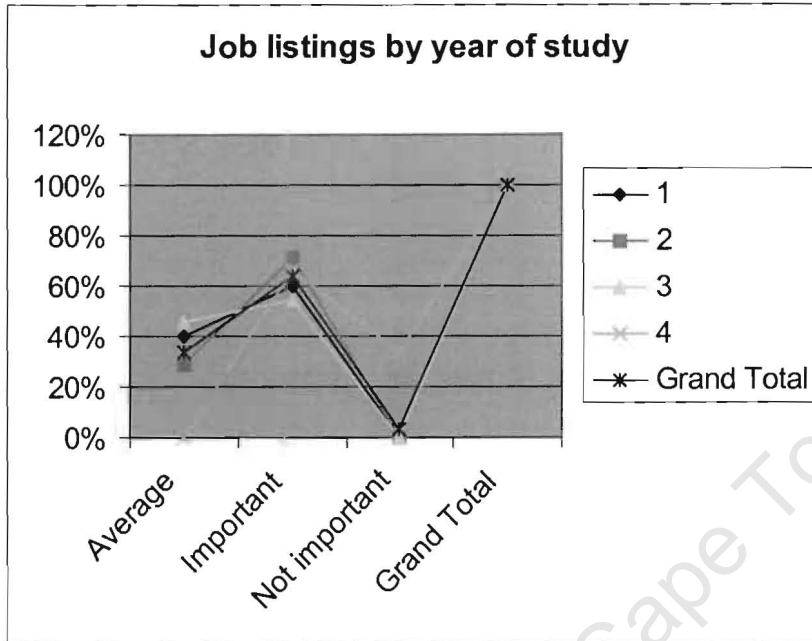


Figure 24 shows that the students that regarded financial information to be more important than the average response of 45% were the second year (57%) and the third year (55%) students. None of the fourth year students thought it to be important.

4.4.2.2 Two-way contingency chart showing the effect of year of study variation on job listings

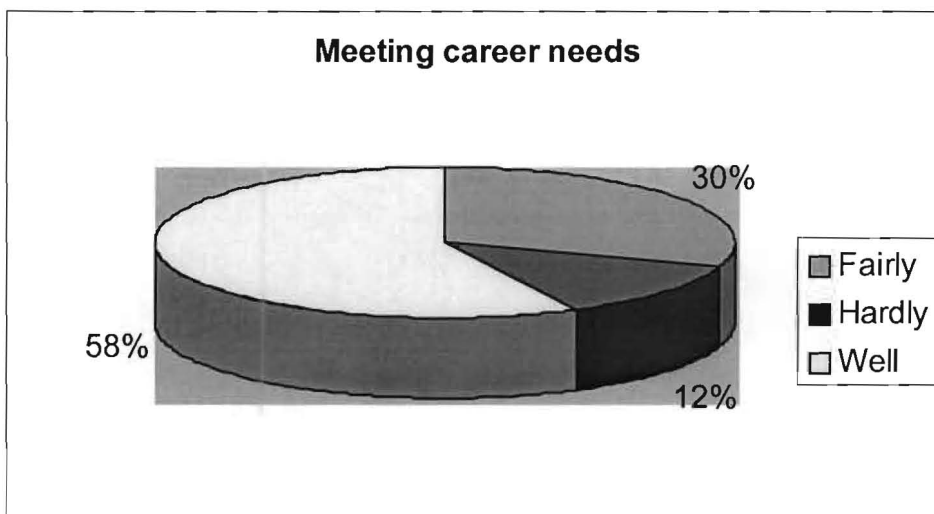
Figure 25: Job listings by year of study



It is evident from Figure 25 that the second (71%) and fourth year students (67%) rated the importance of 'job listings' higher than the aggregate response of 64%.

4.4.3 Meeting career needs (cf. Appendix 2, question 4)

Figure 26: Meeting of career needs by CIC



Source: Survey data

When asked how well the CIC was meeting their career needs, 58% said it was meeting their needs well, 30% of respondents said the CIC was meeting their needs fairly well, while 12% said it hardly met their needs. Further analysis showed no significant results.

#### 4.4.4 Frequency of use of information sources in the CIC (cf. Appendix 2, question 5)

The frequency of use of information sources in the CIC is outlined in Table 7 below. It can be seen that most sources are not used very often. The sources are listed in order of frequency of use as follows:

<b>Information source</b>	<b>% used 'often'</b>
Graduate recruitment brochures	42%
Faculty handbooks	39%
Job search file	24%
Newspapers	21%
Career planning file	21%
Career planning file	21%
Vacation work file	18%
Internet at the CIC	18%
Company information file	18%
First year at work file	9%
Tertiary institutions file	6%
Career mentor programme	6%
Self-assessment file	6%

**Table 7: Frequency of use of career sources**

Self-assessment file	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	9	9	27	27
Often	2	11	6	33
Hardly	22	33	67	100
Vacation work file	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	6	17	18	52
Often	11	11	33	33
Hardly	16	33	48	100
Company info	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	9	33	27	100
Often	6	6	18	18
Hardly	18	24	55	6
Tertiary education file	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	9	31	27	94
Often	13	33	6	100
Hardly	22	22	6	67
Faculty handbooks	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	7	20	21	61
Often	13	33	39	39
Hardly	13	13	39	100
Recruitment brochures	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	5	33	15	100
Often	14	14	42	42
Hardly	14	28	42	85
Job search file	Count	Cumul. Count	Percent	Cumul.Percent
Moderately	9	17	27	52
Often	8	8	24	24
Hardly	16	33	48	100
Newspapers	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	9	26	27	79
Often	7	33	21	100
Hardly	17	17	52	52
Career planning file	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	4	33	12	100
Often	7	7	21	21
Hardly	22	29	67	88
First year at work file	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	7	30	21	91
Often	3	33	9	100
Hardly	23	23	70	70
Career mentor program	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	3	3	9	9
Often	2	33	6	100
Hardly	28	31	85	94
Internet at CIC	Count	Cumul.Count	Percent	Cumul.Percent
Moderately	1	33	3	100
Often	6	32	18	97
Hardly	26	26	79	79

Source: Survey data

Further analysis of the data showed significant results as indicated below in 4.4.4.1 to 4.4.4.6.

4.4.4.1 Two-way contingency chart showing the effect of year of study variable on self-assessment

Figure 27: Self-assessment by year of study

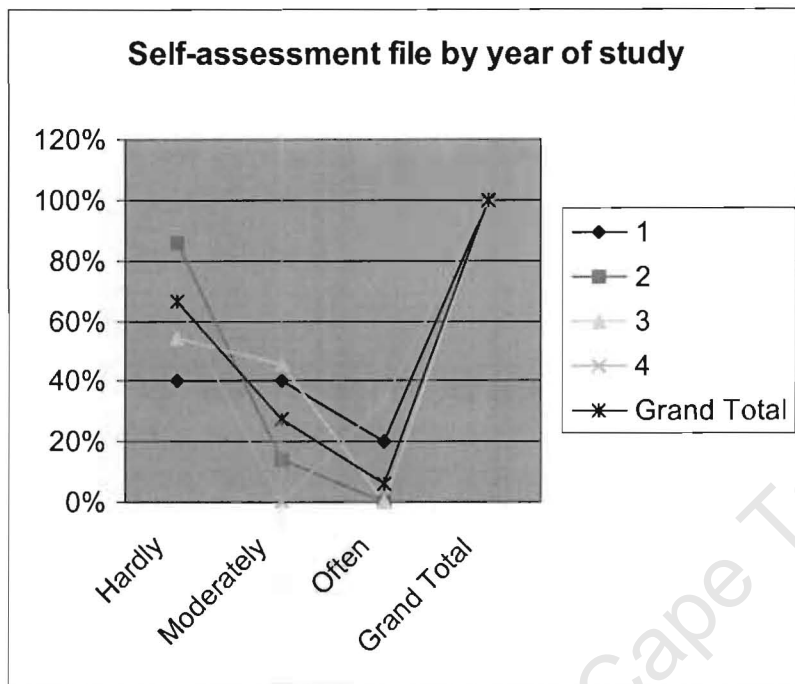
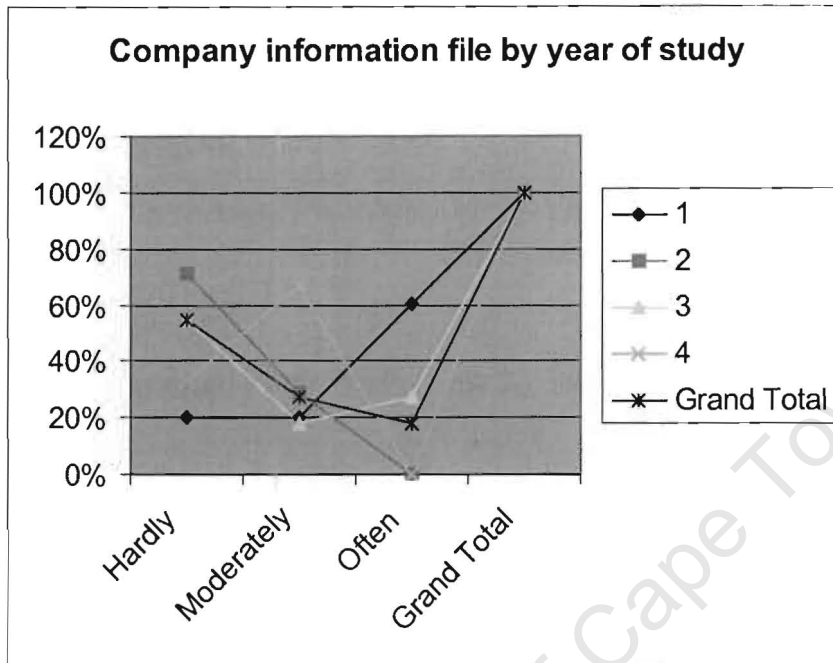


Figure 27 depicts the frequency of use of the self-assessment file by year of study of users of the CIC. Fourth year students (33% often response) and first year students (20% often response) were the year groups that consulted the self-assessment file more frequently than the aggregate (6% often response). A large proportion of third year students (45%) moderately seek information from the self-assessment file followed by first year students (40%) while second year students (14%) and the fourth year students (0%) were below the aggregate response of 27%. More than the aggregate number (67%) of second year students (86%) admitted to hardly seeking information from the self-assessment file. The “hardly used ”response of the other groups with regard to the self-assessment file was the fourth year students at 67%, third year students at 55% and first year students at 40%.

4.4.4.2 Two-way contingency chart showing the effect of year of study variable on the use of the company information file

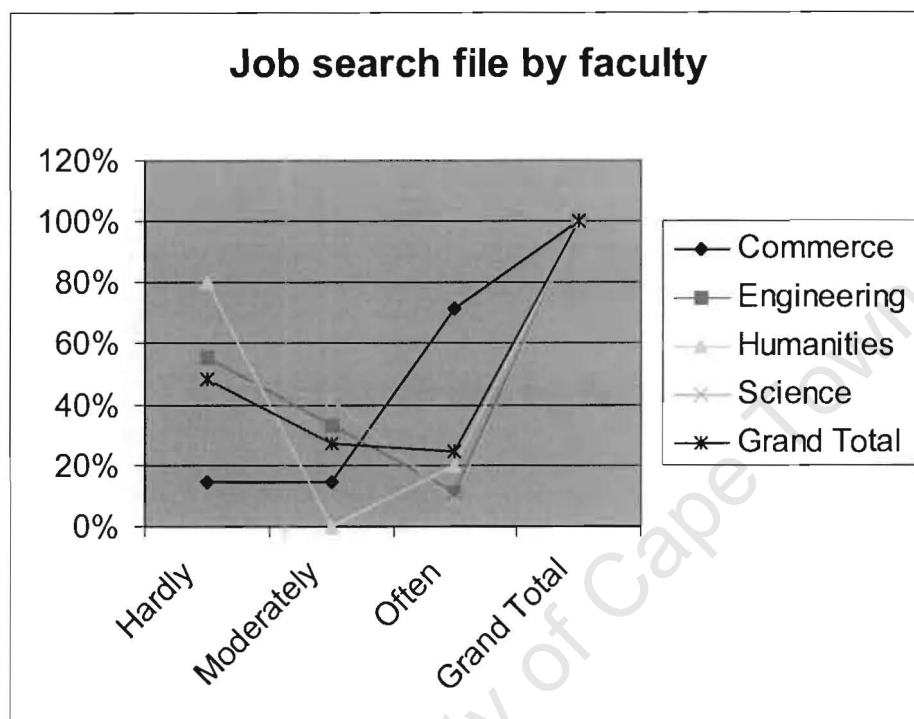
Figure 28: Use of company information file and year of study



From figure 28 we can see that a large proportion of first year students (60%) often consulted the company information file. The only other category that consulted this file more frequently than the aggregate response of 18% were the third year students at 27%. The majority of fourth year students (67%) consulted the company information file moderately. Most second year students (71%) indicated that they hardly consulted the company information file as well as more than half the third year students (55%). (Response aggregate for the 'hardly' category was 55%).

#### 4.4.4.3 Two-way contingency chart showing the effect of faculty variable on the use of the job search file

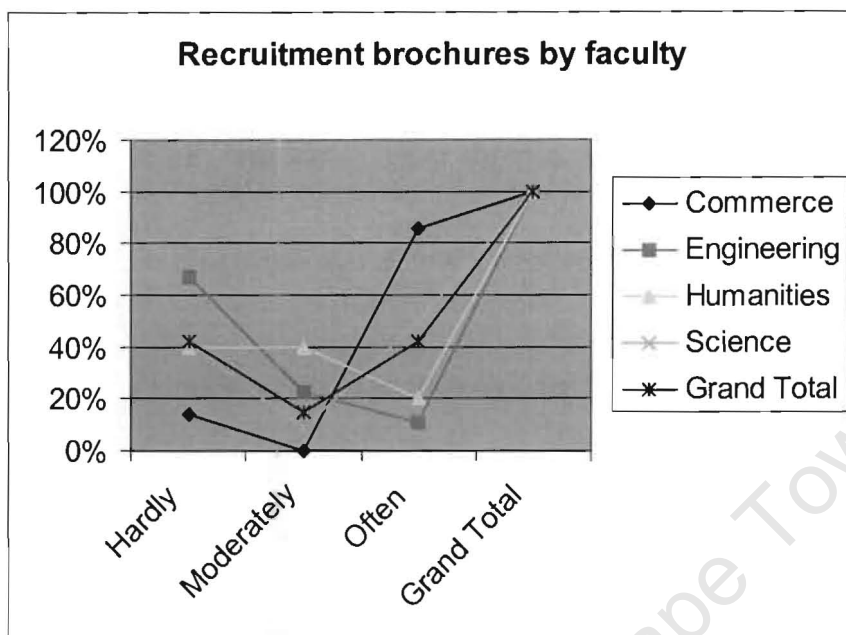
Figure 29: Use of job search file by faculty



The chart above shows that the Commerce students (71%) were the category who most frequently used the job search file 'often'. The Humanities students (20%), Engineering students (11%) and Science students (8%) were all below the "often" response aggregate of 24%. The Science students (42%) rated the highest "moderate" use of the job search file followed by Engineering students (33%) (both more than the response aggregate of 27%). Humanities students (80%) registered the largest proportion of those who hardly consulted the job search file, followed by Engineering students (56%) and the Science students (50%) (all above the aggregate response of 48%).

4.4.4.4 Two way contingency chart showing the effect of faculty variable on the use of Graduate Recruitment information brochures

Figure 30: Use of Graduate Recruitment brochures



The students who most frequently used the Graduate Recruitment brochures were the Commerce students (86% often response) and the Science students (50% often response). The Humanities students at 20% and the Engineering students at 11% were below the aggregate "often" response of 42%. The students who used this file the least frequently were the Engineering students with a 67% "hardly" response. (aggregate "hardly" response was 42%). The Humanities students indicated a 40% moderate use (aggregate was 15%), as well as a 40% moderate use of these brochures.

**4.4.4.5 Two-way contingency chart showing the effect of year of study variable of users on use of Graduate Recruitment brochures**

**Figure 31: Use of Graduate Recruitment Brochures and year of study**

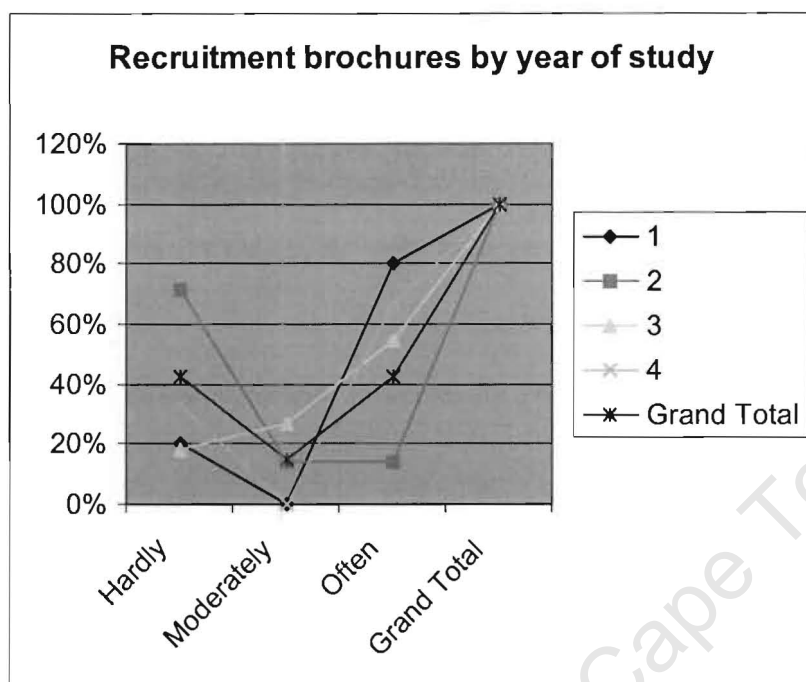
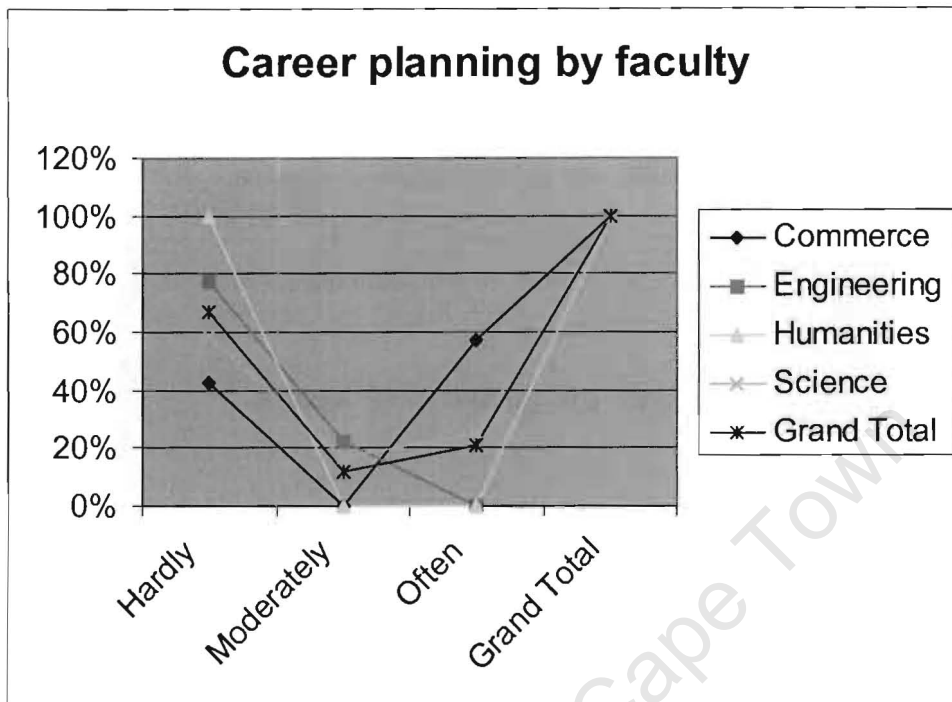


Figure 31 shows that a very large proportion of first year students (80%) often seek information from Graduate Recruitment brochures. A sizeable number of fourth year students (67%) and third year students (65%) often seek information from Graduate Recruitment brochures (all above the response aggregate response of 42%). Only a few second year students (14%) often seek information from these brochures (below the 42% aggregate response). The third year students (27%) were the highest “moderate” users of these files, while all the other categories were below the 15% response aggregate. An overwhelming 71% of the second year students indicated that they hardly seek information from the Graduate Recruitment brochures, while all the other categories were below the 42% response aggregate

4.4.4.6 Two-way contingency chart showing the effect of the faculty variable on the use of the career planning file

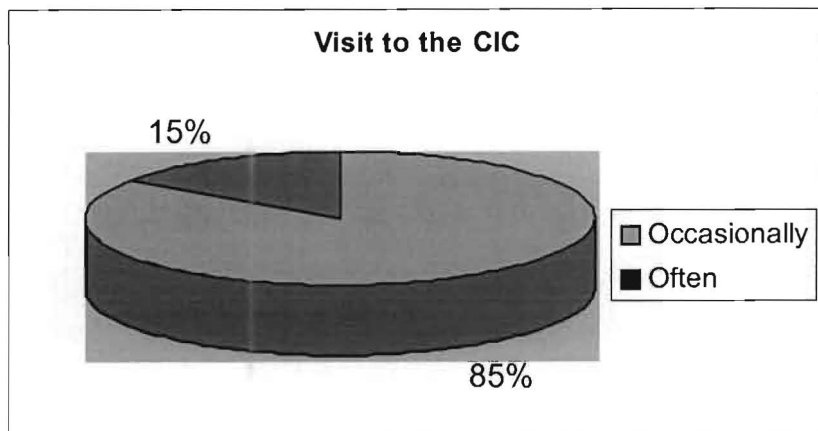
Figure 32: Use of career planning file by faculty



It is evident from figure 28 that among the students who consult the career planning file often, Commerce students (57%) were the highest followed by Science students (25%) both above the aggregate response of 21%. Those who moderately consulted it were Engineering students (22%) followed by Science students (17%) also above the aggregate response of 12%. All the humanities students (100%) and 78% of the Engineering students indicated that they “hardly” consulted this file. Fifty eight percent of the Science students and 43% of the Commerce students also “hardly” consulted this file (the aggregate response of 67%).

#### 4.4.5 How frequently the CIC was visited (cf. Appendix 2, question 7)

Figure 33: frequency of visits to the CIC



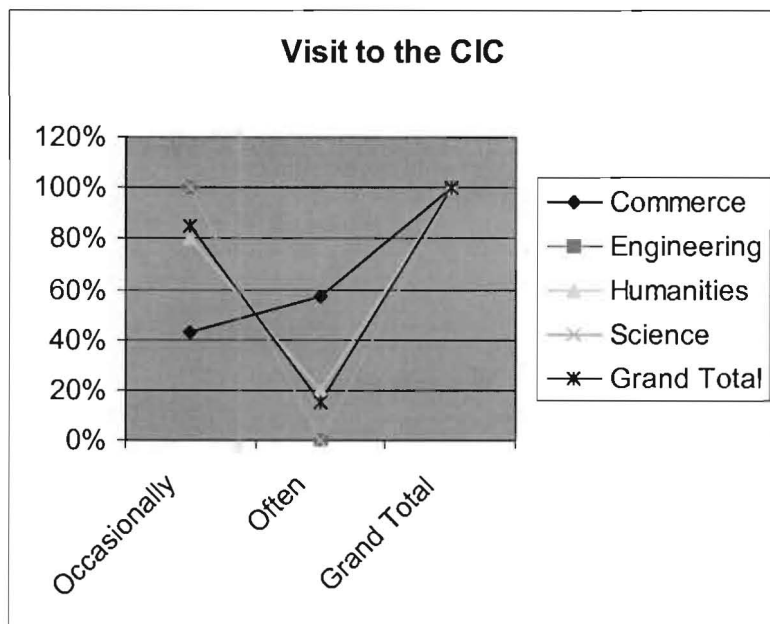
Source: Survey data

A substantial number of respondents (85%) indicated that they visited the CIC occasionally while only 15% of the respondents visited the CIC moderately. None of the respondents frequently visited the CIC.

Further analysis of the data showed the following significant results:

##### 4.4.5.1 Two-way contingency chart showing the effect of faculty variable on the number of visits to the CIC

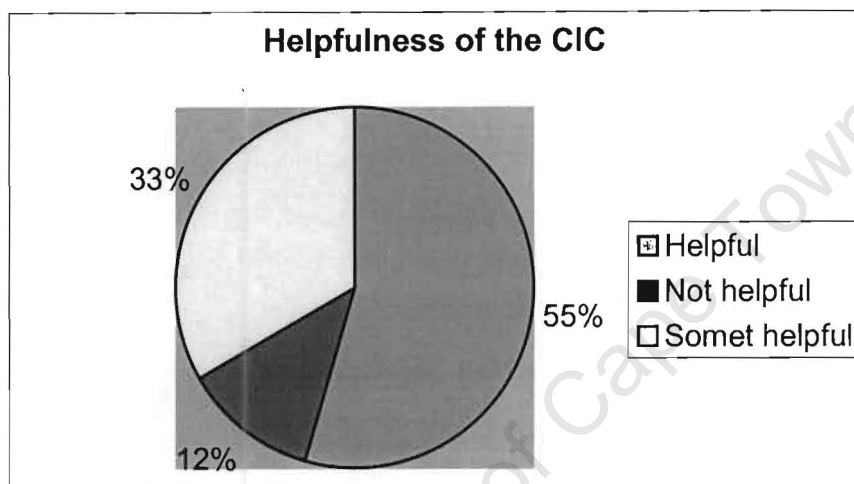
Figure 34: Visit to the CIC by faculty



A large proportion of Commerce students (57%) indicated that they visited the CIC moderately and 20% of Humanities students also visited it moderately frequent (the aggregate response was 15%). All the Engineering students and Science students (100% each) only visited the CIC occasionally followed by Humanities students (80%) and Commerce students (43%) (the aggregate response was 85%).

#### 4.4.6 Helpfulness of the CIC (cf. Appendix 2, question 8)

Figure 35: Helpfulness of the CIC



Source: Survey data

The chart above shows that 33% of respondents found the CIC to be helpful sometimes, 55% of the respondents found it helpful at all times and 12% viewed the CIC as not helpful. Further analysis of the data did not provide significant results

#### 4.4.7 Problems encountered at the CIC (cf. Appendix 2, question 9)

The users provided the following responses with regard to problems they encounter with:

**Locating resources:** The vast majority (79%) denied having problems.

**Instructions:** The overwhelming majority of users (85%) indicated that they did not have problems with instructions in using the CIC.

**Table 8: Problems encountered at the CIC**

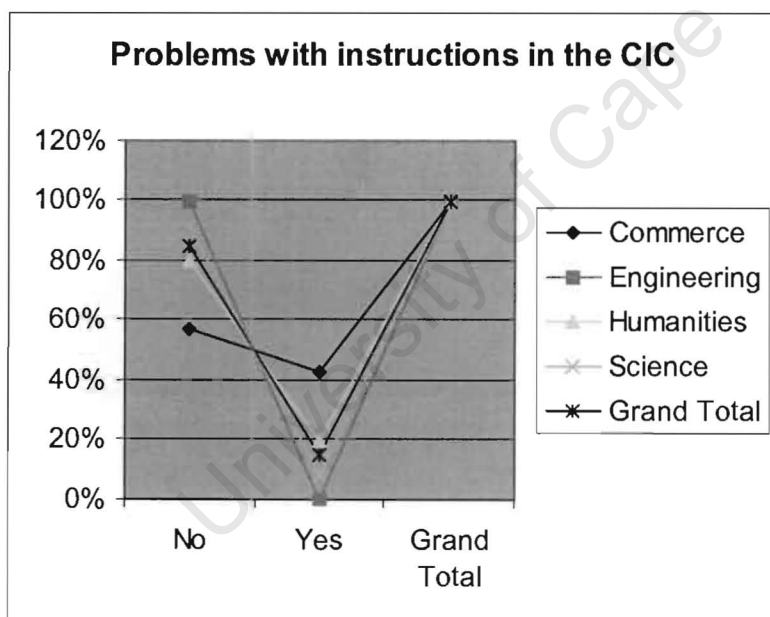
Problems locating resources	Count	Cumul.Count	Percent	Cumul.Percent
No	26	26	79	79
Yes	7	33	21	100
Problems with instructions	Count	Cumul.Count	Percent	Cumul.Percent
No	28	28	85	85
Yes	5	33	15	100

Source: Survey data

If the data are analysed further the following significant results were obtained:

**4.4.7.1 Two-way contingency chart showing the effect of faculty variable on instructions in the CIC**

**Figure 36: Problem with instructions at the CIC by faculty**



All the Engineering students (100%) and 92% of the Science students indicated that they did not have problems with instructions in the CIC (these figures are greater than the response aggregate of 85%). Of the Humanities students and Commerce students, 80% and 57% respectively did not experience problems with instructions. It is thus clear that more Commerce students experienced problems than any other category of students.

#### 4.4.8 Confidence in CIC staff (cf. Appendix 2, question 10)

The users' response to question 10 asking them to indicate whether they had confidence in the CIC staff was as follows (cf. Table 9 below):

**Handling queries:** When asked if they have confidence in the way the CIC staff is handling their queries, 67% of respondents answered in the affirmative.

**Networking with prospective employers:** It is evident from Table 9 that 52% of respondents are satisfied with the way the CIC is networking with prospective employers.

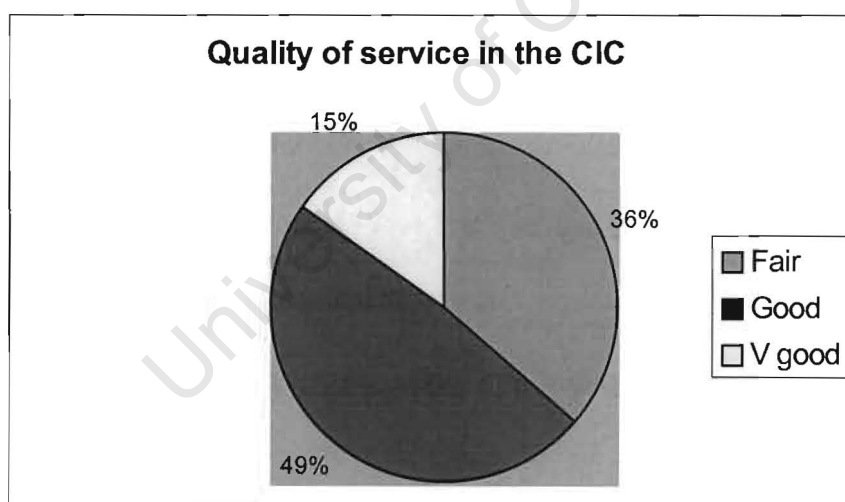
**Table 9: Confidence in CIC staff**

Handling queries	Count	Cumul.Count	Percent	Cumul.Percent
Yes	22	22	67	67
No	11	33	33	100
Networking	Count	Cumul.Count	Percent	Cumul.Percent
Yes	17	17	52	52
No	16	33	48	100

Source: Survey data

#### 4.4.9 Quality of service provided by the CIC (cf. Appendix 2, Question 11)

**Figure 37: Quality of service provided by the CIC**



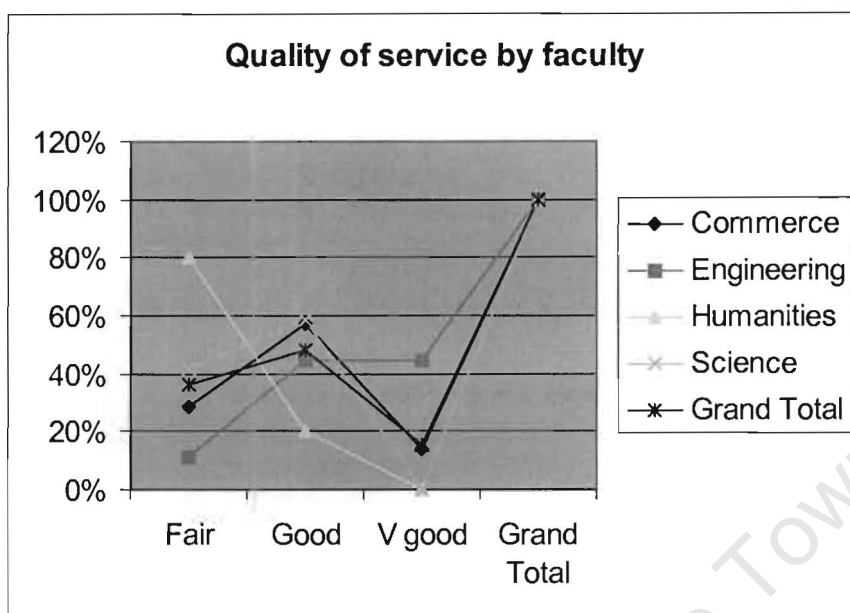
Source: Survey data

The chart above illustrates that 49% of respondents rated the quality of service in the CIC as good while 36% felt that the service was fair. Only 15% viewed the service as very good, and none rated it as bad.

Further analysis of the data produced the following significant results:

#### 4.4.9.1 Two-way contingency chart showing the effect of faculty variation on the quality of service provided by the CIC

Figure 38: Quality of service provided by the CIC by faculty



The Engineering students were the most positive about the quality of service provided by the CIC as 44% of them rated it as very good (aggregate response of 15%). The only other students that provided good rating were the Commerce students at 14%. The Science students (58%) were the highest in rating the CIC services as “good” followed closely by Commerce students (57%) (both above the aggregate response of 49%), while the Engineering students and Humanities students respectively provided a 44% and 20% “good” rating. A very high percentage of Humanities (80%) students rated the CIC services as being fair with 42% of the Science students, 29% of the Commerce students and 11% of the Engineering students holding this view (aggregate response for this category was 36%).

#### 4.4.10 Currency of information provided by the CIC (cf. Appendix 2, question 12)

When asked if they were satisfied with the currency of information provided by the CIC 67% of the respondents held the view that the information provided by the CIC is current.

Table 10: Satisfaction with currency of information

Currency of info	Count	Cumul.Count	Percent	Cumul.Percent
Yes	22	22	67	67
No	11	33	33	100

#### 4.4.11. Satisfaction with CIC marketing (cf. Appendix 3, question 13)

When asked if they were satisfied with the way the CIC markets its services, 64% of the respondents said they were.

Table 11: Satisfaction with CIC marketing strategy

CIC marketing	Count	Cumul.Count	Percent	Cumul.Percent
Yes	21	21	64	64
No	12	33	36	100

Source: Survey data

#### 4.4.14 Improvement of services (cf. Appendix2, question 14)

None of the respondents provided further details upon being asked to indicate how the CIC could improve its services.

### 4.5 INTERVIEWS

#### 4.5.1 Introduction

The analysis of information obtained from the interviews was based on the interviewer's record that he kept of the interviews. This record was in the form of transcribed notes derived from the tape-recorded responses from participants. The interviewer organised the content of the interviewees' statements and classified the meanings and interpretations he had attached to those statements. The researcher systematically examined the contents of the interviews and recorded relative incidence of themes and ways in which they are portrayed. Ten participants were interviewed. This was the number the researcher set out to interview. Out of this number, four participants preferred not to be tape-recorded. The researcher in this case asked questions and wrote down the responses. The ratio of potential users to users was 8/4.

#### 4.5.2 Interview responses from potential users

Most potential users interviewed had not experienced problems when they had to make career decisions. But the few who admitted having experienced problems said

that their problems were how to be informed on their field of study, and how to get information on companies. One respondent categorically stated that her problem as “not knowing where to go from here.”

When asked whom they would prefer to assist them to make career decisions a significant number of potential users preferred to be assisted by lecturers. They concurred that lecturers were qualified to assist them because “they are well informed in different fields.” The few who preferred to be assisted by CIC staff indicated that the CIC staff was well placed to provide information on job opportunities, and “have information on available jobs.” One respondent who said he would rather rely on himself declared that “career decisions depends on the interests I have about my future.”

When asked if they were aware of services provided by the CIC, an overwhelming majority of the potential users indicated that they were not aware of CIC services.

When asked the type of information they would need while at the university, the majority of the potential users indicated that they would need company information. They mentioned that they wanted to know the kinds of jobs companies provided, job requirements, and earnings, as their immediate company information needs. Potential users also wanted to be provided with information on how to apply for jobs, how to write curriculum vitae, and how to prepare for interviews. Only a few preferred having information that related to their field of study while at university.

Quite a high number of the potential users expected the CIC to provide company information. One respondent emphasised that the CIC should provide information on “employment, salaries and the signing of contracts”. A few of the potential users expected the CIC to provide course information and information on job opportunities.

The majority of the potential users mentioned print media as the most effective way of making students aware of CIC services. They preferred to be informed through posters, pamphlets and the Monday paper. A few of the potential users wanted to be informed of CIC services by e-mail, through faculty visits, and over UCT radio. One

student said that the CIC “can inform students during lunch time at Jammie Plaza like other organisations and societies do.”

Most of the potential users preferred career information throughout their stay at the university. There were those who needed career information in their final year, first year and first and final years but the number was not significant.

When asked to comment on the Career Information Centre (CIC), the majority of the potential users stated that the CIC’s existence should be made more visible and its services should be made known to students. Some of the students felt that:

1. “Career information should be made compulsory to all students at least twice a week.”
2. “CIC is useful to have but ways must be found to make it known to students”
3. “CIC should be made more visible, people should know of its existence”

One student from the faculty of Health Sciences pursuing medicine, indicated that they did not need career information because their career path was well defined and their profession was in great demand. They felt that there was no need for them to worry because they were assured of jobs as soon as they completed their studies, and felt that “the interview was not meant for Faculty of Health Sciences students.”

#### **4.5.3 Interview responses from users**

Users attested seeking information from the CIC when a need arises. They said they seek information from the CIC “as often as possible”, “always especially now that I am in my final year”. They mostly seek information on job search and how to compile curriculum vitae (CV). Users would like the CIC to have orientation programmes covering different companies. Those students who encountered problems when they had to use the CIC attributed the problem to their ignorance of how the CIC worked when they first had to use it. When asked to comment on how the CIC staff handled their queries, users said that “the staff was friendly and polite, ” and “they try to understand what I want and later get back to me”. Users suggested that the CIC should make its services known to students by e-mailing them, putting posters on

campus and giving talks at the Jammie plaza. Users overwhelmingly stated that they needed career information throughout their stay at the university. When asked to comment further on the CIC, they stated that “the CIC should help students write CVs, improve publicity and make sure that information is up-to-date.”

University of Cape Town

## **CHAPTER 5**

### **DISCUSSION AND CONCLUSION**

#### **5.1 INTRODUCTION**

This chapter concludes the study by discussing and summarising the main findings that arose from the survey as reported in chapter 4 and from the published literature on career and other information needs as reported in chapter 2. It starts by looking at issues that arose out of an analysis of the univariate variables and then looks at the effect of the independent variables of faculty alliance and the year of study on the dependent variables of career information needs. The chapter also integrates the main issues derived from the literature review with the findings and makes recommendations that could assist the CIC with their operations.

#### **5.2 Summary of main findings outlined in chapter 4**

In this section, a summary of the main findings that arose from the survey is provided.

##### **5.2.1 Discussion pertaining to responses of the potential users**

###### **5.2.1.1 Distribution of potential users by faculty and the year of study**

The potential users who participated in this study were 67 out of a total of 100 respondents. It is evident that the largest number of potential users was from the Faculty of Health Sciences. This is due to the fact that all the respondents from this faculty indicated that they had never used the CIC. All other faculties were more or less equally represented. It is interesting to note that there were an almost equal number of respondents from the first, second and third year students.

### **5.2.1.2 Career information needs and sources**

It is evident from the study results that:

- Most potential users interviewed indicated that they needed company information. They specifically wanted information on employment, salaries and signing of contracts.
- The majority of potential users expected the CIC to provide information on career options and employment.
- There was also an indication that potential users relied almost equally on the Internet and print media for their career information.
- An overwhelming number of potential users indicated that they did not have contacts with any organisation outside the university from where they can get career information.
- A high number of respondents indicated that they would prefer career officers to assist them in making career decisions.

### **5.2.1.3 Problems experienced when various career-related tasks had to be performed**

The study results indicate that:

- A large proportion of the potential users interviewed indicated that they had not experienced problems when they had to make career decisions.
- There was a moderately high number of potential users who had difficulty in finding company information and jobs advertised in different media.
- There was not much disparity between potential users who experienced problems with preparing for job interviews, writing resumes, and those who did not experience any problem.
- A substantive number of potential users indicated that they were not aware of services the CIC offered.

#### **5.2.1.4 Awareness and understanding of CIC services and marketing strategy**

The study results reflects the following observations:

- The interview respondents indicated that the CIC's existence should be made more visible and its services should be made more actively known to students.
- Most of the potential users would like the CIC to make their services known to the students by advertising them.
- The majority of potential users interviewed regarded print media as the most effective way of making students aware of CIC services.
- There were an almost equal number of respondents who preferred to be informed of the latest career information by posters and pamphlets, CIC website and academic representatives.
- A high number of potential users were in favour of instructional manuals as a mode of teaching them how the CIC operates.
- There was a significant number of potential users who preferred one-on-one instruction.
- The majority of respondents indicated that they needed career information throughout their stay at university.

#### **5.2.2 Discussion pertaining to responses from users**

##### **5.2.2.1 Distribution of users by faculty and the year of study**

There were 33 users who participated in this study. The faculty of Science had the highest number of respondents. Second year students registered the highest number of participants. There were no representatives from the Health Sciences Faculty in this group.

### **5.2.2.2 Career information needs met by the CIC**

Most of the users indicated that they relied on CIC resources for their career information needs. The users singled out the following career-related aspects as important to satisfy their career-related information needs:

- Career interests
- Workplace educational requirements
- Financial aid to study
- In-service training opportunities
- Internship and apprenticeship opportunities
- Company information
- Current job listings
- Creating resumes and preparing for interviews

It is evident from this study that the needs of a significant number of users were being sufficiently met.

### **5.2.2.3 Use of information sources in the CIC**

An overwhelming number of users indicated that they hardly seek information from the following:

- Self-assessment file
- Career planning file
- First year at work file
- Career mentor programme
- Internet at the CIC

A moderate number of users hardly seek information from the vacation work file, company information file, job search file, and newspapers. An equal number of users indicated that they very often and hardly seek information from faculty handbooks and information brochures. The Tertiary institutions file was often consulted by most of the users.

#### **5.2.2.4 Frequency of visits to the CIC, and helpfulness of its services**

The following can be concluded from the study results:

- The majority of respondents indicated that they visited the CIC occasionally.
- A significant number of users found the CIC quite helpful.
- Most users expressed confidence in the way the CIC was handling their queries and networking with prospective employers.
- Users did not encounter any problem with instructions and with locating resources in the CIC.
- A high number of users found the quality of CIC services good and the information provided current.
- Most users indicated that they were satisfied with the way the CIC markets its services.
- 

The user respondents that were interviewed made the same observations.

#### **5.2.3 The effect of faculty alliance and the year of study variables on the dependent variables of career information needs of potential users**

##### **5.2.3.1 Faculty affiliation and career information needs of potential users**

The following can be observed from the study results:

- The students who were by far the most interested in job prospects were the Faculty of Science students. Other faculties were less interested in job prospects. A high number of the Faculty of Health Sciences students indicated that they needed course-related information. A high percentage of Faculty of Commerce students needed career opportunities information. Students from other faculties also indicated this need except the Faculty of Science students who showed that they were not interested in career opportunities.

- An overwhelming number of the Faculty of Science students preferred print media as a source of career information. Students from other faculties were less interested in print media. The majority of the Faculty of Engineering students indicated that they preferred the Internet as a medium through which they can get career information. A high number of the Faculty of Health Sciences students indicated that they relied on course networking more than other faculties did.
- The vast majority of the Faculty of Science students experienced problems when they had to write resumes.
- Of the students who indicated that they were not aware of services offered by the CIC, those from the Faculties of Humanities, Health Sciences and Science were the highest. Students from the Faculties of Engineering and Commerce were also not aware of CIC services but at a lower rate.
- The majority of the students from the Faculties of Science and Health Sciences students preferred one-on-one instructions as a way of being informed of how the CIC operates.

#### **5.2.3.2 The year of study and career information needs of potential users**

It is evident from the results that:

- The majority of first and fourth year students indicated that they had not had problems with interview preparation.
- A high number of the fourth and second year students admitted having had a problem when they had to write resumes. The third and first year students were less affected by this problem.
- The vast majority of the first, third and fourth years students were not aware of services offered by the CIC. A moderate number of second year students were not aware of CIC services.
- A high percentage of the first year students indicated that they preferred to be informed of the latest career information by posters. Most second and third

year students preferred to be informed of the latest career information by academic representatives and many third year students were also in favour of the use of the CIC website.

#### **5.2.4 The effect of faculty affiliation and the year of study variables on the dependent variables of career information needs of users**

##### **5.2.4.1 Faculty affiliation and career information needs of users**

It is evident from this study that:

- The vast majority of the students from the Faculties of Humanities and Engineering hardly consulted the career planning file. Most of the Faculty of Commerce students consulted the career planning file very often.
- A significant number of the Faculty of Engineering students hardly seek information from the recruitment brochures. A high number of the Faculty of Commerce students very often seek information from the recruitment brochures. Students from other faculties very often seek information from recruitment brochures but at a lower rate.
- The Faculty of Commerce students indicated that they consulted the job search file very often. The vast majority of the Faculty of Humanities students in contrast hardly consulted the job search file. A large proportion of students from the other faculties also consulted the job search file infrequently.
- A large proportion of the students from the Faculties of Engineering, Science and Humanities indicated that they occasionally visited the CIC. The Faculty of Commerce students often visited the CIC.
- All the Faculty of Engineering students indicated that they did not have problems with instruction in the CIC. Similarly a high number of students from the Faculties of Science, Humanities, and Commerce did not experience problems with instruction.

- The quality of service provided by the CIC was rated as fair by a large proportion of the Faculty of Humanities students. The majority of the Faculty of Engineering students found the service very good while the students from the Faculties of Science and Commerce students found the service good.

#### **5.2.4.2 The year of study and career information needs of users**

The researcher noted the following observations from the study results:

- A significant number of the first year students viewed information on financial aid to be important. The majority of the second year and third year students viewed information on financial aid to be very important. Many fourth year students did not regard financial aid information as important.
- Most first, second, and fourth years students regarded information on job listings to be very important.
- An overwhelming number of students from all faculties hardly seek information from the self assessment file.
- A large proportion of first year students seek information from recruitment brochures. A moderate number of third and fourth year students also indicated that they seek information from brochures. The majority of second year students hardly seek information from recruitment brochures.
- Most of the first year students very often consulted the company information file while a large proportion of the fourth year students often consulted it. Most second and third year students hardly consulted the file.

#### **5.2.4.3 Overall general trends of the study**

There were 67 potential users and 33 users participating in this study. There was an equal distribution of students (20) per faculty. Of the students who participated in the study, 32% were second year students, 29% were third year students, 23% were first year students, and 16% were fourth students.

The Faculty of Sciences had the highest number of the user respondents (37%), followed by the faculty of Engineering (27%), and the Faculty of Humanities (15%). The Faculty of Health Sciences students did not have any user respondents as none of them had ever used the CIC. Of the potential users who participated, an equal number of respondents each (27%) were in their first, second and third years of study while 19% of the respondents were from fourth year students. Of the user respondents, 43% were in the second year, 33% in the third year, 15% in their first year and only 9% in their fourth year.

#### **5.2.4.4 How the independents variables impact on this study**

When the faculty and the year of study variables were cross-tabulated with dependent variables, the study recorded a number of significant results. The researcher noted the following scenario of the impact of the independent variables of year of study and faculty allegiance on the dependent variables of career information needs:

- The faculty independent variable had an impact on resume writing, career information needs of potential users, the use of the career planning file, Graduate Recruitment brochures, job search file, number of visits to the CIC, instructions provided by the CIC, and quality of service provided by the CIC.
- The independent variable of year of study had an impact on interview preparation, resume writing, ways of making students aware of the latest career information, financial aid, self-assessment file, Graduate Recruitment brochures, and company information file.

- The independent variables of faculty and year of study had an impact on awareness of services offered by the CIC and one-on-one instructions as a way of informing users of the functions of the CIC.

#### 5.2.4.5 A profile for the various students categories and their needs

The table below shows different categories of students and the needs they have expressed.

**Table 12: Various students' categories of needs**

CATEGORIES	NEEDS
Faculty of Health Sciences	<ul style="list-style-type: none"> <li>- Course related information</li> <li>- Assistance from friends</li> <li>- Course networking</li> <li>- Awareness of CIC services</li> <li>- Print media</li> </ul>
Faculty of Commerce	<ul style="list-style-type: none"> <li>- Career opportunities</li> <li>- Print media</li> </ul>
Faculty of Science	<ul style="list-style-type: none"> <li>- Job prospects</li> <li>- Print media</li> <li>- Awareness of CIC services</li> </ul>
Faculty of Humanities	<ul style="list-style-type: none"> <li>- Career opportunities</li> <li>- One-on-one instructions</li> <li>- Print media</li> <li>- Awareness of CIC services</li> </ul>
Faculty of Engineering	<ul style="list-style-type: none"> <li>- Career opportunities</li> <li>- Internet</li> <li>- Awareness of CIC services</li> </ul>
Year 1	<ul style="list-style-type: none"> <li>- Awareness of CIC services</li> <li>- Financial aid information</li> <li>- Job listings information</li> <li>- Use of posters to advertise CIC</li> </ul>
Year 2	<ul style="list-style-type: none"> <li>- Resume writing</li> <li>- Financial aid information</li> <li>- Job listings</li> <li>- Awareness of CIC services</li> </ul>
Year 3	<ul style="list-style-type: none"> <li>- Financial aid information</li> <li>- Job listings</li> <li>- Awareness of CIC services</li> <li>- Use of academic representatives</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>- Resume writing</li> <li>- Job listings</li> <li>- Awareness of CIC services</li> </ul>

Students from all the faculties expressed the need for print media. Students from all year groups and faculties except the Faculty of Commerce indicated that they need to be made aware of services offered by the CIC. The Faculties of Commerce, Humanities and Engineering students expressed the need for information on career opportunities. Students from the Faculty of Health Sciences need course-related information, course networking, and want friends to assist them in making career decisions. The Faculty of Science students require information on job prospects. The Faculty of Humanities students need one-on-one instructions as a way of informing them of the functions of the CIC. The Faculty of Engineering students indicated that the Internet is one of the means through which they can get career information.

All the year groups expressed the need for information on job listings. Years one, two and three students need information on financial aid. Years two and four students want the CIC to assist them with writing resumes. First year students want the CIC to market its services through posters while the third year students prefer the marketing to be done through their academic representatives.

### **5.3 Conclusion**

#### **5.3.1 Career needs and information sources**

Fourie (1999:69) asserts that the youth in South Africa generally attach high value to work and they aspire to be educated, successful and prosperous. It is not surprising then that the study shows an almost equal need for career opportunities, course information and job prospects among potential users. The CIC should strive to cater for the needs that students have identified as their immediate needs. This is particularly important as most users have declared that the CIC is their sole source of career information. According to Fourie (1999:73) young people need career information for the purposes of searching and applying for job vacancies, choosing educational courses, searching for training programmes and to have knowledge about specific job requirements.

This study has shown that most students rated information on such aspects as career interests, company information, resume writing and interview preparation, in-service training opportunities and internship opportunities very highly. These areas of interest were also identified by Akhurst and Jassat (1999:193) who believe that they should be covered in order to provide adequate career information. It is evident from the study that most of the career needs of a significant number of users are being sufficiently met. Although this is the case, a number of users have queried the lack of information relating to salaries and contract signing. Akhurst and Jassat (1999:194) have noted the same observation in their study. They observed that the literature on career information in South Africa consists of information on the description of careers, personal checklists, education and training requirements, career prospects, but lacks information regarding earnings and other benefits.

### **5.3.2 The quality of services offered by the CIC**

It is evident from the study that potential users would prefer to be assisted by career officers in making career decisions. It is therefore imperative for career officers to be accessible to students who need assistance in career-related matters. Most users expressed confidence in the way the CIC was handling their queries and networking with prospective employers. They found the CIC to be helpful and the quality of services rendered satisfactory. Although the majority of users had not experienced problems with locating resources and obtaining instruction at the CIC, the few who had, attributed the problem to their ignorance of how the CIC worked when they first had to use it. Not knowing how the CIC works can be viewed as a barrier to career information needs. Harris and Dewdney (1994:4) have observed that not knowing where to locate information that one realises that one needs, not knowing precisely what information is needed to solve the problem and lack of communication skills and self-confidence can be barriers to information access. The CIC staff can eliminate some of these barriers to information access by creating an environment where students will feel welcome and will feel free to voice their queries. As Akhurst and Jassat (1999:188), put it, the CIC staff should use a variety of techniques to respond to clients' needs.

### **5.3.3 Problems encountered by potential users**

As the study indicates, there was not much disparity between potential users who experienced problems with preparing for job interviews, writing resumes, finding company information, and those who did not experience these problems. Nevertheless the CIC should take note of this trend. It would appear that students who have not experienced problems with the mentioned career aspects are those who have not yet had the need to prepare for interviews, write resumes and find company information.

### **5.3.4 Awareness of CIC services**

An overwhelming majority of potential users indicated that they were not aware of services the CIC offered. Most potential users interviewed had not heard of the CIC before and those who had lamented its lack of involvement in their faculties. Potential users indicated that they preferred the CIC to make their services known to the student community through advertising. They wanted to be informed by posters and pamphlets, UCT radio, e-mail and through talks at Jammie Plaza. Although most users indicated that they were satisfied with the way the CIC was marketing itself, some echoed the use of similar methods suggested by potential users. It is evident from these findings that there is a need for the CIC to put in place a rigorous awareness campaign that will involve all the faculties in UCT. Some of the methods suggested by the students should be implemented. They know the methods that work better for them. It is through marketing and advertising career services that potential clients will be encouraged to make use of them (Akhurst and Jassat, 1999:188).

### **5.3.5 The level at which students need career information**

It is evident from the study that students need career information throughout their stay at university. This calls for the CIC to integrate efforts with faculties to provide services and programmes that meet the needs of diverse students from all year groups.

### **5.3.6 Use of career resources**

A large proportion of users indicated that they hardly seek information from the following CIC sources: self-assessment file, career planning file, first year at work file, and career mentor programme. The Faculty of Commerce students very often seek information from recruitment brochures and the job search file. First year students seek information from recruitment brochures and the company information file. Apart from these groups there is an indication that a large proportion of students from other faculties hardly consulted not just these sources but a number of other files in the CIC. These files are clearly marked and are displayed where students can have easy access to them. Thus, it is not a case of students being unaware of the existence of such files. Since the students have indicated that they relied on print media and the Internet, some of these files may come to the attention of students if they were in electronic formats. Alternatively they could rearrange the contents of the files and make the files more appealing. Promoting the use of information resources should be made one of the priorities of the CIC.

### **5.3.7 The effect of faculty affiliation and the year of study variables on career information needs**

It is evident from the findings that the Faculty of Science students needed information on job prospects while the Faculty of Health Sciences students needed course-related information. The Faculties of Commerce, Engineering, and Humanities students were more interested in career opportunities. This correlates with some of the needs that Fourie (1999:73) has identified as career information needs young people require. Students require these needs to enable them to be aware of training programmes, to understand the world of work, to search for career options and to choose educational courses and plan their careers. It is therefore imperative for the CIC to provide faculties with the necessary information that is geared towards their specific needs.

The study shows that the Faculty of Science students preferred print media as a source of career information. These students should be provided with print media so as to meet their resource needs. The Faculties of Engineering, Humanities and Commerce

students preferred the Internet. The CIC should convert its resources into electronic format to cater for those students who have indicated that they preferred the Internet. The Faculty of Health Sciences relied on course networking for their career information. The Career Centre should liaise with the Faculty of Health Sciences to look into the possibility of integrating career resources into the Health Sciences resource base and encourage students to use them. The Career Centre should focus on needs of each faculty so that their resource distribution is not just equitable but is specifically directed at the faculty that needs it most.

Students in all the faculties have indicated that they have had problems with writing resumes. The study shows that the majority of first and fourth year students had not experienced problems with interview preparations. But most of second and fourth year students have had problems with writing resumes. If the Career Centre liaises with academic departments to offer career programmes at the beginning of the year, then writing resumes, interview preparations and how to apply for jobs could be some of the career aspects that can be included in these programmes.

The majority of potential users from all the faculties and from all the year groups were not aware of services offered by the CIC. First year students wanted to be informed of latest career information through posters while third and fourth year students preferred the CIC website. Second and third year students wanted to be informed through academic representatives. The CIC should embark on a vigorous campaign to make their services known to students. This should involve advertising of career services through posters and pamphlets at the campuses and places of residence, over UCT radio, giving career talks during lunch period at Jammie Plaza and through faculty visits.

Users from the Faculty of Engineering rated the quality of service provided by the CIC as very good while those from Faculties of Science and Commerce found it good. The Faculty of Humanities students found the service fair. It is encouraging to know that the students view the quality of the CIC services in this light. Nevertheless the CIC should keep on improving the quality of their services so that most of the users are happy with the services.

The Faculties of Science and Health Sciences students wanted to be instructed on how the CIC operates through one-on-one instructions. This is one instruction method that the CIC should capitalise on when dealing with students from these faculties. Students from all the faculties indicated that they visited the CIC when the need for career information arose. Students should be encouraged to use the CIC as frequently as possible. Access to and use of career information is an integral part of the career-decision process. The frequent use of the CIC will make students more conversant with the knowledge of various career options, and enable them to make informed career choices.

#### **5.4 Relating the findings to the research questions**

In conclusion the researcher proposes to briefly review the research questions and relate them to the findings that came out of the study.

- **Are students aware of services the CIC is offering?**

A significant number of students indicated that they were not aware of services offered by the CIC. It is evident from the study that these respondents had never used the CIC.

- **Do students know their career-related needs?**

The study shows that students were conversant with their career-related needs. All the respondents were able to outline career-related needs that they would need addressed while at the university.

- **In meeting their career needs, have they encountered or are they likely to encounter problems in having access to information they need?**

The study shows that there was not much disparity between potential users who experienced problems in performing various career-related tasks and those who did not.

- **Do students have confidence in the way the CIC staff is handling their queries, networking with potential employers, or keeping abreast of employment trends?**

The majority of the users of the CIC indicated that they were satisfied with the way the CIC staff dealt with their queries and networked with potential employers.

- **What should the CIC do to effectively and efficiently improve on the service delivery to meet users' needs?**

The study shows that the needs of students are diverse and thus the CIC should address this issue so as to enable them to direct their resources to the specific needs of the students. This should entail the CIC embarking on an awareness campaign, identifying the needs of different students, and catering for students' specific needs.

### **5.5 Recommendations and future research**

It is evident from this study that students experience the need for career information at one point or the other while at university. Students need information on career opportunities and job prospects, company information, resume writing, interview preparation, course-related information, in-service training and internship opportunities. It is also evident from this study that some of the needs of a significant number of users are being sufficiently met. Although this is so, a number of users have queried the lack of information on salaries and contract signing. The CIC should strive to cater for the needs that the students have identified as their immediate needs. It is alarming that an overwhelming number of potential users were not aware of services the CIC offered and some were not even aware of its existence. It is evident that career files are under-utilised by users. The study has shown that students from different faculties and year groups have indicated the kinds of career needs and career resources they require.

The researcher recommends that:

- The CIC constantly carry out surveys to identify potential users and users' career needs. This entails among others delineating the categories of users whose information needs are to be identified, and perceiving the users' problem as holistically as possible (Devadason and Lingam, 1997:42).
- Since users of the Career Centre prefer to be assisted by career officers in making career decisions, career officers should be accessible to students. They should also be qualified to handle students' queries so that the trust that students have in them does not erode. The fate of students should be in the capable hands of trained professionals.
- The CIC should embark on a rigorous awareness campaign that involves academic divisions on all campuses of the University of Cape Town. Posters and pamphlets, UCT radio, e-mails, and career talks should be among the strategies that are used to market the CIC services.
- Making students sign when they use information sources can assist the CIC to monitor use of career resources. This will keep track of how much the sources are used. The files would be rendered more accessible to students if they are in electronic formats as many students have indicated that they prefer using the Internet.
- It is imperative for the CIC to provide students from different faculties and year groups with the necessary information that is geared towards their specific needs and resource requirements. The CIC should direct the needs and resources to faculties and year groups that have indicated what their specific requirements are.
- The CIC should liaise with academic departments to offer career programmes within the academic programme. Resume writing, interview preparation, and applying for jobs would be important career aspects that should be offered since many students experience difficulties with them.

The researcher believes that the results of this study will serve as a foundation for further research in students' career information needs, and hopes that the results will inspire research on how Career Centres in African universities can actively be involved in serving students' career needs. Needs assessment is an ongoing process that should be constantly carried out. The needs of users keep on changing. The needs

of this year's first year or even second year students will not remain the same next year. The researcher suggests that:

- As the CIC implements changes it should carry out user surveys so that it is seen to be catering for a community whose needs are constantly changing
- The CIC carry out a survey that involves academic staff to get their views on how students' career information needs can be catered for.

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**APPENDIX 1: QUESTIONNAIRE TO POTENTIAL USERS**

**An assessment of information needs of users of the Career Information Centre (CIC), University of Cape Town.**

**Questionnaire to Potential Users of the Career Information Centre**

This questionnaire is intended to help the Career Information Centre to have a better understanding of students' career needs and find ways of satisfying them. Your responses will ensure that your career-related queries are adequately attended to.

Please provide appropriate information in the space provided against each question or place a tick [ ] in the boxes for multiple answers where applicable.

1. Programme of study..... Year.....  
Faculty.....
  
2. Mention the type of career information you would need while at university.  
.....  
.....
  
3. Which sources of information do you mostly rely on for your career-related information?  
.....  
.....
  
4. Do you have outside organisations with which you have contacts to get career information?  
  
Yes [ ], No [ ]
  
5. Who would you prefer to assist you make career decisions?  
  
a) My parents [ ], b) My friends [ ], c) Career officers and counsellors [ ]  
d) Other (please specify).....
  
6. Have you experienced problems when you had to do one or more of the following;  
  
a) Prepare for a job interview? Yes [ ], No [ ]  
b) Write resumes? Yes [ ], No [ ]  
c) Find information on companies, agencies or industries? Yes [ ], No [ ]  
d) Find out jobs that prospective employers have to offer? Yes [ ], No [ ]  
e) Other (please specify).....
  
7. Are you aware of the services the Career Information Centre (CIC) offers?  
  
Yes [ ], No [ ]

8. What type of information would you expect the Career Information Centre (CIC) to provide?

.....  
.....

9. How would you suggest the Career Information Centre make its services known to the student community?

.....  
.....

10. How would you prefer to get information on how the Career Information Centre operates?

- a) From instructional manuals Yes [ ], No [ ]
- b) Undergoing an intensive training programme Yes [ ], No [ ]
- c) One- on- one instructions Yes [ ], No [ ]
- d) Other (please specify).....

11. How would you want the Career Information Centre to make students aware of the latest career information available?

.....  
.....

12. When do you mostly need career information services?

- a) In my first year. Yes [ ], No [ ]
- b) In my final year. Yes [ ], No [ ]
- c) Throughout my stay at the university. Yes [ ], No [ ]
- d) Other (please specify).....

## APPENDIX 2: QUESTIONNAIRE TO USERS

### An assessment of information needs of users of the Career Information centre (CIC), the University of Cape Town

#### Questionnaire for users of the Career Information Centre

This questionnaire is intended to help the Career Information Centre to have a better understanding of students' career needs and find ways of satisfying them. Your responses will ensure that your career-related queries are adequately attended to.

Please provide appropriate information in the space provided against each question or place a tick [ ] in the boxes for multiple answers where applicable.

1. Programme of study..... Year of study.....  
Faculty.....

2. Which source of information is the most important for your career information needs?

.....  
.....

3. A Career Information Centre should provide information on the following career-related aspects. Please rank them in order of their importance for your needs.

Not important                      Very important  
1                                      2                                      3

- a) Exploration of career interests
- b) Workplace educational requirements
- c) In-service training programme opportunities
- d) Internship and apprenticeship opportunities
- e) Financial aid
- f) Companies, agencies and industries information
- g) Current job listings
- h) Employer identification
- i) Guidelines in creating resumes and interviews
- j) Other (please specify).....

4. How well does the Career Information Centre meet career needs as mentioned above?

- a) Well [ ], b) Fairly [ ], c) Hardly [ ],

5. How often do you seek information from the following sources in the CIC?

Hardly 1      Moderately 2      Often 3

- a) Self- assessment files
- b) Vacation work file
- c) Career planning file
- d) Company information file
- e) Tertiary education institutions file
- f) Faculty handbooks
- g) Graduate Recruitment information brochures
- h) Job search file
- i) First year at work file
- j) Newspapers
- k) Career mentor programme
- l) Internet at the Career Information Centre

6. What other career- related information not covered by the above sources would you like to have included in the collection?

.....  
.....

7. How often do you visit the Career Information Centre (CIC)?

- a) Often [ ], b) Moderately [ ], c) Occasionally [ ], d) Other (please specify).....

.....

8. How helpful is the Career Information Centre (CIC) with information geared towards your career needs?

- a) Helpful [ ], b) Sometimes helpful [ ], c) Not helpful [ ]

9. In meeting your career needs, have you encountered problems in the Career Information Centre concerning the following;

- a) Locating information resources? Yes [ ], No [ ]
- b) Verbal, written, and graphic instructions? Yes [ ], No [ ]
- c) Other (please specify).....

10. Do you have confidence in the way the Career Information Centre staff is

- a) Handling your queries? Yes [ ], No [ ]
- b) Networking with prospective employers? Yes [ ], No [ ]
- c) Others (please specify).....

11. How do you rate the quality of service provided by the Career Information Centre?

- a) Very good [ ], b) Good [ ], c) Fair [ ], d) Bad [ ]

12. Is the information you normally get from the Career information Centre up-to-Date?

Yes [ ], No [ ]

13. The Career Information Centre markets its services through Careering magazine; Job search and Curriculum Vitae workshops; the Graduate Recruitment Programme; brochures and pamphlets. Are you satisfied with the way they market their services? Yes [ ], No [ ]

If No, suggest other ways you know which they could adopt to market their services.....  
.....

14. What should the Career Information Centre do to improve on its services so as to meet your needs?

.....  
.....

University of Cape Town

## **APPENDIX 3: INTERVIEW SCHEDULE FOR USERS**

### **Interview questions to users**

1. Programme of study:  
Faculty:  
Year of study:
2. How often do you seek information from the Career Information Centre (CIC)?
3. What type of career information have you tried to get from the CIC?
4. What other career information would you like to have included in the CIC collection?
5. Have you ever encountered problems when you had to use the CIC?  
If yes, describe the situation.
6. Comment on the way the CIC staff handles your queries
7. Suggest how the CIC could make their services known to UCT students
8. At what point during your stay at the university would you need career information services?
9. Anything you wish to add concerning the CIC?

## **APPENDIX 4: INTERVIEW SCHEDULE FOR POTENTIAL USERS**

### **Interview questions to potential users**

1. Programme of study:  
Faculty:  
Year of study:
2. What type of career information would you need while at the university?
3. Have you experienced problems when you had to make career decisions or when you needed career information?  
If yes, describe it.
4. Who would you rely on to assist you in making career decisions and why?
5. Are you aware of services offered by the CIC?
6. What type of career information services would you expect the CIC to provide?
7. How would you want the CIC to make UCT students aware of the services they offer?
8. At what point during your stay at the university would you need career information?
9. Anything else you wish to mention concerning the CIC?