

**PROVIDING SERVICES FOR CULTURALLY DIVERSE  
STUDENTS IN ACADEMIC LIBRARIES**

by

**THULI FRANCIS KHOZA**

Submitted in fulfilment of the requirements for

the degree of

**MASTER OF INFORMATION SCIENCE**

at the

**UNIVERSITY OF SOUTH AFRICA**

**SUPERVISOR: DR E.M. GERICKE**

**NOVEMBER 2006**

## FOREWORD

Many people have assisted me in completing this thesis. In particular, my line manager, Mrs Julia Paris for supporting and encouraging me along the way, especially during the time when I felt discouraged.

To my husband, Noah thanks for enabling me to focus on my research, nice take away food and computer expertise. To my children, thanks for your inspiration and understanding throughout this study.

To my supervisor, Dr. E.M. Gericke, many thanks for guiding me along the way with unfailing patience and encouragement at every step.

To my friends and colleagues who have provided me with support and encouragement, especially Lungile Thangene.

To my subject librarian, Mrs Tucker thank you for all the assistance you have given me with my literature searches.

To the Doornfontein Campus Peer information counsellors, thanks in assisting me in recruiting the focus group participants and administering of the survey questionnaire.

I am also grateful to all the undergraduate students who participated in this research and provided me with valuable comments.

## TABLE OF CONTENTS

	<b>Page</b>
Foreword .....	ii
List of Tables .....	xiii
List of Figures .....	xiv
Summary .....	xv
<b>Chapter 1</b>	
<b>Introduction</b>	
1.1 Background to the problem .....	1
1.1.1 Diversity studies in the United States .....	2
1.1.2 Criticism regarding international efforts to address cultural diversity .....	5
1.1.3 Diversity studies in South Africa .....	6
1.2 Problem statement .....	8
1.2.1 Key problem .....	9
1.2.2 Subproblems .....	9
1.3 Limitations and delimitations of the study .....	10
1.4 Terminology .....	11
1.4.1 Culture .....	13
1.4.2 Cultural diversity .....	13
1.4.3 Multicultural society .....	14
1.4.4 Cultural sensitivity .....	14
1.4.5 Cultural awareness .....	15

	<b>Page</b>
1.4.6 Academic libraries .....	15
1.4.7 Library services .....	16
1.4.8 Information needs .....	16
1.4.9 Information usage behaviour .....	18
1.4.10 Information-seeking behaviour .....	18
1.5 Aim and value of the study .....	20
1.6 Research methodology .....	21
1.6.1 Research design .....	21
1.6.2 Sampling .....	22
1.6.3 Research instrument .....	23
1.7 Research programme .....	24

## **Chapter 2**

### **Cultural diversity in academic libraries**

2.1 Introduction .....	26
2.2 Users of academic libraries .....	27
2.3 Characteristics of culturally diverse student populations .....	28
2.3.1 Education and learning styles .....	29
2.3.2 Communication skills and language .....	32
2.4 Information needs of culturally diverse students .....	33
2.5 Information-seeking behaviour of culturally diverse student populations ...	34
2.6 Conclusion .....	37

**Chapter 3****Theoretical framework for studying information needs and usage  
behaviour of culturally diverse student populations**

3.1 Introduction .....	39
3.2 Models for studying information needs and behaviour .....	40
3.2.1 Paisley's model of the scientist within systems .....	41
3.2.2 Task performance model .....	44
3.2.3 Model of the information search process .....	48
3.2.4 Model of the media utilization event .....	50
3.3 A framework for studying culturally diverse student populations .....	54
3.3.1 Information needs .....	58
3.3.2 Decision to read or use information .....	59
3.3.3 Acquisition and selection of information .....	59
3.3.4 Act of interpretation .....	60
3.3.5 Contextual factors .....	60
3.3.5.1 Student characteristics .....	60
3.3.5.2 Academic institution .....	61
3.3.5.3 Physical environment .....	61
3.3.5.4 Cultural, social and political factors .....	61
3.4 Library services for culturally diverse student populations .....	62
3.4.1 Collection development . .....	62
3.4.2 User education .....	63

	<b>Page</b>
3.4.3 Information and reference services .....	64
3.4.4 Staff development .....	66
3.5 Conclusion .....	67

## **Chapter 4**

### **Conducting the empirical study**

4.1 Introduction .....	69
4.2 Focus groups .....	70
4.2.1 Focus groups sampling frame .....	70
4.2.2 Interview schedule .....	71
4.2.3 Focus group interviews .....	71
4.2.4 Focus group results .....	72
4.3 Questionnaire and survey .....	73
4.3.1 Survey sampling frame .....	74
4.3.2 Distribution of survey questionnaires .....	75
4.3.3 Responses to the questionnaire .....	77
4.4 Characteristics of respondents .....	78
4.4.1 Gender of respondents .....	78
4.4.2 Age of respondents .....	79
4.4.3 Year of study of respondents .....	80
4.4.4 Field of study of respondents .....	81
4.4.5 Faculty relation of respondents .....	82
4.4.6 Home language of respondents .....	85

	<b>Page</b>
4.4.7 Race of respondents .....	86
4.4.8 Nationality of respondents .....	86
4.5 Conclusion .....	87

## **Chapter 5**

### **Information needs and usage behaviour of culturally diverse student populations : Discussions of findings**

5.1 Introduction .....	89
5.2 The library that supports the respondents' studies .....	90
5.3 Motives for library use . .....	91
5.3.1 Use of the library for term papers and assignments.....	92
5.3.2 Use of the library for group discussions .....	93
5.3.3 Using the library for studying .....	93
5.3.4 Using the library to meet friends .....	94
5.3.5 Using the library for leisure reading .....	94
5.4 Extent of use of information sources .....	95
5.4.1 Library textbooks and journals.....	96
5.4.2 Getting information from the faculty .....	96
5.4.3 Relying on colleagues and fellow students for information .....	97
5.4.4 Personal collection of materials .....	97
5.4.5 Use of the Internet for information .....	97
5.5 Opinions about the services offered by the TWR Library .....	98
5.5.1 Text books in the reserve collection .....	99

	<b>Page</b>
5.5.2 Loan service .....	100
5.5.3 Relevancy of library collection to course needs .....	100
5.5.4 Availability of suitable leisure reading materials .....	100
5.5.5 Currency of the library collection in general .....	101
5.6 Physical accessibility of the library.....	102
5.6.1 Placing of the library .....	104
5.6.2 Library's opening hours .....	105
5.6.3 Accessibility of the catalogue .....	106
5.6.4 Finding materials .....	106
5.6.5 Reshelving of library materials after use .....	107
5.6.6 Adequate lighting in the library .....	107
5.6.7 Air conditioning in the library .....	107
5.6.8 Directional signs in the library .....	107
5.6.9 Helpful instructions at the computer workstations .....	108
5.7 User education efforts in the library .....	108
5.7.1 Library orientation .....	109
5.7.2 Library brochures .....	110
5.7.3 Relevancy of library user education programmes .....	110
5.7.4 Instruction in the use of the library and its sources .....	111
5.8 Characteristics of the library staff .....	112
5.8.1 Librarian's availability and helpfulness .....	114
5.8.2 Approachability and friendliness of librarians .....	114
5.8.3 Interviews to determine information needs .....	115

	<b>Page</b>
5.8.4 Interaction with librarians .....	115
5.8.5 Librarian's ability to show relevant subject knowledge .....	115
5.8.6 Librarian's willingness to seek help .....	115
5.8.7 Understanding the librarian .....	116
5.9 Student personal characteristics .....	116
5.9.1 Students' ability to express themselves clearly .....	118
5.9.2 Experience in the use of the library .....	118
5.9.3 Library education .....	119
5.9.4 Computer and information handling skills .....	119
5.10 Comments about library services .....	120
5.11 Suggestions to improve library services .....	120
5.12 Conclusion .....	121

## **Chapter 6**

### **Findings and recommendations**

6.1 Introduction .....	124
6.2 Summary of findings .....	126
6.2.1 The library collection .....	127
6.2.1.1 Lack of sufficient and current materials to meet the needs of students	127
6.2.1.2 The reserve collection .....	128
6.2.2 The library staff .....	128
6.2.2.1 Lack of communication skills .....	128
6.2.2.2 Staff attitude .....	129

	<b>Page</b>
6.2.3 The physical environment .....	129
6.2.3.1 Ease of access .....	129
6.2.3.2 Access to the reserve collection .....	130
6.2.3.3 problems with noise levels .....	130
6.2.3.4 Shelving of library materials .....	131
6.2.4 Facilities .....	131
6.2.4.1 Lack of study spaces .....	131
6.2.4.2 Lack of group discussions rooms .....	132
6.2.4.3 Lack of access to electronic and Internet resources .....	132
6.2.5 Library orientation and user education .....	132
6.3 Recommendations .....	133
6.3.1 Collections and materials .....	134
6.3.1.1 Availability of materials and information sources .....	134
6.3.1.2 Collection development and academic departments .....	135
6.3.1.3 Accessibility of collection and information sources .....	136
6.3.2 The library staff .....	136
6.3.2.1 Efficiency of the library staff .....	136
6.3.3 The physical environment .....	137
6.3.3.1 The library operating hours .....	137
6.3.3.2 Controlling noise .....	137
6.3.3.3 Availabilty of library materials on shelves .....	138
6.3.4 Facilities .....	138
6.3.4.1 Increasing study and seating spaces .....	138

	<b>Page</b>
6.3.4.2 Provision of group discussion rooms .....	138
6.3.4.3 Provision of electronic and Internet resources .....	139
6.3.4.4 Improving photocopying services .....	139
6.3.4.5 Provision of library orientation and user education services .....	140
6.3.4.6 Providing effective reference services .....	141
6.4 Topics for further research .....	141
6.5 Conclusion .....	141

## **APPENDICES**

A Focus group interview schedule .....	143
B Questionnaire covering letter.....	145
C Questionnaire .....	146

<b>BIBLIOGRAPHY</b> .....	149
---------------------------	-----

## LIST OF TABLES

### Table no.

4.1 Age groups of respondents .....	79
4.2 Year of study of respondents .....	81
4.3 Field of study of respondents .....	82
4.4 Faculty relations of respondents .....	83
4.5 Percentages of students per faculty .....	84
4.6 Home language of respondents .....	85
4.7 Race of respondents .....	86
4.8 Nationality of respondents .....	87
5.1 The library used to support studies .....	91
5.2 Motives for using the library .....	92
5.3 Motives for library use by cultural groups .....	93
5.4 Students' extent of use of various information sources .....	95
5.5 Extent of use of information sources by cultural groups .....	98
5.6 Students' views on the services offered by the library .....	98
5.7 Opinions about library services by cultural groups .....	101
5.8 Students' views on the accessibility of the library .....	102
5.9 Physical accessibility of the library by cultural groups .....	105
5.10 User education efforts in the library .....	108
5.11 User education efforts in the library by cultural groups .....	112
5.12 Characteristics of librarians .....	113
5.13 Characteristics of the library staff by cultural groups .....	114
5.14 Library and information skills of students .....	117

5.15 Students' personal characteristics by cultural groups .....	118
--	-----

## LIST OF FIGURES

### Figure no.

3.1 The scientist within systems .....	41
3.2 Task performance model .....	46
3.3 The research process .....	47
3.4 Model of the search process .....	50
3.5 User behaviour model .....	53
3.6 Model of information usage behaviour of culturally diverse students .....	56
4.1 Faculty relations of respondents .....	83

## SUMMARY

The purpose of this study was to investigate the role of academic libraries in providing services to culturally diverse student populations. In this study the information needs and information-seeking behaviour of the culturally diverse students of the Technikon Witwatersrand were analysed. The study also tried to establish whether there are differences in information needs and information-seeking behaviour of various cultural groups.

The empirical investigation was conducted by means of focus group interviews and a questionnaire survey on a sample of undergraduate students of the Technikon Witwatersrand. There were assumptions that African students have limited experience in using the academic library, have no computer and information handling skills and might have language difficulties. Therefore, the expectation was that African students might have problems in the use of the academic library. However, the results of the empirical study show that English and Afrikaans speaking students are experiencing more problems than African students.

### **Key terms:**

Cultural diversity; Academic libraries; Library services; Information needs; Information usage behaviour; Information-seeking behaviour; Culturally diverse students;

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND TO THE PROBLEM

Most reports in the subject literature on cultural diversity in academic libraries are based on research done in the United States about minority and international students. No research could be traced on culturally diverse students in South Africa.

The United States is a large country characterized by a large number of immigrants, minorities and many people who speak different languages. South Africa on the other hand has a large population with different language groups, a majority of disadvantaged groups and foreigners. The major population groups in South Africa are blacks, whites, coloureds and Indians (Ocholla 2002).

Academic libraries were among the first to recognize the need to better serve their diverse students and to train staff to appreciate diversity (Coats *et al.* 2000). However, Hawkins *et al.* (2003:308) state that diversity initiative programmes as well as minority residency programmes that were designed by academic institutions to ensure more diversity, often fall short.

Diversity initiatives address problems within the university as a whole and each school or department is encouraged to draft individual statements that involve long-term solutions, including defining the problems, offering concrete steps to resolving barriers, devising a plan of action, follow up and accountability. Minority residency

programmes on the other hand are short-term, quota driven to raise affirmative action statistics and also to make sure that the academic institutions do not lose accreditation (Hawkins *et al.* 2003:308-309).

Many diversity efforts by academic libraries place more emphasis on library staff diversity, better information services for minorities and improved staff development opportunities (Coats *et al.* 2000). Li (1999:146) says that a closer look at diversity initiative programmes shows that large university libraries are the only ones who are engaged in diversity initiative programmes, since there is no literature about diversity initiatives at small college libraries.

Butlar (1994:12) cited a few examples from his research findings of activities by libraries to facilitate diversity, such as establishing a diversity committee, pre-college programmes such as library orientation tours for groups of high school students, outreach through ethnic student associations, participation of the library in scheduled discussions of cultural diversity issues, and international or multicultural displays and exhibits.

### **1.1.1 Diversity studies in the United States**

According to Martin (1994:2) college and university libraries are faced with a challenge of responding to the needs of increasingly diverse student populations. Budd (1998:6) says that demographic changes in student bodies that are taking place in higher education have a direct impact on the library and its services. Quezada (1992:28) is of opinion that demographic shifts already present new

challenges to those concerned with providing quality library services to an increasing diverse multicultural population.

Mandernack *et al.* (1994:85) highlight the fact that diverse user groups, whether diversity is based on their racial or ethnic background, country of origin, age, gender or other characteristics, have all been recognized as distinct population groups with particular needs.

Josey (1994:8) comments that in the United States there is an increase of minorities, but libraries and information centres are not ready to meet challenges that are brought by these minorities. Broidy (1999) points out that librarians are failing to address the significant differences among their student populations. Simmons-Welburn (1999:113) says that although academic libraries and their parent institutions are becoming more diverse in terms of multicultural representation, it is impossible not to question the progress that has been made so far to promote services to a culturally diverse user group. In this regard Alike and Stielow (1995:509) state that the academic library should be proactively involved in the integration of minority students in the academic environment.

Liu (1995:124) says that the information seeking behaviour of a library user from another culture could be very different from the traditional library users due to the different cultural experiences, language, level of literacy, socioeconomic status, education, level of acculturation and value system. Martin (1994a:24) argues that a number of questions need to be considered in developing library services that are responsive to the needs of multicultural students. According to Martin (1994a:24)

libraries should make sure that the programmes and services which have been developed, are taking into account the varying multicultural perspectives.

People are diverse in various ways, for example in cultural background, economic background, age, geographic background, language, race, religion and political affiliation. Fish (1992:34) points out that no community has been truly homogenous in the sense that there are and have always been differences among community members in lifestyles, religion, educational attainment, early childhood experiences, birthplaces, family history, degrees of being physically challenged, loyalty to professional sports teams and political philosophies.

Kflu and Loomba (1990:527) say that it is useful for librarians to be aware that different cultures have different concepts and perceptions of what is acceptable as normal behaviour. In academic libraries differences in age, sex and cultural backgrounds can aggravate misunderstandings and negatively affect communication. Heery (1996) also argues that a number of matters that appear as library problems may actually be caused by cultural confusions resulting from cultural shock.

Downing (1994:149) argues that walking into a college or university library can be an overwhelming shock to students who have not been exposed to the number and variety of computerized and print resources which many academic librarians take for granted. According to Downing (1994:150) librarians at Michigan Undergraduate Library in the mid 1980's realized that many students of colour were not utilizing the

library's services fully, because of various barriers, such as difficult subject access to information, technological barriers, collection gaps, and inhospitable facilities.

Winston and Haipeng (2000:207) point out that even though academic libraries have limited resources, these libraries should find ways to address diversity issues and reflect these in their collections, services, and staffing. Fish (1992:37) argues that when resources are severely limited, it is difficult to meet the needs of the new service group.

Sturges (2005:299) commented that in parts of Britain progressive library services acquired relevant materials, hired specialist librarians and organized cooperation with minority communities. In Britain the reason for libraries' engagement with minority cultures was mainly an attempt to equalize the available services and nothing have been done to foster relations between cultures by providing better information (Sturges 2005:300).

### **1.1.2 Criticism regarding international efforts to address cultural diversity**

Josey and Abdullai (2002) claim that a void exists in organizations, including libraries when it comes to issues of diversity. They further argue that the void that exists in organizations and libraries could be explained by two assumptions. The first assumption is that issues concerning race or ethnicity have very little impact on the organizational life, including the organization of libraries. The second assumption is that some people, especially members of the white culture, believe that racism or discrimination has been eradicated in the workplace.

According to Balderrama (2000:195) librarians view diversity initiatives as window dressing and a diversity officer as a token. Howland (2001:115) says that in any environment attempting to create a positive multicultural environment is a real challenge, particularly when dealing with the issue of real or perceived tokenism. Peterson (1995); and Castro and Chabran (1994) commented about the lack of progress in diversity initiatives.

### **1.1.3 Diversity studies in South Africa**

There is at this stage no available literature on cultural diversity initiatives by South African academic libraries. Diversity according to Ocholla (2002) is difficult to enforce when a demographic area is dominated by a homogeneous community. Diversity is not a focus issue in the library and information work environment, neither does it feature in activities and programmes of the Library and Information Association of South Africa. A major research project needs to be conducted into diversity in the library and information workplace to provide insight into the true situation and to help in the strategizing, planning and intervention of services (Ocholla 2002).

When discussing cultural diversity in the South African context one has to distinguish between urban and rural diversity because students from these backgrounds bring different problems with them to the institutions of higher learning. For instance, some students come from the rural areas with poor learning facilities and without a library at all. Students from the black townships on the other hand might have been exposed to libraries, but the collections in these libraries include mostly fiction and these libraries are often used for studying and writing assignments. Because of the

living conditions at home, libraries provide merely reading space for many. Arko-Cobbah (2004:266) says that high schools in disadvantaged communities lack modern library facilities as well as information communications technology.

The demographic changes are mainly brought about by the shift of the population from the rural areas to the metropolitan areas (Hofmeyr & Buckland 1992:39). Equity laws also caused changes in demographics in the sense that women and people with disabilities who were previously denied access to educational and employment opportunities must now be accepted by educational institutions.

According to Ocholla (2002) major population groups in South Africa are blacks which are 76 percent, whites 13 percent, coloureds 9 percent, Indians 2 percent, with the black population being also diverse with nine major ethnic groups being Zulu, Xhosa, South Sotho, North Sotho, Tswana, Venda, Ndebele, Swazi and Tsonga.

Ocholla (2002) says that in tertiary institutions in South Africa, the composition of the population groups in academic libraries is found to be in favour of communities that were historically affiliated with such institutions. Thus the white population group dominates the historically white universities, while blacks dominate the historically black universities as well as coloured and Indian institutions.

Ocholla (2002) refers to Ellen Tise, the university librarian at the University of Western Cape (UWC), who pointed out that diversity is a major issue at UWC. Tise commented that the total demographic change and spread of the student population does not reflect the diverse student population that UWC currently has. Tise also

pointed out that at the library of UWC there is no diversity policy in place, except the University Employment Equity plan.

The University of the Witwatersrand appointed an affirmative action officer in 1994 (Edwards 1999). According to Edwards (1999) the University of the Witwatersrand (Wits) makes an effort to search actively for candidates from underrepresented groups. Wits University revised its mission statement in 1998 to include issues of tolerance, equality, freedom from racism and sexism and cultural diversity (Edwards 1999).

Edwards (1999) also says that the Wits library is ahead of many historically white universities in South Africa because of its attempt to employ black people across the range of jobs as well as recognizing the need to appoint and retain more blacks in senior positions.

## **1.2 PROBLEM STATEMENT**

In South Africa academic institutions are becoming more multicultural due to the fact that an increasing number of students, particularly from a previously disadvantaged educational background, as well as foreign students or international students are now being educated at the previously predominantly white educational institutions. These students bring different experiences, attitudes, habits and behaviour with them to the academic institutions. The question is whether these students are able to use the library effectively to complete their assignments and projects, or if they need additional resources or different kind of training in using the library. Physical

accessibility of the library and sensitivity of the librarians to various cultural groups also forms part of the problem.

### **1.2.1 Key problem**

The key problem in this study is to determine whether the information needs and usage behaviour of culturally diverse student populations are sufficiently provided for by the academic library.

### **1.2.2 Sub-problems**

From this overall problem statement the following sub-problems were formulated:

1. Which typical characteristics does culturally diverse student populations have?
2. Which typical information needs and information-seeking behaviour patterns do these students have and which factors influence and determine their information behaviour?
3. Are academic librarians aware of and sensitive to cultural diverse student populations and do they have the necessary communication skills to effectively serve these students?
4. How do academic library services meet the needs of culturally diverse students?

### **1.3 LIMITATIONS AND DELIMITATIONS OF THE STUDY**

The units of analyses for this study include culturally diverse students, the academic library and its services. The dependent variables for culturally diverse students are their typical information needs and behavioural patterns and the independent variables are demographic characteristics including their gender, age, year and field of study and cultural group. In case of academic librarians the most dependent variables to be studied are personal characteristics such as cultural sensitivity and communication skills. The variables for academic library services include: its physical environment and facilities, collections and information sources.

The survey population to be studied was undergraduate students of the Technikon Witwatersrand. The survey population is mainly from South African undergraduate students and foreign or international students. The following characteristics of the sample was studied: their demographic characteristics such as age, gender, previous library experience, home language, cultural and ethnic background, field of study and year of study.

The geographical area of the empirical study was limited to the Technikon Witwatersrand and its campuses which are situated in Gauteng.

The study investigated the information needs and information-seeking behaviour of undergraduate students' as well as factors that influence their information needs.

A literature study was conducted which will help the researcher in gaining an insight into the research done on culturally diverse students and the information-seeking behaviour of undergraduates. This was followed by an empirical investigation.

The study had planned to exclude white undergraduate students because most of them have an experience in using the library. But in order to find out whether there is a difference between information needs and information-seeking behaviour of various cultural groups and also to have a representative sample of students, the questionnaire was distributed to all campuses and any student could answer the questionnaire. Therefore white students were also included in the study.

Post-graduate students were excluded from the study because they had been in the academic system for a longer period than undergraduate students. They usually have made the necessary cultural adjustments and normally have sufficient knowledge of the library and its services.

#### **1.4 TERMINOLOGY**

It is important to define some key concepts at this stage. Other concepts will be dealt with as the study proceeds. Yates *et al.* (1994:24) point out that up to now there seems to be no generally accepted definition and conceptualization of cultural diversity. According to Peterson (1994:20) authors who are skeptic about the diversity issue, says that the term "diversity" is meaningless because it includes many groups of people.

With reference to the research of Jackson and Holvino, Norris (2002) divides the process of transformation of society to diversity into three stages:

- (1) Mono-cultural, which is characterized by either implicit or explicit exclusion of racial minorities or women, as well as the other socially discriminated and disenfranchised populations, on the basis of physical disabilities, sexual orientation, class, literacy, religion and settlement (urban or rural).
- (2) Non-discriminatory, which is characterized by a sincere desire to eliminate the majority group's unfair advantage and this is done without the organization significantly changing its dominant culture, but rather by ensuring that the climate of the organization is not a hostile place for the new members of the workplace.
- (3) Multicultural, which describes the organization that is either in the process of becoming, or has become diverse in the most visionary sense that reflects the contributions and interests of the diverse cultural and social groups in the organization's mission, operations, products or services. In this case, the organization is committed to the eradication of all forms of social discrimination and all groups share power and influence and no group is put at an exploitative advantage.

### **1.4.1 Culture**

Culture is a set of values, views of reality and codes of behaviour held in common by people who share a distinctive way of life (Smelser 1991:44). Mandernack *et al.* (1994:85) say that culture is a notoriously ambiguous concept, whose definition has baffled the minds and imaginations of many anthropologists and other scholars. According to Mandernack *et al.* (1994:86), Kroeber and Kluckhohn (1952) defined culture as consisting of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiments in artifacts.

### **1.4.2 Cultural diversity**

According to Winston (1995:8) cultural diversity relates to those cultural characteristics, experiences and differences that are attributed to members of ethnic and racial minority groups, the physically challenged and others. Love (2001:74) defined diversity as those attributes that make people different, having properties and characteristics of language, geography, gender, race, age, physical ability, sexual orientation, religion, skills and economics. Many studies have clearly shown that colour, religion and geographic location are most often used to narrowly define culture and highlight cultural diversity, which is often portrayed in terms of a minority and majority issue.

For the purpose of this study culturally diverse student populations will include all students: the minority white, coloured and Indian populations as well as the majority

black students from the previously disadvantaged educational and socioeconomic backgrounds, and foreign students mainly from other African states.

### **1.4.3 Multicultural society**

Green (1994:173) explains that a multicultural society is made up of a variety of cultural groups, and we should acknowledge and accommodate the interests of each of those groups. Librarians have been criticized for not properly defining multiculturalism. Peterson (1995:30) argue that librarians use the term in many ways and this makes it impossible to tell whether “multicultural” refers to racial minorities, concerns marginalization and equity, or merely celebrates differences as exotic.

### **1.4.4 Cultural sensitivity**

Cultural sensitivity is an understanding of and appreciation for cultural differences and a commitment to creating an environment that supports members of underrepresented groups and that encourages and supports multiculturalism and continuous learning about ourselves and others (Winston 1995:9).

Winston (1995:9) believes that a conducive environment is the one in which members of underrepresented groups can succeed. In the case of academic libraries an indicator of culturally orientated services is the willingness by librarians to accommodate special needs and circumstances of culturally diverse students.

Lam (1988:391), with reference to De Hart (1979) comments that there is a need for empathy and awareness by librarians when dealing with various groups, including blacks and people of other racial and ethnic backgrounds. Wayman (1984:339) also says that librarians should be sensitive to communication and different learning styles by using diverse teaching methods when the need arises.

#### **1.4.5 Cultural awareness**

Cultural awareness embraces a multicultural approach and automatically rejects ethnocentrism or any other forms of cultural chauvinism (Mandernack *et al.* 1994:87). Academic librarians should be able to identify the needs of culturally diverse student groups and have knowledge of their information-seeking behaviour and the factors that determine their library use.

#### **1.4.6 Academic libraries**

In Harrod's *Librarians' glossary* (1995:3) academic libraries are defined as libraries of universities, polytechnics, colleges, schools and all other institutions forming part of, or associated with educational institutions. The aim of the academic library according to Fourie *et al.* (1996:215) is to support the educational institution's teaching, learning and research activities. This study focuses on a technikon library.

### **1.4.7 Library services**

A library service is a library function that is accessible to the library clients as well as partly controlled by them (Heine *et al.* 2000:235). According to Kuhlthau (1994:57) all services of the academic library are directly related to student's information seeking behaviour. According to Gericke (1996:316) the functions of all library services, are information, instruction, guidance and stimulation. Wilkinson (1986:9) lists the major services of academic libraries, as: reference information services, including bibliographic instruction; all technical processes, with their objective of service delivery to users; and provision of space and facilities.

Academic libraries should base their services on the needs and wants of their customers (Brophy 2005:52).

### **1.4.8 Information needs**

The "term information needs" was defined by Krikelas (1983:8) as "the recognition of the existence of uncertainty". The word "information" is associated with the word "need" because it implies a basic need that is similar to other basic human needs that were divided into three categories by psychologists, namely physiological, affective and cognitive needs (Rohde 1986:53). According to Wilson (1997:552) an information need is a subjective experience that only occurs in the mind of the person in need and it is not directly accessible to an observer.

Evans (1992:17) distinguishes between wants, demands and needs. A want is something that a person is willing to pay for in terms of expending time, effort, or sometimes money. A demand is political in nature because people are willing to march for it. Needs are problems that require solutions (Evans 1992:17).

Van Zijl (2005:11) states that the expressed and unexpressed information needs must be addressed by the information service as well unconscious needs that also play a role in the information milieu of users. With reference to Gericke (2001), Van Zijl (2005:12) categorises information needs into conscious and unconscious needs.

The conscious information needs include:

- Expressed, suspected needs or demands, which are needs said to be agreed upon between the information worker and the user.
- Expressed needs or demands that are the needs that are actually communicated to the information worker during the user's search for information.
- Unexpressed needs that have not yet become requests but which are said to be needs understood and experienced by the user.
- Unexpressed, suspected needs which are said to be needs that the information provider must intuitively assume to be present in the user.

The unconscious needs on the other hand are said to also include subconscious needs, which are needs that although present in the information-seeking environment, the user is actually unaware of (Van Zijl 2005:12).

### **1.4.9 Information usage behaviour**

Information usage behaviour is a broad term which relates to actions and factors that influence users when trying to use information. Information usage behaviour of users includes descriptive aspects which are concerned with the decision to use information, selection of information channels and sources and acquisition and utilization of sources. The explanatory aspects of information usage behaviour on the other hand, involve identifying and describing the factors that affect and direct the abovementioned activities (Gericke 1996:190-191).

### **1.4.10 Information-seeking behaviour**

Information-seeking behaviour is a suitable term to refer to the descriptive aspects of information usage behaviour and the actions that the user performs in order to use information. This behaviour is motivated by the user's needs (Gericke 1996:190). Weiler (2005:46) states that the information-seeking behaviour model which was developed by Krikelas (1983) divides information-seeking as follows:

- Perceiving a need
- The search itself
- Finding the information
- Using information, which results either in satisfaction or dissatisfaction.

Information-seeking behaviour describes how people go about fulfilling a need to know and this behaviour should be viewed within the context of the individual's cultural experience (Metoyer-Duran 1993:127).

According to Chen and Herson (1982:6) a study of information-seeking behaviour should take into account certain factors which can help in the better understanding of patterns of information-seeking; such as the situation where the needs and characteristics of information seekers were recognized.

Wilson (1997:556) identified three sets of barriers to information seeking, namely: personal barriers, social or role related barriers and environmental barriers. Concerning environmental or situational barriers, Wilson (1997:560) uses Hofstede's (1980) four cultural dimensions to explain how differences in national cultures may have an effect on the way people of different cultures acquire information because some people might think that it is possible to correlate these cultural dimensions to persons' information-seeking behaviour and information use. These are:

- (a) Power distance. This refers to the way subordinates respond and accepts power as well as authority in organizations.
- (b) Individualism versus collectivism. This refers to the relationship between the individual and the group. It is about the value that is placed on autonomy and individual expression of thought and behaviour compared with the expression of the group, i.e. family.
- (c) Masculinity versus femininity. Men's goals are significantly different from women's goals.

(d) Uncertainty avoidance. People tend to avoid unknown situations that threaten them.

Weiler (2005:47) says that in order to understand the complexity of information-seeking behaviour of the Generation Y students, which are students currently on campus in academic institutions and born between 1980 and 1994, it is important to understand the role played by motivation, critical thinking and learning theory. In a campus environment, Abraham Maslow's first and second level basic needs, which are the physiological and safety needs, are provided for by the academic institution. Whereas the belongingness, esteem and self-actualization needs are addressed at various levels in an ongoing process (Weiler 2005:47). Critical thinking is also viewed by Weiler (2005:47) as crucial for effective information seeking, because most of the time students are incapable of thinking critically about the coursework in general as well as their information needs or information resources in particular. Learning theory on the other hand is dependent on the motivational theory, because students will seek information and learn only if they are motivated (Weiler 2005:48).

## **1.5 AIM AND VALUE OF THE STUDY**

The aim of this study is to determine the role of the academic library in providing services and facilities to culturally diverse students by analyzing the information needs and information-seeking behaviour of these students. The study aims to make recommendations in regard to academic library services by developing a model for service rendering that meets the information needs of culturally diverse student populations.

This study could contribute to make academic librarians more aware of the needs of diverse students and give service guidelines to librarians. This study could also change the mindset of librarians about the information-seeking behaviour of different students in the library so that they reconsider policies and procedures in service rendering to diverse cultural groups.

The study could help to foster the idea that diversity allows a broader approach to similarities and differences of people and that the understanding of the needs of different cultural groups is a prerequisite for good service rendering in academic libraries.

## **1.6 RESEARCH METHODOLOGY**

The research methods used consist of a literature study and an empirical investigation by means of questioning methods. A literature study was carried out in order to gain insight into the problem of cultural diversity in academic libraries. Various studies, especially from abroad, shed light on cultural diversity and international students as well as minority groups or students of colour. The literature study focused on the following aspects:

- (a) Culturally diverse students, by looking at information needs and information-seeking behaviour and how education, learning styles and communication skills are seen as influencing factors in their information-seeking behaviour.

(b) Academic librarians' by paying attention to their ability to identify various cultural student groups, knowledge of students' needs and differences in their information-seeking behaviour; attitudes towards the presence of different groups; willingness to accommodate these groups with their special needs; and efforts to improve their own knowledge and qualifications.

### **1.6.1 Research design**

This study employs a qualitative research design for the pilot study where the focus group method was used, and a quantitative design for the questionnaire survey. According to De Vos (1998: 358) the researcher attempts to gain a holistic understanding of phenomena by working from a qualitative perspective. The important aspect of preparation in the qualitative design starts with a search of the relevant literature, which is said to be the filling in of one's knowledge of the subject and learning what others have said about the subject (De Vos 1998:46).

The focus group method is interactive in nature, because the group interaction produces data and insights that would be impossible to access without the interaction found in the group (Massey-Burzio 1998:209).

During the focus group interviews the verbal skills and cultural differences of participants can be taken into consideration. The focus group method is therefore valuable for exploratory research design and was used as a pilot study. The results emanating from the focus group interviews served as a point of departure to the

survey questionnaire used in the descriptive study which was carried out quantitatively.

### **1.6.2 Sampling**

The convenience sample was used for both the focus groups and the survey. The sample was taken as a result of negotiation, which is willingness of respondents to participate in the study. Silverman (2000:102) explains that the purpose of sampling is usually to study a representative subsection of a precisely defined population in order to make inferences about the whole population. Silverman (2000:104) points out that before we can contemplate comparing our case with others, we need to have selected our case. Denzin and Lincoln (cited by Silverman 2000:102) argue that many qualitative researchers employ purposive, and not random sampling methods, because they seek out groups, settings and individuals where the processes being studied are mostly to occur.

### **1.6.3 Research instrument**

The technique of focus groups with an interview schedule as an instrument was employed in a pilot study. The results of the focus group interviews were then used to compile the survey questionnaire. According to Young (1993:391) the entire interview usually takes less time than a self-administered questionnaire.

Schurink (1998:314) describes a focus group interview as a purposive discussion of a specific topic or related topics taking place between eight to ten individuals with a

similar background and common interests. The main advantage of using focus groups lies in the fact that the group members during a discussion could come up with facts that other group members were not aware of. One respondent's remarks often tend to stimulate others and there is a snowball effect as respondents comment on the views of others.

The focus group interview enables the researcher to develop inductively (that is "from the bottom up" rather than "from the top down") concepts, generalizations and theories that are grounded in or reflect the intimate knowledge of the people participating in the focus group interview (Schurink 1998:314).

A structured questionnaire was used as research instrument in the survey. Closed-ended questions were included for their ease in processing. The questionnaire includes questions about demographic factors, purpose for which information is needed, barriers in using the library, library services that students use or prefer to have, and types of information resources that meet their information needs.

## **1.7 RESEARCH PROGRAMME**

The research programme has been divided into the following chapters:

Chapter 2 gives attention to the characteristics of culturally diverse students and the factors that influence their information needs and information-seeking behaviour. This chapter is based on literature reviews on characteristics of culturally diverse students. Since the study investigates undergraduate students, research that has

been done on undergraduates' information needs and information-seeking behaviour worldwide was consulted in order to gain insight in these aspects.

Chapter 3 focuses on relevant models for the study of information needs and information-seeking behaviour of various users. A model is developed to serve as a frame of reference for studying culturally diverse students empirically.

Chapter 4 explains the procedures followed in the pilot study, sampling and the collection of data for the empirical study. The data collected is described and results analyzed for the empirical study.

In chapter 5 the results of the empirical study concerning the information needs and information-seeking behaviour of culturally diverse students are interpreted and discussed.

Based on the empirical findings chapter 6 summarizes the findings of the study and make recommendations for library services for culturally diverse student populations. Aspects and issues that need further research are indicated.

## CHAPTER 2

### CULTURAL DIVERSITY IN ACADEMIC LIBRARIES

#### 2.1 INTRODUCTION

According to Budd (1998:15) students are diverse in terms of age, gender, cultural and racial background. Baron and Strout-Dapaz (2001) are of opinion that library use is one major area in which international students face challenges, with students having to adjust culturally and educationally, because of unfamiliarity with huge lecture halls and large libraries. Language and communication problems and lack of proper learning styles and different previous academic experiences also contributes to the challenges faced by international students (Baron & Strout-Dapaz 2001).

The purpose of this chapter is to examine and discuss cultural diversity in academic libraries by dealing with the characteristics, information needs and information-seeking behaviour of culturally diverse student populations. The needs and information-seeking behaviour of culturally diverse students are examined within the context of factors such as education, learning styles and communication skills.

The focus is mainly on studies that have been done on undergraduate students in general and their use of academic libraries as well as culturally diverse students internationally.

## 2.2 Users of academic libraries

Academic libraries in South Africa have different categories of user populations which include:

- academic staff (lecturers)
- undergraduate students
- postgraduate students
- researchers
- administrative staff
- alumni (former students)
- Gauteng and Environs Library Consortium (GAELIC) members
- paying and other special members
- management, including heads of academic departments.

According to the Association of College and Research Libraries (ACRL) (1987:542) there is a large number of students with varying levels of experience and abilities who use libraries in a research oriented environment.

Hammond (1994:323) says that the change in the kind of student that higher education seeks to serve will in future make new demands on services that the academic library provides.

Heery (1996) distinguishes between traditional and non-traditional students. Traditional students are said to be young, aged between 18 and 20 years, studying fulltime, living away from home, having reasonably good matriculation results, taking

a degree in one or two subject disciplines, having good study skills, good contact with the academic staff and following a traditional pattern of higher education that is built around lectures and tutorials. The non-traditional student, on the other hand is described as: mature, being over the age of 25, studies part time as a distance learner, enrolls for franchised courses in further education colleges, is from overseas, disabled or with special needs, and enters education via new routes such as access courses.

### **2.3 CHARACTERISTICS OF CULTURALLY DIVERSE STUDENT POPULATIONS**

Whitmire (2001:528) says that it is important for academic librarians to understand factors that influence undergraduate library use, so that they could provide adequate resources and effective services for them. The information skills of undergraduates are regarded as underdeveloped (Whitmire 2002:632). The majority of first year students seem to share the following characteristics (ACRL 1987:542-543):

- (a) They lack sophisticated research skills needed to exploit the library's research support services.
- (b) They are often intimidated by complex and large library systems.
- (c) They are reluctant to ask for assistance in the use of the library.
- (d) They are unaware of services and resources that are available in university libraries.

Zondi (1992:204) commented that many students do not utilize their library resources effectively because they lack skills necessary to use university libraries. Many students from disadvantaged communities lack critical thinking skills, which makes it impossible for them to evaluate or extract relevant information from the sources (Arko-Cobbah 2004:265).

Quarton (2003:120) states that although typical undergraduate assignments involve choosing a topic in a discipline and writing a term paper about it, this is difficult for undergraduates that lack information literacy skills. According to Liu (1993:257) students from developing countries have poor communication skills which results from the lack of an adequate English vocabulary. Given (2002:19) says that the lives of mature undergraduates are complex because they have to balance academic information needs with everyday information needs.

### **2.3.1 Education and learning styles**

Many scholars from different cultural backgrounds may bring distinctive learning traditions with them and find the new academic context different from their previous experiences (Cadman 2000:476).

Rehman and Mohammed (2001:1) assert that there is a strong relationship between cognitive styles, learning approaches and language capabilities in the student's acquisition of library and information skills. International students have difficulties in using libraries, because libraries are either weak or non-existent in the educational system of their countries (Rehman & Mohammad 2001:3-4).

Liu (1995:126) states that policy of education and library service that prevailed in many countries had led to the lack of libraries and resources in these countries. In South Africa according to Owens (2002:53) separateness during the apartheid era meant that the education system and the library services were developed along two lines, namely that of a first and a third world.

Hofmeyr and Buckland (1992:18) state that the South African educational system was shaped by two distinguishable but interrelated processes, namely apartheid and underdevelopment. Owens (2002:54) says that there were no public libraries open to Africans in South Africa before the end of the 1930's and even though the first public library service was introduced in the late 1930s, problems regarding books and the education system remained unchanged. There was change however in the situation of library services at a later stage.

Learning style refers to people's preference in organizing, remembering and thinking about what they have learned (Wayman 1984:337). Learning styles are culture specific (Wayman 1984:337). Conteh-Morgan (2002:191) points out that much attention has been paid to various barriers that affect the student's use of the library and more recently to culture dependent learning styles.

Moeckel and Presnell (1995:310) divide the barriers of international students into two groups, the first is functional barriers that inhibit basic library navigation and include underdeveloped critical thinking skills, differences in education background, problems with expectations of libraries, terminology and language problems. The second group includes cultural barriers, which refer to behaviour and ideals that are

specific to the international students' home countries, such as non-verbal behaviour and communication styles.

Dalrymple (2002:261) explains that there are many models on learning styles, but only one model is often cited by librarians, namely the one that was developed by Kenneth J. Dunn and Rita Stafford Dunn. The Dunn model consists of the following: emotional, environmental, physiological, psychological and sociological dimensions with twenty-one subcategories (Dalrymple 2002:261).

Onwuegbuzie and Jiao (1998:237) refers to Papert (1980) who pointed out that learning style is a contextual construct because what the learner brings to the learning experience is the noticeable features of his past experience. Zondi (1992:207) in his research on library use of first year students at the University of Zululand, found that teaching methods that are being used do not encourage independent learning, since they rely on the lecturer's prepared notes, reading lists and works in the reserve and study collections.

Bristow (1985:50) says that the system of education in Venda made it impossible for students to think critically and objectively because of its emphasis on unquestioning and acceptance of authority, reliance on lecture notes and text books. Heery (1996) says that in the United Kingdom, although students are also expected to challenge the statements of lecturers or written authorities and have freedom in selecting assignment topics and information sources, some students find it difficult to do that. Ark-Cobbah (2004:265) argues students' inability to think critically is also caused by their cultural values.

University students at a junior level may not be aware of learning resources that are available in the library because their coursework is limited to the use of required text only (Rude & Hauptman 1990:364).

### **2.3.2 Communication skills and language**

Blenkinsopp (1994:40) defines communication as the process of sharing information. Communication is the process of using signs and symbols that elicit meanings in another person or persons for whatever intent on the part of the person producing the symbols or signs (Guirdham 1999:81). Blenkinsopp (1994:40) indicates that in cross-cultural communication, cultural values affect the coding process and language barriers can create noise.

According to Liu (1995:125) language could be a barrier for America's linguistically diverse population, especially those foreign born individuals, when seeking information from libraries or elsewhere. Because of poor communication skills and lack of attention to reference services in their home countries, students from developing nations, rarely ask reference questions (Rehman & Mohammad 2001:3). Foreign students find it difficult to approach strangers at the reference desk because of their linguistic and social insecurities (Ball & Mahony 1987:160).

Onwuegbuzie and Jiao (1998:236) refers to a study by Jiao *et al.* (1966) which found that students who are young and male, and those whose first language is not English, are the ones with highest library anxiety.

The fact that English is used primarily as a means of academic communication at a tertiary level, makes it impossible for students from disadvantaged background to master tertiary learning (Arko-Cobbah 2004:266).

Language barriers of students lead to technological barriers. For instance when comparing groups of students in the use of CD-ROM databases DiMartino *et al.* (1995), found that use of vocabulary allowed English-speaking students to carry out more and better computer searching. Reichel (1994:337) explains that libraries today have more characteristics and technology that is new for students from different cultural backgrounds.

## **2.4 INFORMATION NEEDS OF CULTURALLY DIVERSE STUDENTS**

A definition of information needs and related terms were provided in section 1.4.8. The term “information needs” is briefly defined by the Librarian’s thesaurus as needs which library services or materials are intended to satisfy (Soper 1990:2). An information need is viewed as a gap in the individual’s knowledge (Dervin & Nilan 1986:21). Information needs are contextual, thus they cannot be separated from the situation, which creates them and the individual who perceives them (Chen & Hernon 1982:9)

Assignments, tests and research projects give rise to information needs of undergraduate students. In the academic environment needs of students are closely tied to courses offered, assignments given as well as the research areas of the faculty (Winston 1995:10).

Given (2002:20) says that the information needs of students arise even before they set their feet on campus. Mature students use their family members' advice or public library materials to solve their information needs. Student's who apply to institutions of higher learning during their high school education, on the other hand get materials that support their information needs from their educational guidance offices (Given 2002:20). Given (2002:26) found that for mature undergraduates the following information sources were used to supplement library resources: television and newspapers, friends and colleagues, public library reference systems and personal contacts.

Whitmire (2004:98) points out that undergraduate students are using the World Wide Web to complete academic assignments, because of its convenience and accessibility. Berger and Hines (1994:308) discovered that the research needs of undergraduates are more directed towards magazines and newspapers.

Li (1999:139) found that the needs of foreign-born undergraduates are related to their coursework and not to their language or culture.

## **2.5 INFORMATION-SEEKING BEHAVIOUR OF CULTURALLY DIVERSE STUDENT POPULATIONS**

Information-seeking behaviour is defined in section 1.4.9. According to Gericke (1996:191) the description of information user behaviour is concerned with: the methods and channels users use to satisfy their information needs, information-

seeking patterns, information-exchange patterns, the actual use of information in scientific practice and the effect or degree of success of information use.

Valentine (1993:302) summarizes some information-seeking patterns of undergraduate students when completing their research projects:

- Many students use quick methods, which enable them to leave the library quickly.
- Some students believe in starting with something that is familiar, for example the card catalogue, or going straight to the shelves.
- Many students approach friends, classmates and roommates for advice on information sources to use.
- Most students are reluctant to consult librarians because they are afraid that they will appear foolish.

Whitmire (2001:384) comments that the results of her study shows a decline in the rate of asking an academic librarian for help by undergraduate students, which could be the result of unpleasant experiences with library staff, lack of knowledge of library services offered by library staff and library anxiety.

Most suprisingly, Zondi (1992:205) found that students never use subject catalogues, reference tools and periodical indexes to complete their assignments.

Whitmire (2002:634) reports a difference in the information-seeking behaviour of undergraduate students in different subject disciplines. The findings were based on the explanation of information-seeking behaviour of undergraduate students from different subject disciplines, for example undergraduate students from soft

disciplines engage in more information-seeking activities and do not use the library as a place to study.

In pure subject discipline undergraduate studies, students engaged in more information-seeking activities than students majoring in applied discipline studies. Students in life disciplines studies are engaged more in information-seeking activities than students in non-life disciplines studies.

Undergraduate student's year of study was found to determine the way they use the library to a certain extent. (Whitmire 2001:381). For instance during their first year of study, undergraduates use the online or card catalogue more than any library source. Further in descending order they: use computers in the library, use the library to read or study, develop bibliographies, read in the reserve or reference sections, ask the librarian for help, consult indexes to journal articles, borrow books, seek material by browsing in the stacks and check citations in publications.

During their second year of study undergraduates use computers the most followed in descending order, by the use of the card or computer catalogue, use of the library to read or study, to developing a bibliography, to read in the reserve or reference sections, use indexes to journal articles, ask the librarian for help, find materials by browsing in the stacks, check citations in publications and borrow books. These students were least likely to engage in reading of basic references or documents (Whitmire 2001:381).

In their third year of study the use of computers is followed in the descending order by use of the card or online catalogue, development of a bibliography, use of the library to read or study, to read in the reserve or reference section, use indexes to journal articles, ask the librarian for help, check citations in things read, find materials while browsing in stacks and borrow books. Even in their third year of study undergraduate students were found not to engage in reading of basic references or documents (Whitmire 2001:381-382).

Whitmire (2003:158) found that undergraduates from different racial groups have similar patterns of the frequency they engage in different academic library activities. The only differences were in the way of finding materials, for example white students browse stacks, check citations in documents, read and borrow books. White undergraduates were also found to use the catalogue more frequently than the students of colour. Students of colour use the library to read or study and ask the librarian for assistance.

## **2.6 CONCLUSION**

Literature reviews on culturally diverse students point out that communication skills, language, education and learning styles have effects on the information-seeking behaviour of culturally diverse students. The focus of many studies on culturally diverse students is on their characteristics and there is a lack of information on the information needs of these students.

It is clear from the research that has been conducted on undergraduates internationally and in South Africa that undergraduates from different cultural groups have basically the same information needs and information-seeking behaviour. For instance many studies have found that undergraduates are reluctant to consult librarians for help, they rather prefer to consult their peers and use the library mainly for study. However, undergraduates from previously disadvantaged background tend to rely more on their lecturer's notes and use books in the reserve collection.

Studies found that the undergraduate students' usage of the library is dependent on their year of study. Many first year students prefer to use the card or online catalogue followed by other library resources, whereas second and third years prefer to use computers.

Many older undergraduates were found to have academic as well as personal information needs. Many undergraduate students prefer to use the Internet and full text databases without checking the quality of the articles.

The following chapter will attempt to develop a model to empirically study the information needs and behaviour of culturally diverse student populations.

## **CHAPTER 3**

# **THEORETICAL FRAMEWORK FOR STUDYING INFORMATION NEEDS AND INFORMATION-SEEKING BEHAVIOUR OF CULTURALLY DIVERSE STUDENT POPULATIONS**

### **3.1 INTRODUCTION**

In chapter two several characteristics of culturally diverse student users, which influence their information-seeking behaviour are identified, namely: their education and learning style, language and communication skills. There are various studies on the characteristics and needs of culturally diverse student populations and their information-seeking activities as reported in Whitmire (2003). However, the underlying factors that influence information-seeking behaviour and information use of culturally diverse student populations still needs further research.

The aim of this study is to determine the needs and information-seeking behaviour of culturally diverse student populations in South Africa. The information that the study will gain about the information-seeking experiences of these students will help to determine whether the library services and collections meet the information needs and information-seeking behaviour of culturally diverse student populations.

This chapter will attempt to develop a theoretical framework, which will help to identify the information needs and describe the information-seeking behaviour of culturally diverse students.

### **3.2 MODELS FOR STUDYING INFORMATION NEEDS AND BEHAVIOUR**

Information-seeking behaviour models are concerned with the analysis of information needs and the factors that influence information needs of different types of users. The factors that influence the information needs of users should be taken into consideration when providing services to these users.

The various models illustrate different approaches to the study of users of information, for instance Paisley's (1968) model places the user in the centre and focuses on the systems that guides the information needs and behaviour of the user. Blom's (1983) model is concerned with the information environment's ability to help the user to successfully complete his or her tasks. Kuhlthau's (1994) model is concerned with the role of the information environment in helping the user to find relevant information. The services, which are offered by librarians to help students to find information for their research projects and assignments are what Kuhlthau (1994:57) terms "interventions", being the interaction that takes place between the librarian and the student during the information-seeking process.

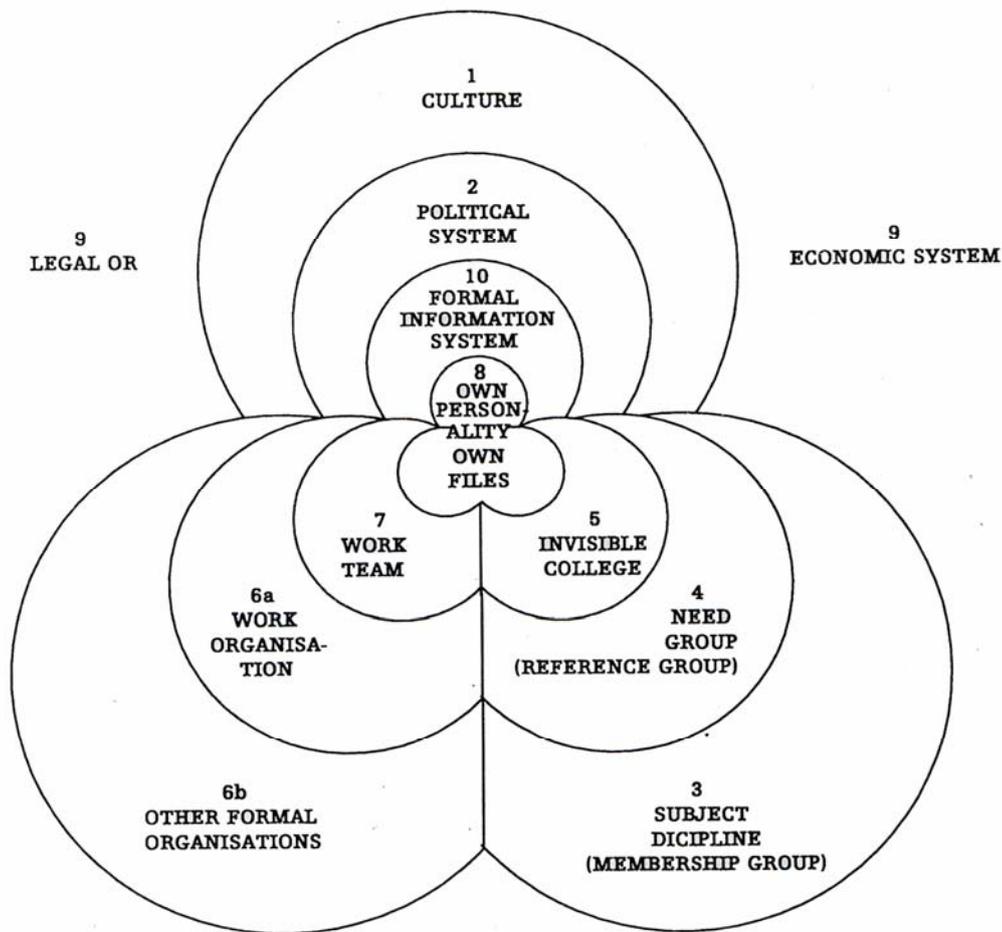
All these approaches will be used to develop a theoretical framework, which will help in identifying the information needs and studying the usage behaviour of culturally diverse student populations. The model to be developed will focus on various relevant aspects concerning students and library services.

The development of a model may provide guidelines for the empirical study.

### 3.2.1 Paisley's model of the scientist within systems

Paisley (1968:3-4) points out that the work of the scientist is surrounded by many systems. In Paisley's model the systems in which the user finds himself, acts as the information sources and forms a set of concentric cycles (Paisley 1968:3-4). These systems according to Paisley (1968:4) relates to the scientist's use of information sources. These systems are represented in figure 3.1. The model in figure 3.1 is an abridged version by Gericke (1996:265) of Wilkins' illustration of the ten systems.

**Figure 3.1: The scientist within systems**



Source: (Gericke 1996:295)

Paisley identifies the following systems, which influence the information needs and behaviour of the scientist:

1. The scientist within his culture
2. The scientist within a political system
3. The scientist within a membership group
4. The scientist within a reference group
5. The scientist within an invisible college
6. The scientist within a formal organization
7. The scientist within a work team
8. The scientist within his own head
9. The scientist within a legal/economic system
10. The scientist within a formal information system.

Paisley's model addresses the various factors influencing the information needs and behaviour of established scientists in an occupational context doing research for their organizations. It is important to note that the closer the system is to the user (which forms the focus in the centre), the greater its influence. This model provides some relevant aspects to consider when developing a model for studying the information needs and behaviour of students.

This model is relevant in studying students, because students are also involved in tasks and research projects, which makes them to be actively engaged with information sources. Thus the academic library being at the centre should try to meet the needs of all the academic support systems. Since students are involved in tasks and projects which makes them to be actively engaged with different

information sources, the academic library being at the focus centre should try to meet the needs of the students.

The model also identifies three sets of information sources used by the scientist, namely (Gericke 1996:296):

- Task-oriented systems. These systems include the work team, work organisation and other organisations accessible to the scientist, which are usually the formal sources of information.
- Discipline-oriented systems. These systems include the invisible college, reference groups in special areas, and the broad subject disciplines and these are mostly informal sources as well as formal channels, which cover subject journals.
- General culture. Formal library and information services are included here. It also includes accessibility, usability and readability, which are aspects that relate to library and information services.

Students' information sources should be accessible, usable and readable, i.e in a format that they can read and understand easily. Raliphada and Botha (2006:247) found that information sources should have the following characteristics: accessibility, relevency, comprehensiveness, cost, currency, delivery method and timeliness.

### 3.2.2 Task performance model

Whilst Paisley's model is valuable to the study of influencing factors, the task performance model is mainly concerned about the success of the user in locating relevant information for his or her task. Figure 3.2 represents the task performance model.

According to Blom (1983:9) task performance is every activity that the scientist does during the scientific process. Blom (1983:17) developed a research process model as an example of task performance and the role played by environmental factors and personal attributes of the scientist during the task performance. The research process model is made up of the following stages:

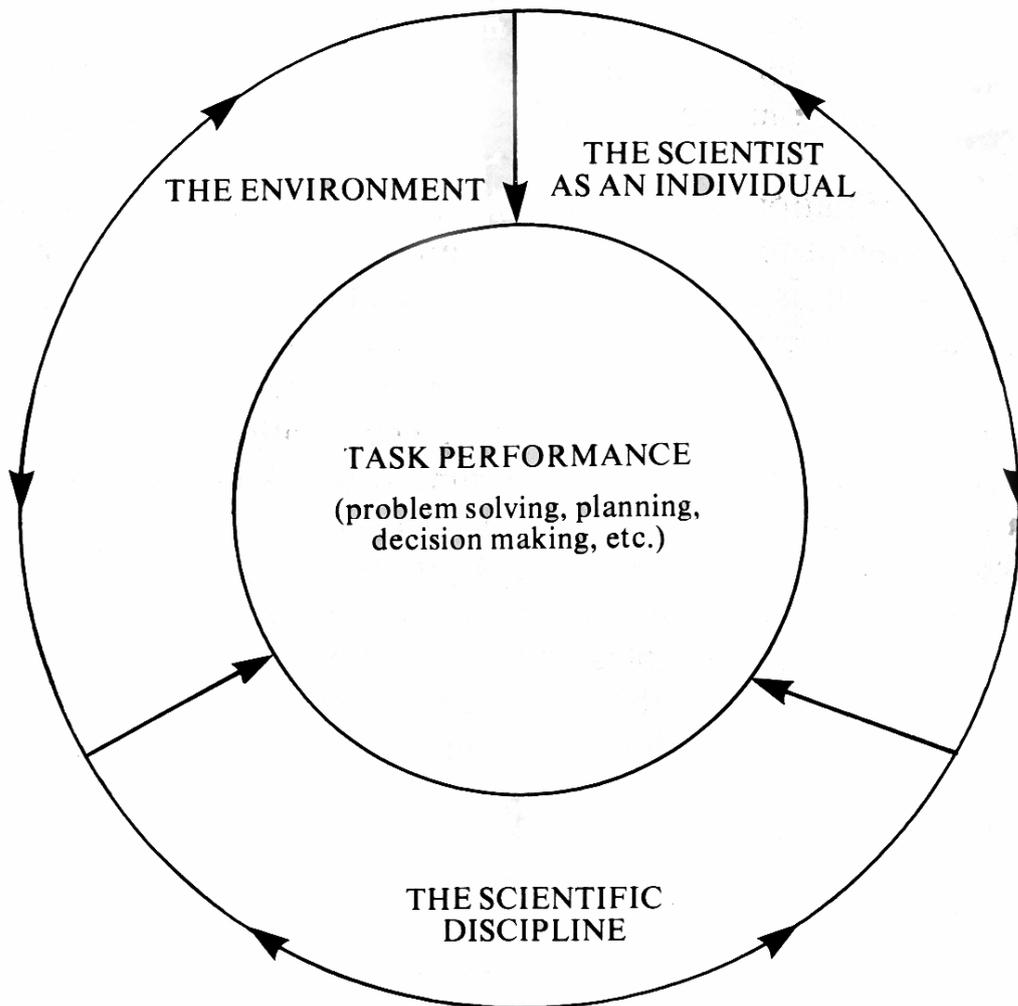
- Statement of the problem, which includes aspects such as the problem discovery, problem survey, problem demarcation, problem formulation and the formation of the hypothesis where and when applicable.
- Methodology, where certain methods and techniques are selected or developed for the problem to be solved.
- Data gathering, which refers to the finding of inputs, being the gathering of existing facts and or gathering of new data, which will contribute to the solution of or the completion of a set task.
- Analysis and synthesis, during which the gathered data are processed, conclusions and applications are made, and the research is related to and integrated with existing scientific knowledge in the field.
- Research report.

- Application in practice.

Blom (1983:5) believes that task performance should be the central objective of the information service. This model measures the effectiveness of an information service by focusing on the contribution that the service has made to the user's task performance (Blom 1983:6). In order to understand needs of the scientist, information workers should have knowledge about the purpose of the task performance (Blom 1983:12).

In his model Blom (1983:12) reduces Paisley's ten systems to three broad sets of factors, which affect the task performance of the scientist, i.e. the scientific discipline, environmental factors and the scientist as an individual.

**Figure 3.2 Task performance model**



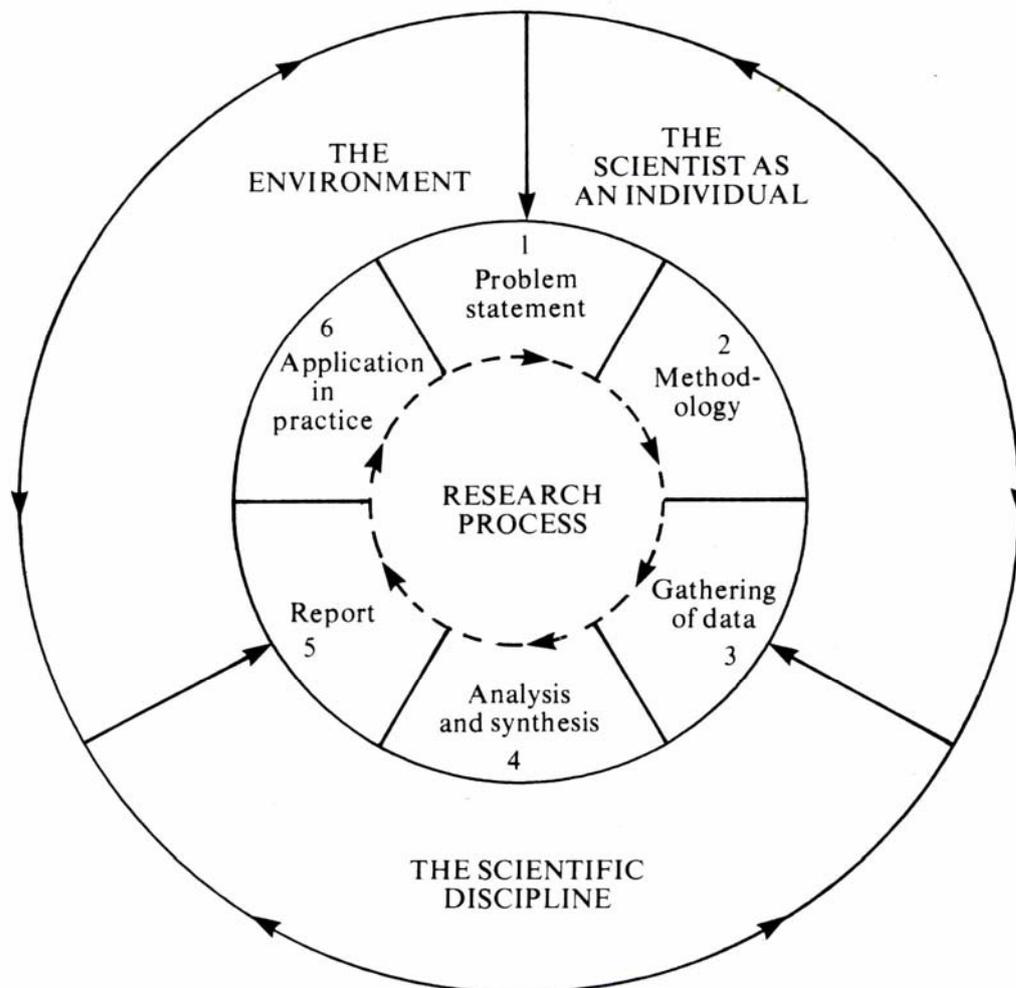
Source: (Blom 1983:9)

The model shows that each factor influences each other and that they are interrelated. Blom's model focuses on the success of the scientist during the task performance. He therefore places the research process in the centre of his second model as the essence of task performance (Gericke 1996:298).

Blom identifies problem solving, planning and decision making need as basic to the task performance of the scientist. The various steps of the research process determine the scientist's needs, namely: problem statement, methodology, gathering

of data, analysis and synthesis, report and application in practice. The model is illustrated in figure 3.3.

**Figure 3.3: The research process**



Source: (Blom 1983:17)

Since Blom's model is task orientated, it could also be applied in an academic setting, because assignments, projects and tests are tasks, which students need to perform and they are all research related. Therefore the model of the research process is relevant to study the information needs and behaviour of students.

### **3.2.3 Model of the information search process**

Kuhlthau's theoretical model of the information search process is made up of six stages with certain tasks, i.e. initiation, selection, exploration, formulation, collection and presentation (Kuhlthau 1994:59-60). These stages provide a point of departure to study information-seeking behaviour of students.

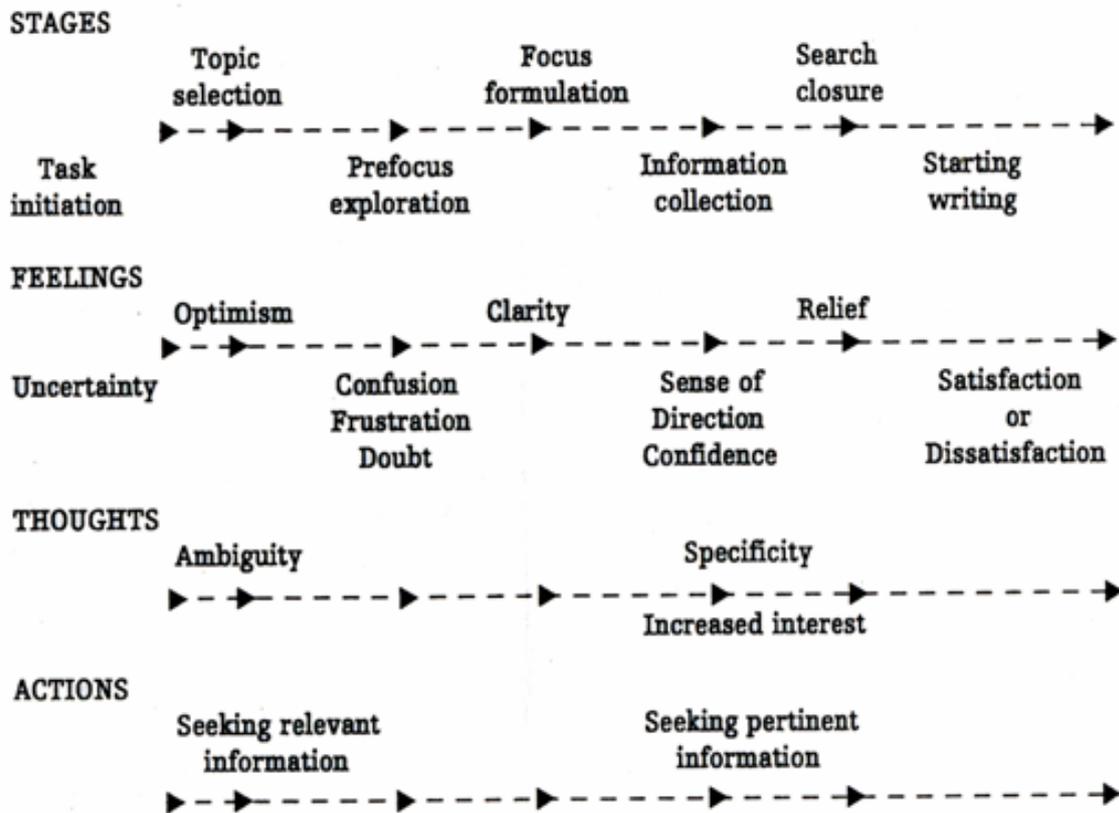
- (a) Initiation stage. Students are given an assignment which gives rise to an information need. During this stage students engage into the search process, which causes them to express feelings of uncertainty and apprehension. Students rely on past experiences and start looking at possible topics that could be selected. After selecting the topic, students consult other students about the given assignment and browse through the library collection.
- (b) Selection stage. Students select topics to research by focusing on their area of interest. During this stage students continue to talk to their teachers, colleagues and family members followed by a preliminary search of the library and the usage of reference sources to gain insight into their topics.
- (c) Exploration stage. Students investigate information and sources that they are going to use about the topic that they have selected. Again in this stage students have feelings of confusion resulting from inconsistency and incompatibility of the different sources.
- (d) Formulation stage. Students formulate a specific focus, which reflects on the information that they have gathered about their topic. During focus formulation students shift from feelings of confusion to feelings of confidence.

- (e) Collection stage. Collection of the materials for the topic or focus. Students have a focused view of their topic and collect information that is related to the topic only.
- (f) Preparation stage. During this stage, students complete their search process, organize their ideas for writing and prepare to present their findings.

Kuhlthau (1994:63) believes that since uncertainty and confusion are the causes of information problems in the early stages of the information-seeking process, there is a need for librarians to intervene in this process. Kuhlthau (1994:64-66) says that the information search process needs intervention, because students arrive at the library with different stages of knowledge. Zones of interventions, which correspond to the six stages of the information-seeking process, were identified together with a relevant bibliographic instruction programme.

Kuhlthau's model focuses on the information needs of undergraduates, which are mostly task based (see 3.2.2). This model when applied to the academic library can help in the planning of information provision services. It is not only task orientated in the sense that it concentrates on the cognitive aspects of undergraduates' information-seeking, their previous experience in using libraries as well as their uncertainty and anxiety that results from their information-seeking behaviour, are kept in mind. In her model Kuhlthau also emphasizes the fact that undergraduates will acquire information skills through intervention by librarians. The model is illustrated in figure 3.4.

Figure 3.4: Model of the search process



Source: (Gericke 1996:300)

### 3.2.4 Model of the media utilization event

Gericke (1996:192-196) states that the user behaviour model of Fouché (1977) describes the reading experience as a meeting between a reader and the publication or other medium, which is affected by factors such as the reader's predisposition and in turn by the content, form and accessibility of the publication. Figure 3.5 below represents an abridged version of the model.

The library as a service distribution system is responsible for making information available and accessible. Information-seeking behaviour is placed within several contextual factors.

In this model the activities that the reader is involved with when interacting with the information system are called antecedents and are represented by circles in the dotted line box. These are the decision to read (that is when the user's needs and motivation comes into play); the selection of reading material based on content and theme, and the acquisition of the reading material based on its physical form or medium. According to this model reading involves interpretation, which could be influenced by the user's predisposition and characteristics as well as his or her cognitive ability.

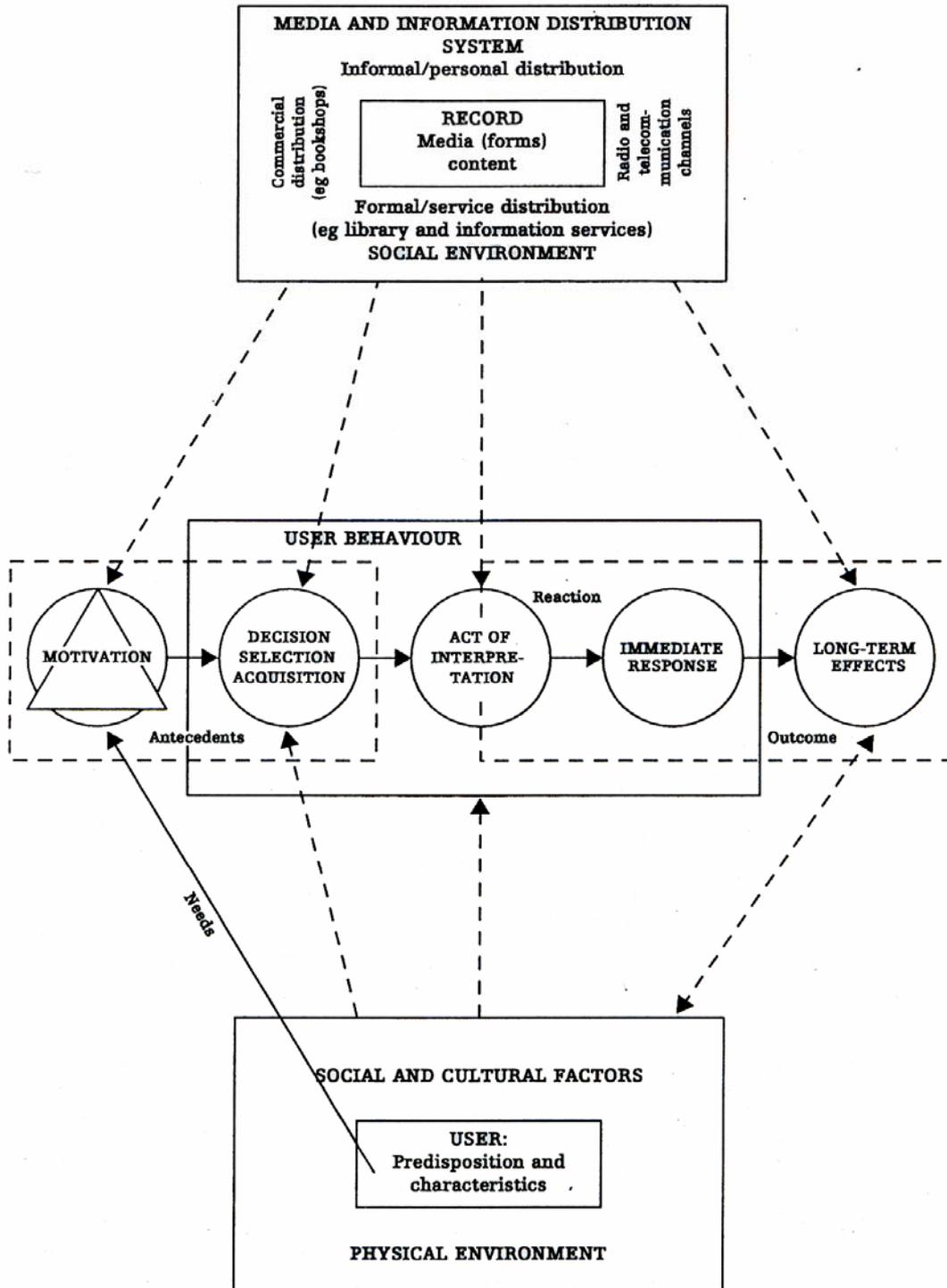
The media usage model focuses more on the user in the sense that it addresses the following factors that influence the needs and behaviour of the user:

- The user's predisposition and characteristics, which includes biological and hereditary factors (sex, age and intelligence) and personality factors (motivation, interest, attitudes towards media, reading ability and receptivity).
- Social, cultural and environmental factors, which include social groups, reference groups, and socioeconomic factors, levels of education, social status and lifestyle.

This broad model is of special relevance when studying the information needs and behaviour of students because the various critical moments of user behaviour are identified and thus enable us to study all relevant aspects of students' information

behaviour. Emphasis on the user's personal cognitive abilities is also of great importance when dealing with cultural diverse students.

Figure 3.5: User behaviour model



Source: (Gericke 1996:193)

### **3.3 A FRAMEWORK FOR STUDYING CULTURALLY DIVERSE STUDENT POPULATIONS**

This model will draw its themes from Paisley's model of the scientist within systems, Blom's task performance model, Kuhlthau's model of the information search process, and Fouché's media utilization event model.

Paisley's model addresses the formal organization of the scientist, which in case of this study refers to the academic institution. This institution comprises of many service units or departments, which plays a role in the life of students during their academic year. For instance the academic library supports teaching of the academic institution by providing information and services to students.

Blom's model focuses on the task performance and behaviour patterns related to the stages in the research process. The task performance of students refers to doing assignments and preparing for tests and examinations with typical research needs for problem solving.

Kuhlthau's model could be easily modified to an academic library setting, because the students' information seeking process is represented in stages. Although these stages focus on the way the students' try to do their first task or research project, they also relate to the way the students approach the library for help in completing their tasks or research projects. For instance, the first stages are said to be characterized by feelings of uncertainty, anxiety and confusion. These feelings could affect the way students proceed when searching for information, for example

students from certain cultural groups can find the library to be a daunting place which may result from gaps in their library experience. Students could be afraid or shy to approach the librarian for help, thus the first stages of the information seeking process may require librarians to intervene. Again students' anxiety and confusion during the first stages could result from the fact that students are not sure whether relevant information for their given task is available. As students gain more confidence in completing their tasks and research projects during the last stages, they can also demand more information sources and services from the library.

Fouché's model is also valuable. It addresses the students' preference for information sources. User behaviour is based on the act of interpretation which follows on the decision to read or use a certain type of media, the selection of media which depends on its content or theme, and the acquisition of media according to its physical form or medium and its availability and accessibility. It is clear from the model that the act of interpretation is influenced by contextual factors such as the user's social and cultural factors, the physical environment and the user's predisposition and characteristics.

All above mentioned elements and factors are the influencing factors that should be considered when developing a model for studying culturally diverse student populations. This model is illustrated in figure 3.6.

**Figure 3.6: Model of information usage behaviour of culturally diverse students.**

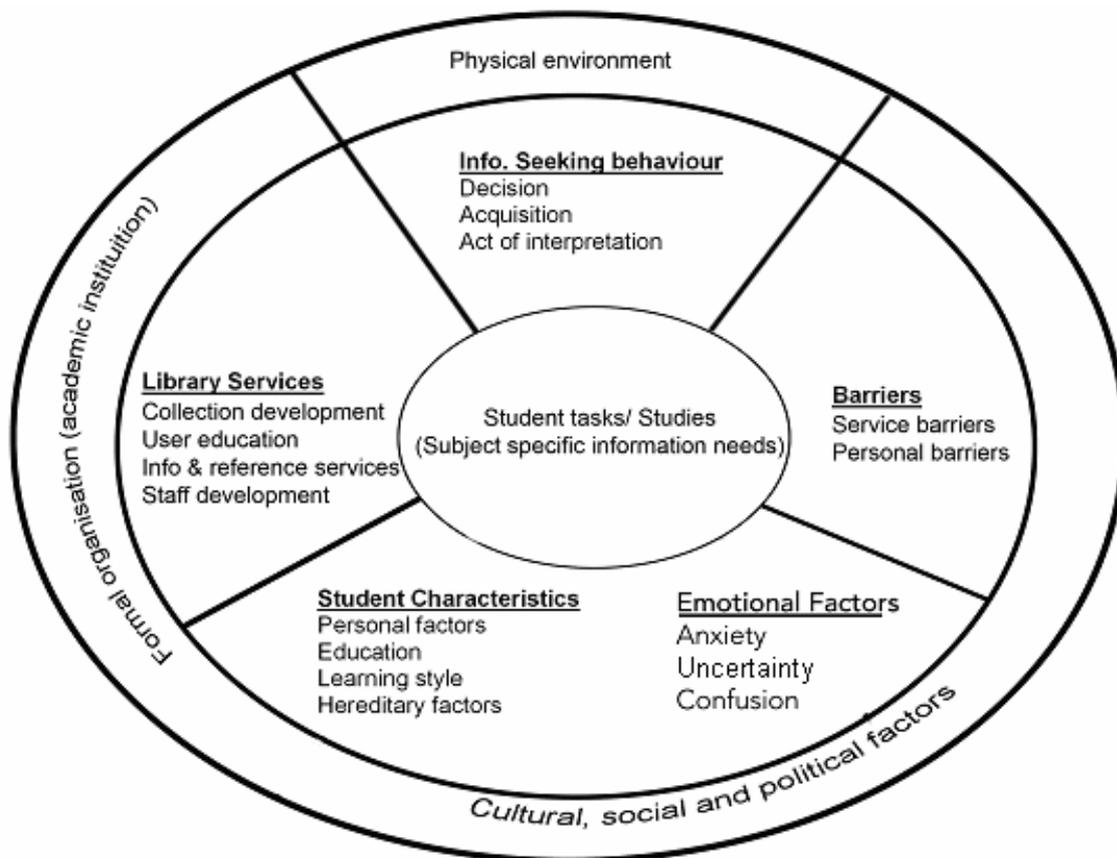


Figure 3.6 represents the model of information usage behaviour of culturally diverse student populations. Information usage behaviour is a broad term which encompasses the following: channels which users follow to satisfy their information needs, their information-seeking patterns, their information-exchange patterns, their use of information in scientific practice and effect of information use on them. The explanatory part of information usage behaviour is concerned with describing the reasons which leads to information-seeking behaviour as well as the information-exchange patterns (Gericke 1996:191). The model consists of a large ellipse including two smaller ellipses. The larger ellipse is divided into three segments including: the formal organization, which in this case is the academic institution; the

physical environment; and the cultural, social and political factors. These factors determine the services which will be offered by the academic library, and could have effects on the acquisition of the library collection and information sources, and the information needs and the information-seeking behaviour of students.

The second ellipse is divided into four sections including: library services; information-seeking behaviour; students' characteristics; and barriers to library use. The core ellipse represents students with their tasks and information needs. The students are placed at the center in order to illustrate their continuous interaction with the academic library and its services while busy with their task performance.

Their information usage behaviour will be determined by their personal characteristics as well as their emotional factors related to the library services and the academic institution.

The model provides for effects of barriers to the utilization of library services, namely: service barriers and personal barriers. These barriers are closely related to the formal organization, the physical environment and cultural, social and political factors. In Kuhlthau's model, anxiety and confusion, which results from the first stage of the information search, could act as personal barriers to students because the articulation of the problem could be affected as well as the ability to judge relevancy of information sources (Kuhlthau 1991:364).

Wilson (1997:556) distinguishes between the following types of intervening variables, which might act as barriers to information-seeking behaviour: personal

characteristics, emotional variables, educational variables, demographic variables, social and interpersonal variables, environmental variables, economic variables and source characteristics. Wilson (1997:557) refers to the study of information-seeking behaviour of cancer out-patients by Borgers *et al.* (1993) who found that hearing problems, lack of medical knowledge, verbal limitations and nervousness are characteristics that act as barriers during their consultation with doctors.

Fouché's model in (Gericke 1996) includes user behaviour in its center by focusing on the act of interpretation with three antecedents, namely: a decision by the user to read or use the media rather than engaging in something else, the selection or choice made by the user about the content or specific subject or theme, and acquisition which relates to a choice by the user about the physical form or medium through a specific information source or channel. The model in figure 3.6 identifies these elements as well as subject specific needs of students as related to student tasks and studies.

### **3.3.1 Information needs**

The information needs of students leads to information-seeking. The basic information needs of students in the model include information on their tasks and assignments and subject specific information to study and write exams. The academic library can play an important role in satisfying the students' information needs.

### **3.3.2 Decision to read or use information**

In this model decision refers to culturally diverse students' decision to use library services to complete their given tasks and assignments or to study. This decision also involves the student's attitude and motives. The decision to use library services depends on the following factors; students' awareness of available services, proper signage in the library, user-friendly information technology, approachable and culturally sensitive library staff, convenient opening hours and relevant library orientation and user education. Green (1994:19) believes that inaccessibility of library locations, badly designed interiors, poor signage, inadequate or inappropriate stock, inconvenient opening hours, certain charging policies and librarians' use of jargon are examples of barriers which may determine the decision not to use the library.

### **3.3.3 Acquisition and selection of information**

The next phase is the acquisition and selection of subject contents as well as the specific form of media or format that will satisfy the information need. The acquisition and selection phase refers to the choice of an appropriate text, which depends on the culturally diverse students' previous experience, problem solving skills and information skills. Accessibility is another important factor in the selection of information sources.

### **3.3.4 Act of interpretation**

The act of interpretation focuses on the reading of materials. This requires students to be able to use, understand and evaluate various information sources. The ability to check for relevance in information sources being used plays an important role here. The nature of the interpretive act could be influenced by the user's predisposition (Gericke 1996:195). Thus the model included personal factors, education, learning style and hereditary factors because of the effects these factors could have during the act of interpretation. The act of interpretation is dependent on students' tasks and their curricular needs. The act of interpretation is also affected by the availability and accessibility of materials.

### **3.3.5 Contextual factors**

Contextual factors refer to the user's predisposition, i.e. student characteristics, formal organization, namely the academic institution, the physical environment and cultural, social and political factors.

#### **3.3.5.1**      *Student characteristics*

The use of information and information services will be influenced by the characteristics of culturally diverse students. For example the lack of information skills and poor communication skills will negatively influence the use of information sources.

### 3.3.5.2 *Academic institution*

The academic library is seen as one of the core functions of the academic institution, thus it must directly support the mission and the vision of the academic institution. The collections and library materials should meet the requirements of the programmes that are offered by the academic institution.

### 3.3.5.3 *Physical environment*

The physical environment of the academic library can affect library services. The physical environment includes factors such as accessibility, noise, lightning, and adequate collections. The library is sometimes unable to control its physical environment.

### 3.3.5.4 *Cultural, social and political factors*

Many authors emphasize the fact that culture shock is a problem, which culturally diverse students may face and it will affect their information-seeking behaviour. According to Reichel (1994:336) the term “culture shock” was termed by Oberg (1960) in order to describe the idea that an unfamiliar culture can be confusing to anyone who must adapt to it. Reichel (1994:336) mentions typical emotions of culturally diverse students, namely: a sense of loss, arising from being uprooted from one’s familiar surroundings, and a feeling of impotence from being unable to deal completely with an unfamiliar environment.

Social factors may relate to the role of the academic library in promoting the academic institution's courses and programmes to its external communities, i.e. in case of the Technikon Witwatersrand, high schools and the business industry surrounding the technikon. Political factors on the other hand refer to the legislation, which might have effects on the academic library's access and information policies.

### **3.4 LIBRARY SERVICES FOR CULTURALLY DIVERSE STUDENT POPULATIONS**

It is clear from the model that the planning of all library services should take into consideration user characteristics and all contextual factors that are mentioned in the model. Services for culturally diverse students should be well planned in cooperation with the academic institution to ensure the greatest possible availability and accessibility. Collection development, user education, information and reference services as well as staff development were identified in the model as part of the library services.

#### **3.4.1 Collection development**

Intner (1997:135) defines collection development as all activities that are associated with building and shaping library collections, including planning, goal-setting, decision making, budgeting, and selecting, acquiring, and evaluating them.

During collection development much emphasis should be on student needs. Martin (1994a:41) maintains that a strong collection development policy has been shown to

be one of the most important tools that support the growth of multicultural collections. Expanding the curriculum and diverse interests, requires the availability of information resources that support teaching and research from a pluralistic and global point of view (Martin 1994a:40).

Academic library collection policies should include a statement that demonstrates intent to collect materials in support of diversity programmes throughout the academy's curriculum (Alire & Stielow 1995:516). During collection policy analysis, it is important to consider statements regarding various formats. As librarians develop greater awareness of a variety of learning and search styles, they should be committed to supplying information in multiple formats (Blandy 1994:124).

### **3.4.2 User education**

User education refers to the teaching and education of the user in the use of libraries and information sources (Gericke 1996:333). Fidzani (1998:331) says that user education programmes have been put in place in some academic libraries to help the users to make effective use of libraries. Fidzani (1998:331) with reference to Fleming (1990), points out that user education includes various programmes of instruction, education and exploration to instruct users to make more effective, efficient and independent use of information sources and services that are provided for them.

Academic libraries offer many types of instruction, ranging from simple geographic tours, to classroom instruction, to sophisticated programmes on searching

databases, but in spite of these librarians find that users are still not sure how to use the library (Piette 1995:77). Zondi (1992:207) mentions that the instructional programmes at the University of Zululand have never been evaluated to assess their effectiveness in improving the skills of first year students since the programmes' inception in 1988.

Behrens (1993:124) says that library skills entail the proficiency to access the sources in the library and also include skills in using the catalogue and other bibliographic tools, physically locating the sources on the shelves, selecting information from these sources and making notes of the information and provide references to the sources.

According to De Jager and Nassimbeni (2002:171) in South Africa the National Commission on Higher Education Working Group on Library and Information Technology reported that information literacy should be an integral part of the profile of a lifelong learner. The diversity of student populations, makes information literacy programmes even more essential. Information literacy can overcome barriers such as culture, language, gender, and contribute to a positive approach to the library and its services (De Jager & Nassimbeni 2002:181).

### **3.4.3 Information and reference services**

Information and reference services refer to the assistance given to the users seeking information by librarians. These services could include: direct personal assistance, directions, signs, exchange of information, readers' advisory service, dissemination

of information in anticipation to user needs or interests and access to electronic resources (Bunge & Bopp 2001:3). In Kuhlthau's zones of intervention, the reference interview is initiated in the fifth zone where the librarian seeks background information on the student's problem by focusing on the task, interest, time and availability (Kuhlthau 1994:69).

The most important aspect of information and reference services is the conversation between the user and the librarian. Thus the goal of the reference interview is to ascertain the information needs of the user by taking appropriate action to satisfy the needs through use of available information sources (Bopp 2001:47).

Mabry (2003:44) identifies the aspects that relates to the characteristics of the user and the librarian which have an influence on the reference interview: character, personality, values, age, education, cognitive abilities, communication abilities and style, appearance, perception of and assumptions about libraries and librarians.

The most important aspect of the first encounter between the librarian and the user lies in the librarian's openness and approachability (Mabry 2003:44).

Understanding the needs of students is important for ensuring quality information and reference services.

Characteristics of the culturally diverse students should be taken into consideration when providing reference services, for example some students lack language skills and sometimes find it difficult to express their information needs clearly.

#### **3.4.4 Staff development**

Kravitz *et al* (1991:186) point out that staff development is a critical component for quality service to the underserved. All staff that work with the public will require sensitivity training in dealing with diverse clientele, training to meet information needs in a variety of languages and information about new collections and available services. Roach and Morrison (2002) point out that if services are to become more responsive to the needs of the ethnically diverse, professional skills and attitudes of librarians also need to change.

In addition to being well trained in their jobs and being able to communicate well, the staff must be able to understand the varying needs of a diverse user population, which includes awareness of and sensitivity to the differing experiences, perspectives and values that individuals bring into the library (Mandernack *et al.* 1994:91).

With awareness of multiculturalism, understanding of cross-cultural information seeking-behaviour and a sense of professionalism, librarians can meet the goals for diversity (Liu 1995:133). Buchanan (2002:37) points out that the recruitment of staff members of a particular race or cultural group signals to other members of the group that the institution is truly committed to meet the needs of that group.

### **3.5 CONCLUSION**

This chapter attempted to develop a theoretical model to study the information needs and behaviour of culturally diverse student populations. This model has drawn its insight from some of the information-seeking behaviour models developed in user studies, for example Paisley's model studies scientists. Scientists in Paisley's model are found in the centre of many systems that touch every aspect of their work.

The information-processing model can help librarians in dealing with culturally diverse students especially during their first year level, because it identifies stages in the information search that students experience when trying to do their tasks and other projects. The stages in the information-processing model throw some light on the interaction between the student and the information environment.

The task performance model emphasises the importance of user success during task performance. This has implications on the efficiency and effectiveness of library services to culturally diverse student populations.

The media utilization event model has taken into consideration various important factors when studying users. This is very important since culturally diverse student populations have characteristics and backgrounds that need to be taken into account when designing library services for them.

Based on these models a model for studying information needs and behaviour of culturally diverse students has been developed. In this model the students are

continuously interacting with the library and information services. The successful completion of their tasks is dependent upon the availability of relevant information sources and a physical environment, which has no barriers. Having drawn some of its aspects from the media utilization event model, it is clear that the decision by the student to use information sources depends on the availability and accessibility of these sources.

Chapter four will focus on the empirical part of the study, which will investigate undergraduate students, their information needs and usage behaviour. The data gathering process will be described.

## **CHAPTER 4**

### **CONDUCTING THE EMPIRICAL STUDY**

#### **4.1 INTRODUCTION**

In chapter two an attempt was made to give an overview about the characteristics of culturally diverse student populations and their information needs as found in the subject literature. Reports on information needs and information-seeking behaviour of culturally diverse students are mainly based on overseas research and findings.

It is clear from the studies that were done abroad that undergraduate students throughout the world have the same information needs and information-seeking behaviour. Chapter three focused on developing a model for studying information needs and behaviour of culturally diverse students, based on existing conceptual frameworks. Various models on information-seeking behaviour were examined in order in order to develop a theoretical framework for the present study. This model helps to identify relevant aspects of this study.

This chapter reports on an empirical investigation into students' information needs and behaviour at the Technikon Witwatersrand. This study was done to ascertain whether the library services rendered to culturally diverse student populations meet their information needs. The research methodology in this study was two fold: the first part was a pilot study with focus group interviews as research instrument; the

second part was a survey based on a self-administered questionnaire as research instrument.

## **4.2 FOCUS GROUPS**

The researcher has decided to use focus group interviews as a form of a preliminary study. Focus groups are small structured interactive groups with selected participants, normally led by a moderator (Litosseliti 2003:1). The results of the focus group interviews were used as a basis in the construction of the questionnaire. Stewart and Shamdasani (1990:17) point out that focus groups are mostly used at a preliminary stage in a larger research program as a means for adding insight to the results obtained from a survey.

### **4.2.1 Focus groups sampling frame**

In focus groups convenience sampling is employed to recruit participants, since there is limitations on the generalizability of its results (Stewart & Shamdasani 1990:53). In convenience sampling the closest persons are normally chosen as respondents (Bailey 1994:94). In this case a convenience sample was drawn from the student population as unit of analysis to select appropriate focus group participants. Undergraduate students from different faculties were identified and recruited to participate in the focus group. Four groups consisting of five to six undergraduate students participated in the focus group interviews. The researcher had to make sure that the selected participants were representative members of the larger group. Undergraduate students were approached and the researcher asked

them to participate in the study. The researcher aimed to look at four groups with a minimum of five participants and a maximum of ten participants per group in order for the focus group interviews to take place.

The recruitment of the students was not an easy task because it was during examination time. The students who agreed to participate were also telephoned and reminded about their focus group interview appointments. Some of the students telephoned to cancel on the day of the focus group interview and some students did not show up. Therefore, it was necessary to recruit other participants. During recruitment an attempt was made to get representation from all the faculties.

#### **4.2.2 Interview schedule**

An interview schedule is a guide with instructions that provides direction for the interviewer in the group discussion and the questions are less structured than those of a questionnaire (Stewart & Shamdasani 1990:60). The interview schedule was used as the interviewer or moderator's guide. In order to avoid bias and influence on the participants' opinion, peer information counsellors were selected to be the focus group moderators instead of the library staff.

#### **4.2.3 Focus group interviews**

Interviews were conducted in the afternoon during the month of November at different venues. Due to time constraints, one group was interviewed per day. The participants were asked to answer various questions. The interview guide provided a

structure for the focus group moderator and also helped the moderator to probe for more answers during the discussions.

The focus group sessions were recorded with the approval of the participants. Data analysis took place after all the groups were interviewed and the tapes were transcribed.

#### **4.2.4 Focus group results**

The focus group interview results showed dissatisfaction with the library's services. There were also some concerns about the collection. Many participants complained about the physical environment. Critical feedback from the focus groups was grouped under the following broad themes that were covered by the interview guide (see appendix B):

- (1) Library interests and preferences. The most common reasons given by the participants for using the library are: studying, doing term papers and research projects.
- (2) Personal usage of the library. Under personal use of the library many of the comments by the participants pointed out that the library is used during exams and tests to study and also to borrow books. Other participants said that they preferred the public library rather than the academic library.

- (3) Satisfaction with services. There is dissatisfaction with the reserve collection, study space and photocopying services. According to the participants most of the collection is not relevant to course needs.
- (4) Satisfaction with accessibility of services and sources. Many participants want the library to be open on weekends. Books and journals are often not in proper places on the shelves.
- (5) Orientation and training in the use of the library. The importance of library orientation was emphasised by participants.

#### **4.3 QUESTIONNAIRE AND SURVEY**

A self-administered questionnaire was used to do the survey on the information needs and behaviour of undergraduate students of the Technikon Witwatersrand. The focus group interviews were used as the basis for developing a questionnaire. The question format that was mostly used in the questionnaire was that of closed questions, because this type of questionnaire can easily be coded and calculated, and mainly open-ended questions were used during the focus group interviews. The respondents would be able to fill in the questionnaire in less than ten minutes. The questionnaire employed for the study was divided into two sections.

Section A contained items that elicit information on demographic characteristics of respondents. Questions 1 to 8 dealt with gender, age, year of study, field of study, faculty, home language and nationality.

Section B was based on the needs of students and their use of library services. Question 9 dealt with motives for using the library. Preferences for various information sources were to be indicated in question 10. Opinions about services being offered by the Technikon Library were asked in question 11, and opinions about the physical accessibility of the library were asked in question 12.

Views on user education efforts by the library were included in question 13. The personal characteristics of the library staff were to be indicated in question 14, and personal characteristics of the students were to be indicated in question 15.

Questions 16 and 17 were the only two open questions, which were asked in order to get more information from the respondents. Students were asked about the biggest problems that they might have in their use of the Technikon Library. In the last question respondents could include suggestions that they might have in improving the services of the Technikon Library.

#### **4.3.1 Survey sampling frame**

The main aim of the study was to determine whether the information needs and behaviour of culturally diverse student populations are sufficiently provided for by the Technikon Witwatersrand library and the fact that most students do not have access to email facilities, the researcher decided that convenience sampling could help maximize the sample size, by making more students to participate in the survey.

The first batch of questionnaires was administered at the information desk, thus undergraduate students who happened to be in the library participated by filling in the questionnaires. Undergraduate students from all the faculties of the Technikon Witwatersrand could form part of the survey population to be studied. The questionnaire was distributed to all the campuses in order to ensure that students from all the disciplines were included in the survey sample. The distribution of the questionnaire to all the campuses helped to make sure that all undergraduate students who were using the library had an equal chance of being included in the study.

#### **4.3.2 Distribution of survey questionnaires**

The time of the year during which the researcher had decided to distribute the questionnaires was the month just before the start of the end of the year examinations. The questionnaires were hand delivered by the researcher to staff at the issue desks of the various libraries on the campuses and students were asked to complete the questionnaire themselves. The survey correspondence could not be sent via the email because many students did not have access to email, and getting a list of students' phone numbers and addresses was not an easy task either.

Using self-addressed postage for returning the questionnaires was impossible because of the postage expenses. Another problem was that if students should have received the questionnaires through the mail, they could have thrown them away without filling them in. The questionnaire was therefore distributed to all the libraries

of the former Technikon Witwatersrand Campuses in order to ensure that students from different disciplines were included in the survey sample.

The questionnaires were received by the information desk staff and the peer information counsellors who were on duty at the information desk. The information desk staff handed the questionnaires out to students. The questionnaires had a covering letter attached to it which explained the objectives of the study. That helped the peer information counsellors in determining the eligibility of the students who participated in the study.

On the 10<sup>th</sup> of October 2005 a total of 160 questionnaires were delivered at the following libraries, the Doornfontein Campus Library, Eloff Street Campus, and Auckland Park Campus library. The questionnaires that were sent out to the Doornfontein Library were aimed at the students who are doing health, engineering science and art and design.

The questionnaires that were sent out to the Eloff Street Campus Library were aimed at the students who are doing graphic design, clothing technology and fashion design. The questionnaires, which were sent out to the Auckland Park Library, were aimed at the students doing business management.

The peer information counsellors who were working at the library's information desk handed out the first batches of the questionnaires to the students when they were leaving or entering the library during their working shift. This had a negative effect on the response rate because many students left the library with the questionnaires, but

never returned them. The response rate was also affected by the fact that many students were no longer coming to the library because of the examinations. This problem led the researcher in some cases to approach lecturers to help with the administering of the questionnaires in their departments.

As a follow-up survey a further 141 questionnaires were sent out to different faculties on the 2<sup>nd</sup> of November 2005. The only department excluded from the follow-up survey was the Art and Design Department due to some time constraints. Lecturers who were responsible for undergraduates distributed the questionnaires, which were accompanied by a covering letter.

The lecturers handed out and collected the completed questionnaires from the students after writing their examinations. The researcher also got hold of the students by handing out questionnaires to them before they started with practice in their departmental clinics.

#### **4.3.3 Responses to the questionnaire**

On the 8<sup>th</sup> of December 2005 a total of 159 questionnaires were completed and returned with a few questionnaires incompletely answered. After the collection of data 159 questionnaires were sent to the Statskon Department of the University of Johannesburg for analysis and interpretation.

## **4.4 CHARACTERISTICS OF RESPONDENTS**

The data from 159 respondents was used as a final sample. An overall response rate of fifty percent was achieved. Questions 1-7 dealt with the personal characteristics of the students.

### **4.4.1 Gender of respondents**

Technikon Witwatersrand as a whole in 2005 had 52.6% males and 47.4% females, the data relating to the independent variable "gender" indicates that out of 159 undergraduate respondents who participated in the study 41.5% were male and 57.9% female.

Based on the findings on variables in section 4.4, the relation between gender and use of library services shows that the highest percentage of the respondents who uses the library was female. Although the percentage of female students at the institution is 11% lower than the male students, the female respondents were 10% higher than the male respondents. The reason for this could perhaps be related to the high percentage of females in the Health faculty which had a very high response rate in the study. The tendency of the female students to use the library more than the male students was cited by many studies on information-seeking behaviour.

#### 4.4.2 Age of respondents

The age indications of the respondents were grouped under the following age groups:

- Under 20 years
- 21-30 years
- 31-40 years
- 41 years and above.

Table 4.1 gives an indication of the age distribution of respondents.

**Table 4.1: Age groups of respondents**

		Frequency	Percent	Valid Percent
	<b>Under 20 years</b>	29	18.2	18.5
	<b>21 - 30 years</b>	121	76.1	77.1
	<b>31 - 40 years</b>	5	3.1	3.2
	<b>41 years and above</b>	2	1.3	1.3
	<b>Total</b>	157	98.7	100.0
<b>Missing</b>	<b>System</b>	2	1.3	
<b>Total</b>		159	100.0	

The 21-30 years age group is the largest group with 76.1% of the respondents falling into this age group. A small group 18.2% of the respondents falls within the under 20 year's age group. The smallest group 3.1% are between the ages 31 to 40 years followed by 1.3% of the respondents who are 41 years and older.

The findings on age and use of library services revealed that the majority of the students who use the library fall in the age range of 21 to 30 years. The other age groups have smaller numbers, i.e. 18.2% of the students that use the library are under 20 years and a small number of respondents that use the library are in the age ranges of 31 to 40 years, and 41 years and above. The results on age and library use could be correlated to the respondents' year of study, because in 4.4.3, the students who were doing third and second year were more than those who were doing first and fourth year. This could simply mean that the third and second year students who happen to be library users fall in the 21 to 30 year age range, and use the library more than the other age groups.

#### **4.4.3 Year of study of respondents**

Since the aim of the study was to determine the information needs and information-seeking behaviour and information needs of culturally diverse students by focusing on the undergraduates, it was important to include the year of study of the respondents as a value. The third year students are the largest group of the respondents 39.6%. The second largest group of respondents is the second year students being 34.6%. First year students form only 12.6% of the respondents whilst the fourth year students are 11.9% of the respondents. Third year students thus seems to be using the library more than the second and first year students. This is represented in table 4.2.

The reason for higher percentage of library use by the second and third year students could be based on the fact that when students move to higher levels of their studies, their tasks increase and so are their information needs.

**Table 4.2: Year of study of respondents**

		Frequency	Percent	Valid Percent
Valid	First Year	20	12.6	12.7
	Second Year	55	34.6	35.0
	Third Year	63	39.6	40.1
	Fourth Year	19	11.9	12.1
	Total	157	98.7	100.0
Missing	System	2	1.3	
Total		159	100.0	

#### 4.4.4 Field of study

In the field of study question the respondents had to indicate their subject discipline. This value will help in determining the information needs and behaviour of undergraduate students in different disciplines. The results are indicated in table 4.3.

In a situation where respondents have used abbreviations to indicate their field of study, the researcher had to use one relevant term.

**Table 4.3: Field of study of respondents**

Field of study	Frequency	Percent	Field of study	Frequency	Percent
ACCOUNTING	6	3.8	FOOD TECHNOLOGY	1	.6
ANALYTICAL CHEMISTRY	1	.6	GRAPHIC DESIGN	3	1.9
BIOMEDICAL TECHNOLOGY	5	3.1	HOMEOPATHY	27	16.9
BUILT ENVIRONMENT	1	.6	HOSPITALITY MANAGEMENT	1	.6
BUSINESS MANAGEMENT	1	.6	HUMAN RESOURCE MANAGEMENT	1	.6
CHEMICAL ENGINEERING	13	8.1	INDUSTRIAL ENG	2	1.3
CHIROPRACTIC	19	11.9	IT	2	1.3
CIVIL ENGINEERING	1	.6	LOGISTICS	1	.6
ECONOMICS	2	1.3	MANAGEMENT SERVICES	1	.6
ELECTRICAL ENGINEERING	5	3.3	MARKETING	3	1.9
EMERGENCY MEDICAL CARE	1	.6	MECHANICAL ENGINEERING	3	1.9
ENGINEERING METALLURGY	4	2.5	MINING ENGINEERING	3	1.9
ENVIROMENTAL HEALTH	2	1.3	MULTIMEDIA	2	1.3
EXTRACTION METALLURGY	2	1.3	PODIATRY	14	8.8
FASHION	1	.6	PUBLIC RELATIONS	1	.6
FINANCIAL INFORMATION	1	.6	SPORT MANAGEMENT	1	.6

It is clear from the results in table 4.3 that most 16.9% of the respondents in the study were studying homeopathy and 11.9% chiropractic, followed by 8.1% chemical engineering. Most fields of study had only a few of respondents; therefore data on the field of study does not provide meaningful conclusions.

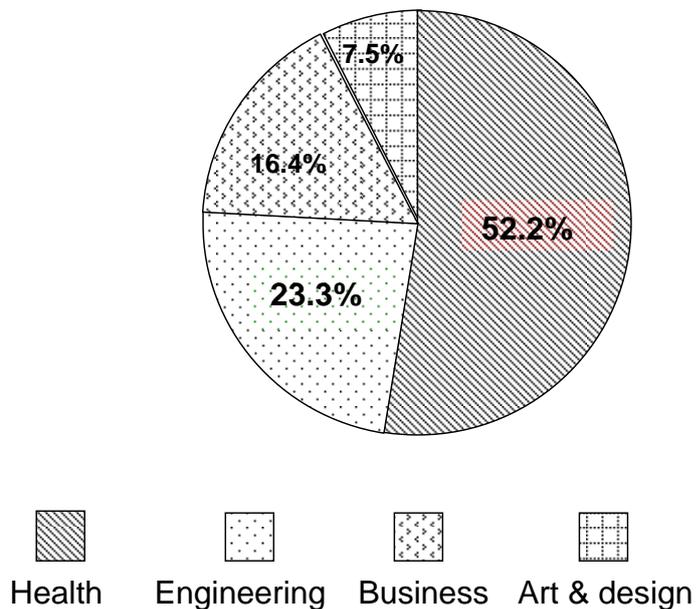
#### **4.4.5 Faculty relation of respondents**

Table 4.4 and figure 4.1 gives an indication of the faculty relations of the respondents.

**Table 4.4: Faculty relations of respondents**

		Frequency	Percent	Valid Percent
Valid	Health	83	52.2	52.5
	Engineering	37	23.3	23.4
	Business	26	16.4	16.5
	Art & Design	12	7.5	7.6
	Total	158	99.4	100.0
Missing	System	1	.6	
Total		159	100.0	

**Figure 4.1: Faculty relations of respondents**



Of the 159 undergraduate students who took part in the survey 52.2% were from the health faculty, 23.3% were from the engineering faculty, 16.4% were from the business faculty and 7.5% were from the art and design faculty. Table 4.5 shows the results when correlating numbers of respondents from each faculty with actual

faculty numbers. Respondents from the health faculty in the sample represent 24.8% of the total number of students in the faculty. The possible explanation for the high number of health students using the library could be the fact that, health students start to do research very early during their studies. The art and design respondents in the sample represent 5.3% of the total students in the faculty. The explanation for art and design's low response rate could result from the fact that the discipline is more practical in nature or students could be relying on sources other than the library. The engineering faculty is the largest faculty which is represented by 2.7% of respondents of the total students in the faculty and the reason for its low response rate in the study could be that some of the engineering courses such as mathematics, statistics and physics are more practically orientated. It is also possible that engineering students during their undergraduate years of study rely mostly on their prescribed textbooks. Engineering further consists of semester courses and less research projects. In the sample respondents from the business faculty which is the second largest faculty represent 2.1% of the total number of students in the faculty. It can be concluded that low representation of the business faculty came as a result of some of the business courses requiring no research or library use and because of the fact that some students can contact people or companies directly for information.

**Table 4.5: Percentages of students per faculty**

Faculty	Actual Faculty No.	Faculty percentages in the sample
Health	335	24.8%
Engineering	1355	2.7%
Business	1250	2.1%
Art & design	223	5.4%

#### 4.4.6 Home language of respondents

Since the study is about culturally diverse students, the researcher considered their home language to be a variable likely to influence the information-seeking behaviour of these students. When coding the data the researcher had to combine all African languages together as well as those whose home language was English and Afrikaans. Greek, Portuguese and Swiss were grouped under other languages.

It is clear from table 4.6 that the largest group of the respondents 61.0% are Africans. The English- and Afrikaans-speaking groups are the 2nd largest group with 35.2%. The smallest group was Greeks and Portuguese with 1.3% and .6% were Swiss.

**Table 4.6: Home language of respondents**

		<b>Frequency</b>	<b>Percent</b>
<b>Valid</b>	<b>AFRICAN</b>	97	61.0
	<b>ENGLISH/ AFRIKAANS</b>	56	35.2
<b>Other</b>	<b>GREEK</b>	2	1.3
	<b>PORTUGUESE</b>	2	1.3
	<b>SWISS</b>	1	.6
<b>Total</b>		159	100.0

The results of the home language of the respondents show that the majority of respondents were African followed by the English and Afrikaans speaking students.

#### 4.4.7 Race of respondents

**Table: 4.7: Race of respondents**

		Frequency	Percent
<b>Valid</b>	<b>BLACK</b>	97	61.0
	<b>WHITE</b>	42	26.4
	<b>Total</b>	139	87.4
<b>Other</b>	<b>ASIAN</b>	2	1.3
	<b>COLOURED</b>	2	1.3
	<b>INDIAN</b>	10	6.3
	<b>System</b>	6	3.8
	<b>Total</b>	20	12.6
<b>Total</b>		159	100.0

As a means of getting further insight into the information needs of the culturally diverse students, the respondents were also asked to indicate their race. Since any question about race is a sensitive issue, the researcher had to be careful when coding the data not to exclude any race. For instance where respondents indicated their race as European they were combined with white respondents. Out of the 159 respondents, 61.0% are Africans, 26.9% Whites, 6.3% Indians, 1.3% Asians and 1.3% coloureds.

#### 4.4.8 Nationality of respondents

Respondents were asked to indicate their nationality because the researcher was of the opinion that the nationality of respondents could affect their information-seeking behaviour.

**Table 4.8: Nationality of respondents**

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>
	<b>South African</b>	148	93.1	96.1
	<b>Other</b>	6	3.8	3.9
	<b>Total</b>	154	96.9	100.0
<b>Missing</b>	<b>System</b>	5	3.1	
<b>Total</b>		159	100.0	

The majority of the respondents (93.1%) are South African and only 3.8% are from other nationalities. According to the results 3.1% of the respondents did not answer the question.

#### **4.5 CONCLUSION**

The sampling and data collection methods used in the focus group interviews and the survey were explained. The characteristics of the respondents were discussed. The highest percentage questionnaires returned were from female respondents. Most of the respondents were from the health faculty followed by the engineering faculty. The majority of the respondents were falling into the ages 21-30. The third and second year students were the largest group of respondents.

Those respondent whose home language was African were the largest followed by the English and Afrikaans speaking respondents.

In chapter 5 data on the information needs and behaviour of respondents will be analysed and interpreted to determine whether the library services of the Technikon Witwatersrand library meet their needs.

## CHAPTER 5

### INFORMATION NEEDS AND USAGE BEHAVIOUR OF CULTURALLY DIVERSE STUDENT POPULATIONS: DISCUSSION OF FINDINGS

#### 5.1 INTRODUCTION

The first chapters of the study were mainly theoretical in nature. These chapters helped in developing the framework within which this research could be based, and the model of information usage behaviour of culturally diverse students were developed in section 3.3. This model formed the basis for developing a self-administered questionnaire.

In chapter 4 the sampling and data collection process of the empirical study was discussed. Findings on the response rate during the data collection stage and the sample itself was provided, and the demographic characteristics of the respondents were discussed. These findings provided some insight in library use by undergraduate students.

In this chapter the focus will be on the survey results and findings on the information needs and information-seeking behaviour of culturally diverse student populations.

Since the questionnaire was divided into two main parts, the first part of the questionnaire tried to develop a profile of the respondents, by asking biographical information from them. The second part of the questionnaire focussed on determining the needs and information-seeking behaviour of culturally diverse student populations. The questionnaire attempted to address some of the factors that were identified in the model in figure 3.6. For instance the physical environment in the model plays an important role in the information-seeking behaviour of students. In the model information-seeking behaviour starts with the decision of the student to use the academic library. The decision by students to use the library services and information resources could be determined by factors such as the academic library's ease of access. According to the model in figure 3.6 information needs of students arise mainly from their studies and tasks, thus questions about the

relevancy of the library collections and other library services were included in the empirical study.

Cross tabulations based on home language and variables on usage of library services, preferences and opinions about the usage of the library services by the respondents were also calculated. During data analysis in chapter 4 the results on home language of the respondents yielded results of which some language groups were very few. Therefore it became necessary to combine all black languages into African and all European languages into English and Afrikaans. Some respondents did not indicate the variable race and this could lead to the exclusion of some of the students if cross tabulation with other variables was done, thus the variable home language was used instead.

The importance of the language variable lies in the fact that it is a determining factor in cultural diversity. It is therefore important to determine the differences in attitudes and preferences of various language groups to ensure that the library design services that meet the needs of different cultural groups. For instance depending on the needs of different cultural groups, a multicultural approach to user education could be the most effective way of meeting the user education needs of various cultural groups.

## **5.2 THE LIBRARY THAT SUPPORTS THE RESPONDENTS' STUDIES**

In question 8 the researcher wanted to find out which type of the library mainly supports the respondents' studies. It is evident from table 5.1 that the academic library is well used. A large number of respondents, comprising 93.1% use the academic library to support their studies.

**Table 5.1: The library used to support studies**

<b>Library used to support studies</b>		<b>Unmarked</b>	<b>Marked</b>	<b>Total</b>
<b>Academic</b>	<b>Count</b>	11	148	159
	<b>%</b>	6.9%	93.1%	100.0%
<b>Public Library</b>	<b>Count</b>	140	19	159
	<b>%</b>	88.1%	11.9%	100.0%
<b>Never use a library</b>	<b>Count</b>	154	5	159
	<b>%</b>	96.9%	3.1%	100.0%
<b>Other sources, services</b>	<b>Count</b>	153	6	159
	<b>%</b>	96.2%	3.8%	100.0%

The public library is used by only 11.9% of the respondents. Only five respondents (3.1%) never use a library and 3.8% use other sources such as the faculty collection or colleagues and friends.

### **5.3 MOTIVES FOR LIBRARY USE**

Motives for library use are closely linked to the basic information needs of students as identified in the model in section 3.3.1, as well as to the decision to use information (see section 3.3.2). In question 9 respondents were asked about their motives for using the library services by choosing one of the options “Often”, “Sometimes” or “Never” for the following suggested motivations: using the library for term paper or assignments, group discussions, studying, meet friends and leisure reading. (48.4%) of the respondents indicated that they often use the library for term papers or assignments. 33.3% sometimes uses the library for term or assignments and 14.5% never use the library for their term papers or assignments. 3.8% did not respond to this issue. Another suggested motivation for using the library was group discussions. 20.1% of the respondents claimed that they often come to the library for group discussions. 33.3% sometimes uses the library for group discussions. 37.1% never use the library for this purpose and there was a non-response of 9.4%.

Studying was also listed among the suggested motivations, 51.6% indicated that they often use the library for studying, 29.6% sometimes use the library for studying

and 14.5% never use the library for studying and 4.4% did not respond. Only 19.5% of the respondents sometimes come to the library to meet their friends, while 7.5% often use the library to meet their friends and 61.0% never use the library for this purpose. There was an 11.9% non-response. On the question of using the library for leisure reading, 14.5% of the respondents said that they often use the library for leisure reading. 25.2% sometimes use the library for leisure reading and 11.3% respondents did not respond. The results are represented in table 5.2.

**Table 5.2: Motives for using the library**

		Often	Sometimes	Never	No Response	Total
<b>Term papers or assignments</b>	<b>Count</b>	77	53	23	6	159
	<b>%</b>	48.4%	33.3%	14.5%	3.8%	100.0%
<b>Group discussions</b>	<b>Count</b>	32	53	59	15	159
	<b>%</b>	20.1%	33.3%	37.1%	9.4%	100.0%
<b>Studying</b>	<b>Count</b>	82	47	23	7	159
	<b>%</b>	51.6%	29.6%	14.5%	4.4%	100.0%
<b>Meet friends</b>	<b>Count</b>	12	31	97	19	159
	<b>%</b>	7.5%	19.5%	61.0%	11.9%	100.0%
<b>Leisure reading</b>	<b>Count</b>	23	40	78	18	159
	<b>%</b>	14.5%	25.2%	49.1%	11.3%	100.0%

The results were also cross tabulated with the variable “home language” to determine differences in motives for library use between different cultural groups. This is illustrated in table 5.3.

### **5.3.1 Use of the library for term papers and assignments**

The results of the cross tabulations indicated that 52.2% of the African speaking respondents often use the library for term papers or assignments. 39.1% sometimes use it and 8.7% never use it for that purpose. Although nearly 50% of English and Afrikaans speaking respondents often use it for term papers or assignments, a large percentage namely 25.5% never use the library for term papers or assignments. This could be because of the fact that many English- and Afrikaans-speaking students have Internet access and could access the library’s full text databases remotely.

### 5.3.2 Use of the library for group discussions

The percentage of African respondents (28.9%) who often uses the library for group discussions was more than double than that of the English and Afrikaans speaking respondents (12.5%). 48.7% of African respondents indicated that they sometimes use the library for discussions, while only 20.8% of English and Afrikaans speaking respondents sometimes use the library for this purpose. African students that never use the library for group discussions are 24.4% and a very large percentage (66.7%) of English and Afrikaans speaking students never use it for this purpose.

**Table 5.3: Motives for library use by cultural groups**

	Often		Sometimes		Never		Total	
	No.	%	No.	%	No.	%	No.	%
	<b>African students</b>							
<b>Term papers/ assignments</b>	48	52.2%	36	39.1%	8	8.7%	92	100.0%
<b>Group discussions</b>	26	28.9%	42	48.7%	22	24.4%	90	100.0%
<b>Studying</b>	61	64.2%	28	29.5%	6	6.3%	95	100.0%
<b>Meet friends</b>	9	10.5%	26	30.2%	51	59.3%	86	100.0%
<b>Leisure reading</b>	16	18.6%	36	41.9%	34	39.5%	86	100.0%
	<b>English &amp; Afrikaans students</b>							
<b>Term papers/ assignments</b>	27	49.1%	14	25.5%	14	25.5%	55	100.0%
<b>Group discussions</b>	6	12.5%	10	20.8%	32	66.7%	48	100.0%
<b>Studying</b>	19	37.3%	18	35.3%	14	27.5%	51	100.0%
<b>Meet friends</b>	3	6.3%	4	8.3%	41	85.4%	86	100.0%
<b>Leisure reading</b>	7	14.3%	2	4.1	40	81.6%	49	100.0%

### 5.3.3 Using the library for studying

The results shows that a large number (64.2%) of African students often use the library for studying, whereas only 37.3% of English and Afrikaans speaking respondents often use the library for studying. 29.5% of African respondents and

35.3% of English and Afrikaans speaking respondents sometimes use the library for this purpose. A small percentage (6.3%) of African respondents indicated that they never use the library for studying, whereas a large percentage (27.5%) of English and Afrikaans speaking respondents indicated that they never use the library for this purpose. The possible explanation for this might be the unavailability of study places at home for the majority of African speaking students.

#### **5.3.4 Using the library to meet friends**

Using the library to meet friends is not an important motive for visiting the library. The results showed that 10.5% of African students and only 6.3% of English and Afrikaans speaking students often come to the library for this purpose. 30.2% of African respondents sometimes use the library for this purpose and 8.3% of English and Afrikaans speaking respondents. 59.3% of African respondents and 85.4% of English and Afrikaans speaking respondents indicated that they never come to the library for this purpose.

#### **5.3.5 Using the library for leisure reading**

On the question of using the library for leisure reading, the results revealed that there were significant differences between the English and Afrikaans speaking and African respondents. A large number of English and Afrikaans speaking students (81.6%) and only 39.5% of African students never use the library for leisure reading. Only 18.6% of African students and 14.3% of English and Afrikaans speaking students often use the library for this purpose. 41.9% of African and 4.1% of English and Afrikaans speaking students sometimes use the library for leisure reading.

More than half of the students never use the academic library (54.8%) for leisure reading. It is possible that they use the public library for this purpose. It is surprising to find that a low percentage of English and Afrikaans speaking students use the library for leisure reading, because they are assumed to have had better guidance, education and opportunities for leisure reading.

## 5.4 EXTENT OF USE OF INFORMATION SOURCES

Responses to statements related to the respondents extent of use of information sources are presented in table 5.4.

**Table 5.4: Students' extent of use of various information sources**

		Often	Sometimes	Never	No Response	Total
<b>Library text books and journal collection</b>	<b>Count</b>	96	48	10	5	159
	<b>%</b>	60.4%	30.2%	6.3%	3.1%	100.0%
<b>Information from faculty</b>	<b>Count</b>	48	70	28	13	159
	<b>%</b>	30.2%	44.0%	17.6%	8.2%	100.0%
<b>Colleagues or fellow students</b>	<b>Count</b>	37	83	21	18	159
	<b>%</b>	23.3%	52.2%	13.2%	11.3%	100.0%
<b>Personal collection of materials</b>	<b>Count</b>	49	61	30	19	159
	<b>%</b>	30.8%	38.4%	18.9%	11.9%	100.0%
<b>Use of Internet for information</b>	<b>Count</b>	73	39	35	12	159
	<b>%</b>	45.9%	24.5%	22.0%	7.5%	100.0%

Question 10 tried to determine students' extent of use of various information sources. 96 (60.4%) of the respondents revealed that they often use library textbooks and journals. 30.2% sometimes use library textbooks and journals, while 6.3% never use this part of the collection. 3.1% did not respond to this question.

When the respondents were asked whether they get information from their faculty 30.2% stated that they often get their information from the faculty. 44.0% said that they sometimes use the faculty to obtain their information. 17.6% never use the faculty to get information. 8.2% did not respond.

There is a belief that students sometimes rely on their colleagues or fellow students for their information needs. On this issue 23.3% of the respondents indicated that they often get their information from their colleagues or their fellow students. 52.2% reported that they sometimes get their information from their colleagues or fellow

students and 13.2% never ask their colleagues or fellow students for information. There was a non-response of 11.3%.

The respondents were also asked whether they use their own personal collection. 30.8% indicated using their personal collection often, 38.4% sometimes use their personal collection and 18.9% never use their personal collection. 45.9% of the respondents indicated that they often use the Internet for information. 24.5% sometimes use the Internet sometimes to get information, 22.0% never use the Internet and 7.5% did not respond.

The variable home language was also used to find out if there are differences between various cultural groups regarding extent of use of information sources. The responses are illustrated in table 5.5.

#### **5.4.1 Library textbooks and journals**

69.6% of African respondents revealed that they often use library textbooks and journals while only 50.0% of English and Afrikaans speaking respondents often use this part of the collection. 28.3% of African and 35.7% of English and Afrikaans speaking respondents sometimes use this part of the collection. 2.2% of African and 14.3% of English and Afrikaans respondents indicated that they never use library textbooks and journals.

#### **5.4.2 Getting information from the faculty**

The results show only a small difference between the cultural groups regarding use of faculty as a source of information. When the respondents were asked whether they get information from their faculty, 36.5% of English and Afrikaans speaking respondents stated that they often get information from their faculty. 33.0% of African respondents also indicated that they often get information from their faculty. 50.0% of African and 42.3% of English and Afrikaans speaking respondents reported that they sometimes go to their faculty for this purpose. 21.2% of English and Afrikaans speaking and 17.0% of African students never use their faculty to get information.

### **5.4.3 Relying on colleagues and fellow students for information**

There is a belief that students sometimes rely on their colleagues or fellow students for their information needs. But only 27.6% of African and 27.1% of English speaking respondents often rely on their colleagues and fellow students for information. 62.1% of African respondents indicated that they sometimes get their information from their colleagues or their fellow students, whilst 54.2% of English and Afrikaans speaking respondents reported that they sometimes get their information from their colleagues or fellow students. 18.8% of English and Afrikaans speaking and 10.3% of African respondents never rely on colleagues and fellow students for information.

### **5.4.4 Personal collection of materials**

The cross tabulation between home language and use of respondents' own personal collection rather than the library revealed that 38% of English and Afrikaans speaking participants often use their personal collection, whilst 34.5% of the African respondents often use their personal collection. 46.4% of African respondents and 38% of English and Afrikaans speaking respondents sometimes use their personal collection. Only 19% of African respondents and 24% of English speaking respondents never use their personal collection.

### **5.4.5 Use of the Internet for information**

The cross tabulation results show that 50% of English and Afrikaans speaking respondents indicated that they often use the Internet for information, whilst 48.3% of African respondents often use the Internet to get information. 28.1% of African respondents and 26.9% of English and Afrikaans speaking respondents sometimes use the Internet to get information. 23.6% of African respondents and 23.1% of English and Afrikaans speaking respondents never use the Internet for this purpose. Despite the fact that approximately half of both racial groups reported that they often use the Internet to find information, comments from open-ended questions show that many respondents complain about the lack of Internet access.

**Table 5.5: Extent of use of information sources by cultural groups**

	Often		Sometimes		Never		Total	
	No.	%	No.	%	No.	%	No.	%
<b>African students</b>								
<b>Textbook &amp; journals</b>	64	69.6%	26	28.3%	2	2.2%	92	100.0%
<b>Faculty</b>	29	33.0%	44	50.0%	15	17.0%	88	100.0%
<b>Fellow students</b>	24	27.6%	54	62.1%	9	10.3%	87	100.0%
<b>Personal collections</b>	29	34.5%	39	46.4%	16	19.0%	84	100.0%
<b>Internet</b>	43	48.3%	25	28.1	21	23.6%	89	100.0%
<b>English &amp; Afrikaans students</b>								
<b>Textbooks &amp; journals</b>	28	50.0%	20	35.7%	8	14.3%	56	100.0%
<b>Faculty</b>	19	36.5%	22	42.3%	11	21.2%	52	100.0%
<b>Fellow students</b>	13	27.1%	26	54.2%	9	18.8%	48	100.0%
<b>Personal collections</b>	19	38.0%	19	38.0%	12	24.0%	50	100.0%
<b>Internet</b>	69	50.0%	14	26.9%	12	23.1%	52	100.0%

## 5.5 OPINIONS ABOUT SERVICES OFFERED BY TWR LIBRARY

Question 11 which was concerned with the respondents' opinions about the services offered by the Technikon Witwatersrand Library, tried to determine whether the available services are able to meet the needs of the diverse students. The totals in general of the respondents are represented in table 5.6.

**Table 5.6: Students' views on the services offered by the library**

		Agree	Disagree	Not Sure	No Response	Total
<b>The reserve collection provide sufficient text books</b>	<b>Count</b>	62	50	41	6	159
	<b>%</b>	39.0%	31.4%	25.8%	3.8%	100.0%
<b>The reserve collection provides sufficient loan service</b>	<b>Count</b>	47	55	52	5	159
	<b>%</b>	29.6%	34.6%	32.7%	3.1%	100.0%
<b>The library collection is relevant to course needs</b>	<b>Count</b>	102	34	19	4	159
	<b>%</b>	64.2%	21.4%	11.9%	2.5%	100.0%
<b>The library has required suitable leisure reading materials</b>	<b>Count</b>	54	42	58	5	159
	<b>%</b>	34.0%	26.4%	36.5%	3.1%	100.0%
<b>The library collection in general is current</b>	<b>Count</b>	53	42	58	6	159
	<b>%</b>	33.3%	26.4%	36.5%	3.8%	100.0%

The results revealed that out of 159 respondents only 39% agreed that there are enough text books in the reserve collection, 31.4% disagreed and 25.8% were not sure. The non-response was 3.5%. Responses about the sufficiency of the loan service provided by the reserve section of the library showed that the majority of the respondents 34.6% disagreed that the loan service from the reserve collection is sufficient. 29.6% agreed that the loan service is sufficient. However 32.7% of the respondents reported that they were not sure. This could result from the fact that the respondents are not aware of the availability of the reserve collection service. 3.1% did not respond to this question. The non- response could also indicate non-use.

The results of the question whether the library collection is relevant to the respondents' course needs shows that the majority of the respondents (64.2%) agreed that the library collection is relevant to their course needs. 21.4% disagreed with this statement, 11.9% were not sure and 2.5% did not respond. When asked about the suitability of the leisure reading materials, 34% responded positively, 26.4% of the respondents disagreed. The number of respondents who were not sure about this issue is high (36.5%) and 3.1% did not respond.

The respondents were also asked whether the library collection is current, 33.3% agreed and 26.4% disagreed. The majority of the respondents 36.5% were not sure whether the library collection is current. There was a non-response of 3.8%.

The opinions about services that are offered by the Technikon Witwatersrand library were also correlated with home language. The respondents had to indicate whether they "agree" "disagree" or are "not sure". To simplify the results, the "not sure" responses were not considered during the correlations. The results of the cross tabulation are represented in table 5.7.

### **5.5.1 Text books in the reserve collection**

57.7% of African respondents and 47.2% of English and Afrikaans speaking respondents agreed that the reserve collection has sufficient textbooks. 8% of English and Afrikaans speaking respondents and 42.3 % of African respondents disagreed on this issue.

### **5.5.2 Loan service**

Table 5.7 shows that more than half of English and Afrikaans speaking and African respondents feel that the loan service provided by the reserve section of the library is not sufficient. 56.1% of African and 52.9% of English and Afrikaans speaking respondents disagreed that the loan service provided by the reserve section is sufficient. 47.1% of English and Afrikaans and 43.9% of African respondents agreed that the loan service provided by the reserve section is sufficient.

### **5.5.3 Relevancy of library collection to course needs**

The cross tabulation results show that the majority of African respondents 81.0% agreed that the library collection is relevant to their course needs. But a much lower percentage (63.0%) English and Afrikaans speaking respondents agreed with this issue.

Although various cultural groups agreed that the library collection is relevant to their course needs, table 5.7 shows that more than a third (37.0%) of English and Afrikaans speaking respondents (compared to 19.0% of African respondents) disagreed on this issue.

### **5.5.4 Availability of suitable leisure reading materials**

The question about the suitability of the leisure reading materials, 38 (62.3%) of the African respondents and 43.8% of the English and Afrikaans speaking respondents agreed that the leisure reading material is suitable. 56.3% of English and Afrikaans speaking respondents disagreed. It was indicated in 5.3.1.5 that African students use more leisure reading materials from the academic library than English and Afrikaans speaking respondents.

It is possible that these students prefer using the public library. The reason for English and Afrikaans speaking students to disagree about the suitability of leisure reading materials could be the result of bad selection of these materials by the librarians.

### 5.5.5 Currency of the library collection in general

Table 5.7 shows that when respondents were asked whether the library collection is current, 58.6% African respondents agreed. 51.4% English and Afrikaans respondents also agreed. 48.6% of the English and Afrikaans speaking and 41.4% of the African respondents disagreed. Although the majority of students do regard the library collection in general to be current, a large percentage of respondents are not convinced that the collection is current.

In question 16 many respondents commented that most of the books were outdated and do not meet their course needs. Respondents also complained about the lack of biographies and leisure books. The respondents complained about the lack of African literature. There were complaints about the reserve collection, respondents indicated that more copies of materials are needed in the reserve section.

**Table 5.7: Opinions about library services by cultural groups**

	Agree		Disagree		Total	
	No.	%	No.	%	No.	%
	<b>African students</b>					
<b>Textbooks in reserve collection</b>	41	57.7%	30	42.3%	71	100.0%
<b>Loan service</b>	29	43.9%	37	56.1%	66	100.0%
<b>Relevancy of library collection</b>	68	81.0%	16	19.0%	84	100.0%
<b>Availability of leisure reading material</b>	38	62.3%	23	37.7%	61	100.0%
<b>Currency of collection in general</b>	34	58.6%	24	41.4%	58	100.0%
	<b>English &amp; Afrikaans students</b>					
<b>Textbooks in reserve collection</b>	17	47.2%	19	52.8%	36	100.0%
<b>Loan service</b>	16	47.1%	18	52.9%	34	100.0%
<b>Relevancy of library collection</b>	29	63.0%	17	37.0%	46	100.0%
<b>Availability of leisure reading material</b>	14	43.8%	18	56.3%	32	100.0%
<b>Currency of collection in general</b>	18	51.4%	17	48.6%	35	100.0%

## 5.6 PHYSICAL ACCESSIBILITY OF THE LIBRARY

In question 12 respondents were asked questions about their views on the physical accessibility of the library. Their responses could be used to elicit information about the effects of the ease of access on their information needs and information-seeking behaviour. In this case access could be determined by both physical and social aspects. The social aspects can be just as significant, for example the library may be within reach, but its access to students who do not reside in the residences may be restricted by lack of public transport after hours. Questions about the physical accessibility of the library could also help to assess whether physical accessibility was not a barrier to library use. The results of the general responses are illustrated in table 5.8.

**Table 5.8: Students' views on the accessibility of the library**

		Agree	Disagree	Not Sure	No Response	Total
<b>The library is well suited and in reach of most students</b>	<b>Count</b>	125	21	9	4	159
	<b>%</b>	78.6%	13.2%	5.7%	2.5%	100.0%
<b>The library is open when needed</b>	<b>Count</b>	95	54	7	3	159
	<b>%</b>	59.7%	34.0%	4.4%	1.9%	100.0%
<b>It is easy to access the catalogue</b>	<b>Count</b>	98	31	26	4	159
	<b>%</b>	61.6%	19.5%	16.4%	2.5%	100.0%
<b>Library materials are shelved as indicated in the catalogue</b>	<b>Count</b>	109	19	27	4	159
	<b>%</b>	68.6%	11.9%	17.0%	2.5%	100.0%
<b>Library materials are quickly reshelfed after use</b>	<b>Count</b>	56	54	45	4	159
	<b>%</b>	35.2%	34.0%	28.3%	2.5%	100.0%
<b>There is adequate lighting in the library</b>	<b>Count</b>	132	14	7	6	159
	<b>%</b>	83.0%	8.8%	4.4%	3.8%	100.0%
<b>There is proper air conditioning in the library</b>	<b>Count</b>	101	38	14	6	159
	<b>%</b>	63.5%	23.9%	8.8%	3.8%	100.0%
<b>There are clear directional signs in the library</b>	<b>Count</b>	101	36	16	6	159
	<b>%</b>	63.5%	22.6%	10.1%	3.8%	100.0%
<b>Helpful instruction are available at the computer workstations</b>	<b>Count</b>	82	42	28	7	159
	<b>%</b>	51.6%	26.4%	17.6%	4.4%	100.0%

78.6% of the respondents indicated that the library is situated within the reach of most students, 13.2% disagreed that the library was well suited for most students and 5.7% of the respondents were not sure.

The question about the library opening hours resulted in the following responses: 59.7% agreed that the library is open when needed, 34.0% disagreed that the library is always open when needed and 4.4% were not sure.

The results indicate that 61.6% of the respondents felt that it is easy to access the library catalogue, while 19.5% disagreed about the ease of access of the library catalogue. The number of respondents who were not sure about this question is 16.4% and 2.5% did not respond to the question. One could assume that about 40% do not find the catalogue easy to access or use.

On the question about finding library materials on the shelves, 68.6% of the respondents agreed that they find the library material at the correct shelf number as indicated by the catalogue, 11.9% disagreed. The number of respondents who were not sure was 17%, which is higher than the number of respondents who disagreed. There was a non-response of 2.5%.

35.2% of the respondents agreed that library materials are quickly re-shelved after they have been used, 34% disagreed and 28.3% were not sure. This indicates a problem that must receive attention.

Most students are satisfied with lighting in the library. 83.0% of the respondents indicated that lighting is adequate, 8.8% indicated that lighting is inadequate and 4.4% were unsure. Most respondents, 63.5%, agreed that there is proper air-conditioning in the library, 23.9% disagreed and 8.8% were not sure. The non-response was 3.8%.

There was a positive response about the library's directional signs. 63.5% of the participants indicated that signage in the library is clear, 22.6% disagreed and 10.1% were not sure. 7 (3.8%) of the participants did not respond.

The answers provided by 51.6% of the respondents on the availability of helpful instructions at the library computer workstations, shows that there are helpful instructions available next to the computer workstations. However, 26.4% disagreed, 17.6% were not sure and 4.4% did not respond.

Cross tabulations based on home language and physical accessibility variables were done in order to find out which cultural groups find the library accessible. The results are represented in table 5.9.

### **5.6.1 Placing of the library**

A very large percentage 94.4% of English and Afrikaans speaking and 79.3% of the African respondents agree that the library is well situated. 20.7% of the African and only 5.6% of the English and Afrikaans speaking group respondents disagreed that the library was well situated for most students. The actual data in table 5.9 shows that there is a significant difference between the language groups. More African respondents disagreed that the library is well situated, this could result from the fact that they do not reside on campus and are using public transport.

**Table 5.9: Physical accessibility of the library by cultural groups**

	Agree		Disagree		Total	
	No.	%	No.	%	No.	%
<b>African students</b>						
<b>Placing of the library</b>	69	79.3%	18	20.7%	87	100.0%
<b>Opening hours</b>	42	47.2%	47	52.8%	89	100.0%
<b>Accessibility of the catalogue</b>	62	82.7%	13	17.3%	75	100.0%
<b>Finding of materials</b>	67	88.2%	9	11.8%	76	100.0%
<b>Reshelving of materials</b>	32	46.4%	37	53.6%	69	100.0%
<b>Adequate lighting</b>	81	94.2%	5	5.8%	86	100.0%
<b>Proper air conditioning</b>	65	75.6%	21	24.4%	86	100.0%
<b>Directional signs</b>	64	75.3%	21	24.7%	85	100.0%
<b>Instructions at computers</b>	57	76.0%	18	24.0%	75	100.0%
<b>English &amp; Afrikaans students</b>						
<b>Placing of the library</b>	51	94.4%	3	5.6%	54	100.0%
<b>Opening hours</b>	49	90.7%	5	9.3%	54	100.0%
<b>Accessibility of the catalogue</b>	34	69.4%	15	30.6%	49	100.0%
<b>Finding of materials</b>	37	78.7%	10	21.3%	47	100.0%
<b>Reshelving of materials</b>	23	59.0%	16	41.0%	39	100.0%
<b>Adequate lighting</b>	46	85.2%	8	14.8%	54	100.0%
<b>Proper air conditioning</b>	31	66.0%	16	34.0%	47	100.0%
<b>Directional signs</b>	33	70.2%	14	29.8%	47	100.0%
<b>Instructions at computers</b>	22	50.0%	22	50.0%	44	100.0%

### 5.6.2 Library's opening hours

The cross tabulation results on the library opening hours shows that 90.7% of English and Afrikaans speaking and 47.2% of African respondents agreed that the library is open when needed, whilst 52.8% of the African and 9.3% of the English and Afrikaans respondents disagreed on this issue. It is clear that library-opening hours are only a problem for African students. This is not related to the placing of the library (see section 5.6.1), but rather to other circumstances of African students, such as housing.

Comments from open-ended question 16 also revealed that a number of respondents complained about the short library hours especially during exam times and that the library does not open on Sundays.

Many respondents were concerned about the fact that the overnight materials in the reserve section were issued out only after 16h00. Curry (2003:376) is of opinion that students are mostly worried about the library hours during the examination time.

### **5.6.3 Accessibility of the catalogue**

The results in table 5.9 indicate that 82.7% of the African and 69.4% of English and Afrikaans speaking respondents agreed that it is easy to access the library catalogue, whilst 30.6% of the English and Afrikaans speaking and 17.3% of the African respondents do not find the library catalogue easy to access. The results show that African students have no problem with the language or technology when using the catalogue. In this matter they have no disadvantage comparing with the English and Afrikaans students.

Although most students (77.4%) reported that they find it easy to access the library catalogue, the respondents in question 16 were concerned that the library OPACS are always out of order.

### **5.6.4 Finding materials**

88.2% of African respondents agreed that they find the library materials at the correct shelf number as indicated by the catalogue. 78.7% of English and Afrikaans speaking respondents also agreed about this issue. 21.3% of the English and Afrikaans speaking and 11.8% of the African respondents disagreed that they find the library materials at the correct shelf numbers. It is clear that most students are positive about information sources in the catalogue and the shelving of library materials. However in the open-ended question some respondents indicated that some books are not easy to find even if the catalogue indicates that they are available.

### **5.6.5 Re-shelving of library materials after use**

59.0% of the English and Afrikaans speaking and 46.4% of the African participants agreed that library materials are re-shelved quickly after use. 53.6% of the African and 41.0% of the English and Afrikaans participants disagreed about this issue. Seeing that approximately half of the respondents are of opinion that shelving is not done quickly enough, the library will have to look into the matter.

Many respondents in the open-ended question also complained that library materials are not shelved on time.

### **5.6.6 Adequate lighting in the library**

It is clear in table 5.9 that lighting in the library is not a problem. 94.2% of the African and 85.2% of the English and Afrikaans-speaking students agreed that the library's lighting is adequate, and 14.8% of the English and Afrikaans speaking and 5.8% of the African respondents disagreed that there is adequate lighting in the library.

### **5.6.7 Air conditioning in the library**

African students are more satisfied with the air conditioning in the library than the English and Afrikaans-speaking students. 75.6 % of African students agreed that there is proper air conditioning in the library, whilst 66% of English and Afrikaans students agreed. 34% of English and Afrikaans speaking and 24.4% of African students disagreed on this issue.

### **5.6.8 Directional signs in the library**

The results in table 5.9 show that 75.3% of African and 70.2% of English and Afrikaans speaking participants agreed that signage in the library is clear, whilst 29.8% of English and Afrikaans speaking and 24.7% of African participants disagreed.

### 5.6.9 Helpful instructions at the computer workstations

76% of the African respondents agreed that they find helpful instructions at the library computer workstations. However, only 50% of the English and Afrikaans-speaking respondents agreed. 60% of the English and Afrikaans speaking and 24% of the African respondents disagreed.

### 5.7 USER EDUCATION EFFORTS IN THE LIBRARY

Since user education is important in ensuring that students make optimal use of the library services and its resources, question 13 was included to investigate the efforts that were made by librarians towards user education. The library staffs' expertise and the ability to interact with students are important in educating the students to use the library and its resources. The results shown in table 5.10 provide a valuable insight in the respondents' views about the library's user education efforts. The results were also cross tabulated with the variable "language" in order to find out whether the library's user education programmes meet the needs of different cultural groups

**Table 5.10: User education efforts in the library**

		Often	Sometimes	Never	No Response	Total
<b>The librarian provides sufficient library orientation to all racial groups</b>	<b>Count</b>	67	60	25	7	159
	<b>%</b>	42.1%	37.7%	15.7%	4.4%	100.0%
<b>Library brochures provides clear information about services and resources</b>	<b>Count</b>	64	66	20	9	159
	<b>%</b>	40.3%	41.5%	12.6%	5.7%	100.0%
<b>Library user education programmes are relevant to course needs</b>	<b>Count</b>	68	68	17	6	159
	<b>%</b>	42.8%	42.8%	10.7%	3.8%	100.0%
<b>Instruction in the use of the library and sources is given to all racial groups</b>	<b>Count</b>	82	47	19	11	159
	<b>%</b>	51.6%	29.6%	11.9%	6.9%	100.0%

42.1% of the respondents indicated that librarians often provide sufficient library orientation to all racial groups. 37.7% answered that sufficient library orientation to all racial groups happens sometimes. 15.7% of the respondents felt that sufficient

library orientation is *never* provided by the librarian to all racial groups and 4.4% did not respond.

The results indicate that approximately 80% of the respondents are of opinion that sufficient library orientation is provided.

Quite similar results followed when respondents were asked about the information on services and resources provided by the library orientation brochure, 40.3% of the respondents indicated that the orientation brochure *often* provides clear information about services and resources. 41.5% of the respondents said information in the library orientation brochure is *sometimes* clear. 12.6% said the information is *never* clear and 5.7% did not answer the question..

On the question concerning the relevancy of the user education programmes to the respondents' course needs, 42.8% reported that user education programmes are *often* relevant to their course needs. 42.8% chose the *sometimes* option, 10.7% chose the *never* option and 3.8% did not respond.

The response as to whether instruction in the use of the library and its sources is given to all racial groups was very positive: 51.6% of the respondents said instruction on use of the library and its resources is *often* given to all racial groups and 29.6% said it is done *sometimes*. Only 11.9% stated that the instruction in the use of the library and its sources is *never* given to all racial groups and 6.9% did not respond.

### **5.7.1 Library orientation**

Cross tabulations of language and library orientation in table 5.11 revealed that there was a slight difference of opinions between English and Afrikaans and African respondents on the question whether librarians provide sufficient orientation to all racial groups. 45.1% of the African and 40.0% of the English and Afrikaans respondents indicated that librarians *often* provide library orientation to all racial groups. 43.6% of the English/Afrikaans speaking and 37.4% of the African respondents indicated that library orientation to all racial groups happens *sometimes*.

17.6% of the African and 16.4% of the English and Afrikaans-speaking respondents felt that sufficient library orientation is *never* provided to all racial groups.

It can be concluded that library orientation to all racial groups is regularly done and is therefore not a matter of serious concern.

### **5.7.2 Library brochures**

African students are more positive about the library brochures. The cross tabulations revealed that 48.9% of African and 31.5% of English and Afrikaans speaking students indicated that the library orientation brochure *often* provides clear information about services and resources. 55.6% of English and Afrikaans speaking and 37.8% of African students indicated that information in the library orientation brochure is *sometimes* clear. 13.3% of African and 13% of English and Afrikaans speaking students indicated that the information is *never* clear.

It seems that clarity of information in the orientation brochure seems to be no serious problem. 13.2% of respondents indicated a serious problem with clarity.

### **5.7.3 Relevancy of library user education programmes**

Table 5.11 revealed that 48.9% of the African respondents reported that user education programmes are *often* relevant to their course needs. While a much lower percentage (36.4%) of the English and Afrikaans respondents felt that the user education programmes are *often* relevant to their course needs. 49.1% of English and Afrikaans speaking respondents claimed that these programmes are *sometimes* relevant to their course needs, whilst 42.4% of African respondents indicated that the user education programmes are *sometimes* relevant to their course needs. A slightly higher percentage (14.5%) of the English and Afrikaans speaking respondents than African respondents (8.7%) pointed out that user education programmes are *never* relevant to their course needs.

It can be concluded that most students find user education programmes relevant to their course needs, however, it is clear that English and Afrikaans speaking students are less satisfied than African students with the relevancy of these programmes.

#### **5.7.4 Instruction in the use of the library and its sources**

Table 5.11 shows that African respondents (64%) agree that instruction in the use of the library and its resources is *often* given to all racial groups unlike 41.5% of English and Afrikaans speaking respondents who disagree that this is the case. 47.2% of the English and Afrikaans speaking and 23.6% of the African respondents felt that instruction in the use of the library and its sources is *sometimes* given to all racial groups. 12.4% of the African and 11.3% of the English and Afrikaans speaking respondents stated that instruction in the use of the library and its sources is *never* given to all racial groups.

It is possible that librarians pay more attention to problems of African students in the light of previous disadvantages than to English and Afrikaans speaking students.

**Table 5.11: User education efforts in the library by cultural groups**

	Often		Sometimes		Never		Total	
	No.	%	No.	%	No.	%	No.	%
<b>African students</b>								
<b>Sufficient orientation provided to all racial groups</b>	41	45.1%	34	37.4%	16	17.6%	91	100.0%
<b>Library brochure provides clear information about services</b>	44	48.9%	34	37.8%	12	13.3%	90	100.0%
<b>User education programmes are relevant to course needs</b>	45	48.9%	39	42.4%	8	8.7%	92	100.0%
<b>Instruction given to all racial groups</b>	57	64.0%	21	23.6%	11	12.4%	89	100.0%
<b>English and Afrikaans students</b>								
<b>Sufficient orientation provided to all racial groups</b>	22	40.0%	24	43.6%	9	16.4%	55	100.0%
<b>Library brochure provides clear information about services</b>	17	31.5%	30	55.6%	7	13.0%	54	100.0%
<b>User education programmes are relevant to course needs</b>	20	36.4%	27	49.1%	8	14.5%	55	100.0%
<b>Instruction given to all racial groups</b>	22	41.5%	25	47.2%	6	11.3%	53	100.0%

The results on the whole indicate that a large percentage of African students are of opinion that the library's user education efforts are sufficient. However, the results indicate that English and Afrikaans speaking students are less satisfied with the various user education efforts.

## **5.8 CHARACTERISTICS OF THE LIBRARY STAFF**

It was necessary to include question 14 relating to the library staff's characteristics to determine the respondents' perception of the library staff's attitude, etc. The library staff's attitude could affect the whole library service. The respondents overall responses are illustrated in table 5.12.

The answers provided by 59.7% of the respondents show that librarians are available and helpful, while 20.8% disagreed. 17.0% were not sure and 2.5% did not respond. 49.7% agreed that the librarians are approachable and friendly to all racial

groups, but 20.8% disagreed. The number of respondents who were not sure was slightly higher at 25.2% and 4.4% did not respond. When asked if librarians conduct reference interviews in order to establish their information needs, 22% agreed, 39.6% disagreed and 32.1% were not sure about this statement, 6.3% did not answer the question. On the issue of interaction between respondents and librarians, 42% of the respondents agreed that their interaction with librarians helps them to satisfy their information needs. 19.5% disagreed and 33.3% were not sure. 35.2% of the respondents agreed that information librarians are knowledgeable in their subject areas, while 24.5% disagreed and 32.7% were not sure. The question about the librarians' willingness to seek help from other staff members, resulted in 37.7% respondents agreeing, 17.6% disagreed and 39.6% were not sure. There was a non-response of 5%. Regarding the question whether the respondents find it easy to understand the librarian, 52.2% of the respondents agreed, 18.2% disagreed and 23.3% were not sure, 6.3% did not respond.

**Table 5.12: Characteristics of librarians**

		Agree	Disagree	Not Sure	No Response	Total
<b>Librarians are available and helpful when needed</b>	<b>Count</b>	95	33	27	4	159
	<b>%</b>	59.7%	20.8%	17.0%	2.5%	100.0%
<b>Librarians are approachable and friendly to all racial groups</b>	<b>Count</b>	79	33	40	7	159
	<b>%</b>	49.7%	20.8%	25.2%	4.4%	100.0%
<b>Librarians conduct interviews to determine information needs</b>	<b>Count</b>	35	63	51	10	159
	<b>%</b>	22.0%	39.6%	32.1%	6.3%	100.0%
<b>Interaction with librarians helps to satisfy information needs</b>	<b>Count</b>	67	31	53	8	159
	<b>%</b>	42.1%	19.5%	33.3%	5.0%	100.0%
<b>Information librarian show relevant subject knowledge</b>	<b>Count</b>	56	39	52	12	159
	<b>%</b>	35.2%	24.5%	32.7%	7.5%	100.0%
<b>Librarian show willingness to seek help from other staff members</b>	<b>Count</b>	60	28	63	8	159
	<b>%</b>	37.7%	17.6%	39.6%	5.0%	100.0%
<b>I find it easy to understand the librarian</b>	<b>Count</b>	83	29	37	10	159
	<b>%</b>	52.2%	18.2%	23.3%	6.3%	100.0%

The results were also cross-tabulated with home language to determine how different groups experience the librarians that serve them. The findings are illustrated in table 5.13.

**Table 5.13: Characteristics of the library staff by cultural groups**

	Agree		Disagree		Totals	
	No.	%	No.	%	No.	%
	<b>African students</b>					
<b>Availability &amp; helpfulness</b>	61	78.2%	17	21.8%	78	100.0%
<b>Approachability &amp; friendliness</b>	49	70.0%	21	30.0%	70	100.0%
<b>Interviews</b>	25	41.7%	35	58.3%	60	100.0%
<b>Interaction</b>	46	76.7%	14	23.3%	60	100.0%
<b>Subject knowledge</b>	39	67.2%	19	32.8%	58	100.0%
<b>Willingness to seek help</b>	43	70.5%	18	29.5%	61	100.0%
<b>Understanding the librarian</b>	49	71.0%	20	29.0%	69	100.0%
<b>English &amp; Afrikaans students</b>						
<b>Availability &amp; helpfulness</b>	29	65.9%	15	34.1%	44	100.0%
<b>Approachability &amp; friendliness</b>	27	69.2%	12	30.8%	39	100.0%
<b>Interviews</b>	9	25.7%	26	74.3%	35	100.0%
<b>Interaction</b>	19	52.8%	17	47.2%	36	100.0%
<b>Subject knowledge</b>	16	47.1%	18	52.9%	34	100.0%
<b>Willingness to seek help</b>	16	61.5%	10	38.5%	26	100.0%
<b>Understanding the librarian</b>	29	76.3%	9	23.7%	38	100.0%

### 5.8.1 Librarian’s availability and helpfulness

The answers provided show that 78.2% of African and 65.9% of English and Afrikaans speaking respondents are of opinion that librarians are available for students and that they are helpful. 34.1% of English and Afrikaans speaking and 21.8% of African respondents disagreed.

### 5.8.2 Approachability and friendliness of librarians

Participants of both language groups were positive that librarians are approachable and friendly to all racial groups. 70% of African and 69.2% of English and Afrikaans speaking students agreed about this matter. 30.8% of English and Afrikaans speaking and 30% of African respondents disagreed.

### **5.8.3 Interviews to determine information needs**

Less than half (41.7%) of African students and only one quarter (25.7%) of English and Afrikaans speaking respondents agreed that librarians conduct reference interviews in order to establish their information needs. 74.3% of English and Afrikaans speaking and 58.3% of African students disagreed.

### **5.8.4 Interaction with librarians**

Table 5.13 shows that a much higher percentage (76.7%) of African participants than English and Afrikaans speaking respondents (52.8%) were positive that the interaction between librarians and students helps to satisfy information needs. 47.2% of English and Afrikaans speaking and 23.3% of African respondents disagreed that the interaction with librarians helps to satisfy information needs.

### **5.8.5 Librarian's ability to show relevant subject knowledge**

Most of the African respondents (67.2%) are of the opinion that librarians have the necessary subject knowledge to give them guidance. However, less than half (47.1%) of English and Afrikaans speaking respondents agreed that information librarians the have necessary subject knowledge to give them guidance. 52.9% of English and Afrikaans speaking and 32.8% of African respondents disagreed.

### **5.8.6 Librarian's willingness to seek help**

A high percentage of respondents (67.8%) are of opinion that librarians are willing to seek help from colleagues when necessary. The cross tabulation results show that 70.5% of African and 61.5% of English and Afrikaans speaking students agreed that librarians' show willingness to seek help from other staff members when necessary. 38.5% of English and Afrikaans speaking and 29.5% of African students disagreed on this issue.

### **5.8.7 Understanding the librarian**

A high percentage of respondents (72.9%) are of the opinion that they find it easy to understand librarians. Both English and Afrikaans speaking and African respondents share the opinion that they find it easy to understand the librarian. In this case a larger percentage (76.3%) of English and Afrikaans speaking respondents than African respondents (71%) agreed that they find it easy to understand the librarian, 29.0% of African and 23.7% of English and Afrikaans speaking respondents disagreed.

### **5.9 STUDENTS' PERSONAL CHARACTERISTICS**

The responses to the four statements in question 15 relating to the students' personal characteristics were also correlated with the students' home language. The inclusion of the questions, which relates to the students' characteristics, could help to determine the students' personal barriers. These barriers could prevent students from using the library services and its resources. Students have been found to have language problems, lacking library experience and to have a lack of computer and information handling skills (Rehman & Mohammad 2001).

The results in table 5.14 revealed that the majority (92.5%) of the respondents agree that they have the ability to express themselves clearly and 11.3% disagreed. 2.5% were not sure. To the question, which relates to their experience in using the library, 83.6% had a strong belief that they know how to use the library, 3.8% disagreed and 9.4% were not sure.

**Table 5.14: Library and information skills of students**

		Agree	Disagree	Not Sure	No Response	Total
<b>I have the language ability to express myself clearly</b>	<b>Count</b>	147	2	4	6	159
	<b>%</b>	92.5%	1.3%	2.5%	3.8%	100.0%
<b>I have experience in the use of the library</b>	<b>Count</b>	133	6	15	5	159
	<b>%</b>	83.6%	3.8%	9.4%	3.1%	100.0%
<b>I have received training in the use of the library and its resources</b>	<b>Count</b>	61	78	13	7	159
	<b>%</b>	38.4%	49.1%	8.2%	4.4%	100.0%
<b>I have computer and the information handling skills</b>	<b>Count</b>	138	5	9	7	159
	<b>%</b>	86.8%	3.1%	5.7%	4.4%	100.0%

The answers provided by the respondents about the training in the use of the library and its resources, reveal that 38.4% of the respondents agreed that they received training in the use of the library, 49.1% disagreed and 8.2% were not sure.

In spite of the fact that about 50% of the respondents have not received training in the use of the library and its resources, when asked about their computer and information handling skills, many (86.8%) indicated that they do have these skills. Only 3.1% disagreed and 5.7% were not sure.

The results on students' characteristics in table 5.14 were also cross-tabulated by the students' language in order to determine the effect their culture group have on the way they use the library. The cross-tabulated results are illustrated in table 5.15.

**Table 5.15: Students' personal characteristics by cultural groups**

	Agree		Disagree		Total	
	No.	%	No.	%	No.	%
	<b>African students</b>					
Students' ability to express themselves clearly (communication skills)	89	98.9%	1	1.1%	90	100.0%
Experience in the use of the library	78	92.9%	6	7.1%	84	100.0%
Training in the use of the library (Library education)	32	39.0%	50	61.0%	82	100.0%
Computer and information handling skills	83	96.5%	3	3.5%	86	100.0%
	<b>English &amp; Afrikaans students</b>					
Students' ability to express themselves clearly (communication skills)	53	98.1%	1	1.9%	54	100.0%
Experience in the use of the library	50	100.0%	0	.0%	50	100.0%
Training in the use of the library (Library education)	27	51.9%	25	48.1%	52	100.0%
Computer and information handling skills	50	96.2%	2	3.8%	52	100.0%

### 5.9.1 Students' ability to express themselves clearly

Table 5.15 shows that when respondents were asked about their ability to express themselves clearly or their communication skills, 98.9% of African and 98.1% of English and Afrikaans speaking students agreed that they can express themselves clearly. A very small number 1.9% of English and Afrikaans speaking and 1.1% of African students disagreed.

It can be concluded that African students, in terms of their own perceptions, do not have any disadvantage as far as communication skills are concerned. The possibility of a higher percentage of black librarians in libraries may also play a role.

### 5.9.2 Experience in the use of the library

Nearly 128 (95.5%) of all respondents are of the opinion that they have experience in using the library. The results in table 5.15 revealed that 100% of English and Afrikaans speaking and 92.9% of African students indicated that they have the necessary experience to use the library. Only 7.1% of African students disagreed.

The results show that English and Afrikaans students still have a better history of library use than African students.

### **5.9.3 Library education**

In spite of the high percentage (83.6%) of students that claimed to have experience in the use of the library nearly half (49.1%) of the students stated that they received no training in the use of the library. The answers provided by the respondents about the training in the use of the library and its resources, revealed that 51.9% of English and Afrikaans speaking and only 39% of African respondents agreed that they have received training in the use of the library. 61% of African and 48.1% of English and Afrikaans speaking respondents disagreed that they received library education.

It is a point of concern that only 39% of the African respondents have received training in the use of the library. There is a need for library user education targeted for this group of users.

### **5.9.4 Computer and information handling skills**

There is a discrepancy in the results of library education and computer and information handling skills, 86.8% of all respondents claim to have the necessary computer and information handling skills. Despite the fact that a large percentage of African and English and Afrikaans speaking respondents claimed that they haven't received training in the use of the library and its resources (see table 5.15).

96.5% of African and 96.2% of English and Afrikaans speaking students indicated that they do have computer and information handling skills. Only 3.8% of English and Afrikaans speaking and 3.5% of African respondents disagreed that they have these skills.

The findings of the cross tabulations show that the respondents believe that they have necessary skills to use the library and information effectively. However, it is difficult to determine whether this is definitely the case. An influencing factor could be

the fact that the majority of the respondents were in their third (39.6%) and (34.6%) second year of study and have gained experience in using the library.

Findings by many studies on the personal characteristics of culturally diverse students were contradicted by the survey results of the present study. For instance many studies have found that culturally diverse students lack information handling skills, might not have experience in using the library and some lack the language ability to express themselves. 92.5% of all respondents agreed that they have an ability to express themselves clearly. 83.6% have experience in using the library and 86.8% have computer and information handling skills.

### **5.10 COMMENTS ABOUT LIBRARY SERVICES**

Since it was difficult to code or analyse the responses statistically, the problems and the suggestions were grouped together and summarized. Out of 159 respondents who participated in the survey, 130 respondents answered question 16. Most of the comments about library services were integrated into the applicable sections in chapter 4 and 5. While the majority of the respondents do not have problems with the factors concerned with physical accessibility of the Technikon Witwatersrand Library, most respondents commented about the fact that the library was too noisy. There was also some concern about the lack of study spaces, insufficient seating places and inadequate photocopying machines.

### **5.11 SUGGESTIONS TO IMPROVE LIBRARY SERVICES**

The majority of the respondents in question 17 suggested that the existing library hours should be extended and that the library should also be opened on Sundays. The respondents suggested that a bigger interactive library should be built and the study and seating spaces should be increased.

There were also some suggestions to build a discussion room inside the library in order to alleviate the noise problems.

Library staff should be sent for training in communication skills and on how to interact with students. Respondents indicated that there was a need for library user education.

The library should conduct research about the needs of different faculties. The library's book budget should be increased. More computers and Internet facilities should be added in the library. Photocopying machines should also be increased.

The results of the focus group interviews also confirm the concerns that were raised by the students in the survey in section 5.10 above. The results of the focus group interviews reveal that students are concerned about the textbook and journal availability, collections, which are not relevant to course needs, lack of study spaces, photocopying services and insufficient opening hours.

The majority of the students also indicated that there are no user education efforts in the library. This could be attributed to the fact that they are not aware of the existence of library orientation and user education programmes.

## **5.12 CONCLUSION**

In this chapter the results of a survey on information needs and behaviour of culturally diverse students are reported. The empirical investigations show that culturally diverse students have various information needs. Motives for library use are: using the library for studying as the most important motive, followed by use of the library for term papers or assignments, and lastly using the library for group discussions. Results on the respondents' motives for using the library in table 5.3 have revealed that, the majority of African students use the library for studying. This could have implications for study and seating spaces. Most English and Afrikaans speaking students and more than half of the African students often use the library for their term papers or assignments.

The responses on the extent of use of information sources revealed that respondents regard library textbooks and journals, as well as the Internet to be their most preferred sources of information. Various cultural groups indicated that they

prefer to use their own personal collection as well as getting information from their faculty.

There is no significant difference between cultural groups in terms of relying on their colleagues for information, using their collections and the Internet.

The results emphasize the need for adequate study spaces, collection development, resources such as computers and databases and an adequate reserve collection.

The comments from the open-ended question in question 16 reveal that the majority of the respondents complained that library staff lacks communication skills. Some participants felt that the majority of the library staff are not knowledgeable, are unhelpful and always have a negative attitude towards the students. Some staff members are said to be unapproachable and unfriendly. There was also a complaint that library staff communicate in their mother tongue. It is possible that this concern was raised by white respondents, because the results in section 5.8 reveal that there are differences in opinion between cultural groups concerning the library's staff subject knowledge, availability and helpfulness, and that interaction between librarians and students helps in satisfying information needs. The majority of African respondents agreed that information librarians have relevant subject knowledge, are helpful and available when needed and that interaction between librarians and students helps in satisfying information needs. However, 47.1% of English and Afrikaans speaking respondents disagreed that information librarians have relevant subject knowledge.

The general comments about the library services may play an important role in improving the library services. The open-ended questions allowed the respondents to really express their concerns about library services, which was impossible in the questionnaire where they had to indicate their responses by either "agreeing" or "disagreeing".

The large percentage of respondents indicating "sometimes" or "never" regarding a service may indicate that services need to be re-evaluated and should be properly marketed.

In chapter 6, which is the final chapter of this study, the researcher will deal with the findings and recommendations.

## CHAPTER 6

### FINDINGS AND RECOMMENDATIONS

#### 6.1 INTRODUCTION

The aim of the study was to investigate the way in which academic library's services meet the information needs of culturally diverse student populations by examining the role that was played by the Technikon Witwatersrand Library. The research was conducted by using the following methods, the literature study, focus group interviews and a survey using a structured questionnaire.

The specific questions posed in the study were:

(a) Which typical characteristics does a culturally diverse student body have?

There were some assumptions that culturally diverse students could have personal characteristics which could prevent them from utilizing the library services fully. The research results on the personal characteristics of students revealed that 83.6% of the students indicated that they have an experience in using the library, 92.5% have the language ability to express themselves clearly and 86.8% have computer and information handling skills. The majority of the library users were female as well as students who were in their second and third year of study. The research results indicated that culture, social factors and demographic factors may not necessarily have an influence on the respondent's usage of library services and its sources, since the results revealed that the majority of African respondents were not actually disadvantaged as assumed.

(b) Which typical information needs and information-seeking behaviour patterns do these students have and which factors influence and determine their information behaviour?

The study revealed that the majority of students use the academic library to support their studies. High percentage of African students (64.2%) reported that

they use the library mainly for studying followed by 52.2% of African students who use the library for their term papers or assignments. 28.9% of African students compared to 12.5% of English and Afrikaans speaking respondents use the library for group discussions. The research results reveal that the research needs of the majority (69.6%) of African respondents are directed mostly towards textbooks and journals. 45.9% of all respondents prefer to use the Internet for their information needs. There is a quite a number of respondents (30.2%) who get their information from their own faculties and some (30.8%) rely on materials from their personal collections.

(c) Are academic librarians aware of and sensitive to culturally diverse student populations and do they have the necessary communication skills to effectively serve these students?

The findings revealed that the majority of students (59.7%) stated that librarians are always available and helpful when needed. The cross-tabulated results show that 78.2% of African and 65.9% of English and Afrikaans speaking respondents reported that librarians are always available and helpful when needed.

Another high percentage of African and English and Afrikaans speaking students (69.7%) agreed that librarians are approachable and friendly to all racial groups. Many African students (76.7%) felt that an interaction with librarians helps in satisfying their information needs. In addition, findings reveal that the majority of the students (52.2%) indicated that they find it easy to understand librarians. The comments from the open-ended questions revealed that some students consider librarians to be unapproachable, unhelpful, having a negative attitude and lacking communication skills.

(d) How do academic library services meet the needs of culturally diverse students?

The library reserve is a service that is mostly used by undergraduate students. Lecturers from different faculties place prescribed and recommended books as well as lecture notes in the reserve collection. However, a high percentage

(42.9%) of English and Afrikaans speaking and African students have stated that the reserve service does not provide sufficient loan service. The majority (64.2%) of students indicated the library collection is relevant to their course needs. The comments from the open-ended questions also revealed that some students were concerned about the fact that, books at the reserve collection were not sufficient. Some students commented that library materials were not relevant to their course needs. This comment could be from 37% of English and Afrikaans students who disagreed that library collection is relevant to their course needs.

The results of the study also revealed some information about the user education efforts in the library. Many participants (42.1%) indicated that librarians provide sufficient library orientation to all racial groups. The majority of the students indicated that the user education programmes provided by the library are relevant to their course needs. The research results further revealed that a high percentage (64%) of African students reported that instruction in the use of the library and its sources is given to all racial groups.

## **6.2 SUMMARY OF FINDINGS**

The overall research results show that in general the information needs of the culturally diverse student populations are met by the services offered to them by the Technikon Witwatersrand Library. However, the cross-tabulated results revealed that the majority of English and Afrikaans speaking students are dissatisfied with some of the services. Therefore there should be some improvements and adjustments on some of the existing services and facilities in order to meet the needs of this cultural group.

The comments on problems that were identified by some of the respondents are valuable in making recommendations and may also help in improving the existing library services.

The research findings, which relate to the students' task performance needs can be grouped into five main areas, library collections, physical environment, library staff, research tools and facilities.

## 6.2.1 The library collection

### 6.2.1.1 *Lack of sufficient and current materials to meet the needs of students*

The role of the library's collection is to support the study and subject specific needs of students, thus it is important for the collection to be sufficient and up to date. The model in figure 3.6 shows that there is an interaction between students' tasks and collection development. It is clear from the research results that most students rely on the academic library to support their studies. Thus the library textbooks and journals are in high demand by most of the students. There is some concern that the library collection is not adequate and not current.

The students also complained about the state of the journal collection. Some faculties with different departments have fewer journal titles because each department within a faculty is responsible for paying for the first year of the journal's subscription and the library takes over during the second year. Most departments do not want to buy journals, because they fear that they will finish their budgets.

Van Zijl (2005:22) states that according to Cooper (1983) things such as institutional objectives and plans, user needs, patterns of use, the scope, the strength and weakness of various subject fields in the collection, human and fiscal resources at the library's disposal and cooperative arrangements for sharing of resources, should be taken into consideration during the selection of the library's information resources. The collection development and management policies, guidelines and standards that are adopted in an academic library are influenced by international standards for collection development, user needs and resource sharing.

Some students reported that there was a lack of biographical materials. There was a comment about unavailability of African literature and a suggestion to increase the leisure reading material.

These problems could result from a lack of communication between the librarians and the academic staff. Another problem could be the collection development policies that are not aligned to the information needs of students. The issue about

the unavailability of journals may result from the fact that students are not aware of the availability of full text databases that the library subscribes to.

#### 6.2.1.2 *The reserve collection*

The library is used by all students, but only 39% of the respondents agree that it provides sufficient textbooks. The cross tabulation with home language also indicated that both African and English and Afrikaans speaking students believe that the reserve collection provides sufficient textbooks. The academic departments place prescribed books, recommended books as well as lecture notes in the reserve section for students to complete their assignments and projects. Many students complained that materials in the reserve collection are not sufficient and the editions are old.

The problem is that the academics annually select prescribed and recommended materials to be added to the reserve collection, but some do not indicate new editions and the academic departments should request the library to order the latest editions. This is a problem because the library's responsibility is to advise the academic departments about buying of additional copies and new editions, because the information budgets are controlled by the academic departments and the library cannot order material without authorization from the academic departments. The information librarians are allowed to use the collection development fund to buy reference materials and close the gaps in the core collection, but are not allowed to use this fund to buy multiple copies of prescribed and recommended books for the reserve collection.

### **6.2.2 The library staff**

#### 6.2.2.1 *Lack of communication skills*

The library staff's ability to communicate with all students could help the students to benefit from library services. Lack of communication by the library staff could be a barrier to students. Although the majority of students find it easy to understand librarians, one respondent commented that students are too scared to ask help from

the librarians and therefore do not visit the library Another student complained that the library staff tend to speak in their own language when communicating with students.

There was some suggestion that English should be used instead. The interaction between librarians and students can help the librarians to understand the information needs of students better. Librarians should liaise with the academic departments in order to get more information on student profiles. Librarians should also attend meetings, which are organized by student organizations on campus so that they could gather information on students' information needs.

#### *6.2.2.2 Staff attitude*

The attitude of the library staff can make or break the library service. The research results revealed that the library staff is highly regarded by most students. Students indicated that librarians are available when needed, approachable and helpful. Some students on the other hand commented that librarians are unhelpful and lack subject knowledge. There was some suggestion that librarians should be given better training. Regular courses, seminars and other efforts for continuing education are very important to keep librarians informed and competent to serve all cultural groups.

### **6.2.3 The physical environment**

#### *6.2.3.1 Ease of access*

The majority of students felt that the Technikon Witwatersrand Library is within reach. In addition to ease of access there is the issue of library hours. Library hours can act as a barrier to some of the students. For instance the library operating hours are a problem for students who do not stay on campus, because of transport barriers. Although 59.7% of all the respondents stated that the library is open when needed, less than half (47.2%) of African respondents agreed with this. Some of the students complained that the library closes too early on Saturdays and is closed on Sundays. There were some suggestions that library hours should be extended during exams and on Saturdays as well as being open on Sunday. Presently the

Auckland Park and Doornfontein Campus libraries open at 07:30 until 21:00 Monday to Thursday, 07:30 to 16:00 on Friday and 09:00 to 12:00 on a Saturday. The Eloff Street and Hotel School Campus libraries opens between 07:30 and 16:00 Monday to Friday and do not open on a Saturday. The Doornfontein campus has a twenty four-hour-study area outside the library. The only possible solution could be to increase the Saturday library hours from 09:00 to 15:00 by appointing more student assistance.

#### *6.2.3.2 Access to the reserve collection*

The majority (56.1%) of African and 52.9% of English and Afrikaans speaking students complained that the loan period of the reserve collection was not sufficient. The materials that are placed in the reserve collection are for use in the library, some can be taken out of the library as overnight material and are only issued out to students after 16:00. Students are concerned about the fact that reserve materials are only issued at this time because some of them do not reside on campus and rely on public transport to get home.

This problem could be solved by cooperation between the reserve section staff, librarians and the faculty. The reserve section staff should provide the information librarians with the circulation statistics of the reserve collection, this information could help to identify the gaps in the reserve collection. The circulation statistics of this collection could also help the academic departments in motivating for additional copies. Thus the availability of additional copies can make it possible to extend the loan periods of the reserve collection.

#### *6.2.3.3 problems with noise levels*

Since the research results revealed that high percentages of students use the library for studying, it is important for the library to provide students with a quiet place to study. Many students complained that the library was too noisy. Some of the noise is said to be made by the library staff and the cleaning staff. The vacuuming of the library should be done when the library is closed. Some students suggested the

provision of group discussion rooms in a separate section so that study, reading and research areas can be noise free.

There was also dissatisfaction with the library air conditioning system. The existing air conditioning system should be replaced and serviced regularly.

#### 6.2.3.4 *Shelving of library materials*

It is important for users to be able to locate materials in the library easily. Many students commented that they sometimes find it difficult to locate materials from the shelves even when the library catalogue indicates that the particular item is available on shelf. The majority of students use library materials for their assignments and term papers, thus library materials should be reshelfed on time. Regular shelf reading can help in the location of missing library materials.

### **6.2.4 Facilities**

#### 6.2.4.1 *Lack of study spaces*

Study space is one of the library's important resources. Availability of adequate study spaces is important because a large number of students indicated that they use the library for studying. Many students commented that study and seating space is inadequate. Students complained that seating becomes a big problem especially during exam time.

The library should have information about the number of the students who have registered so that some adjustments for study and seating spaces could be made.

It is also important that regular surveys should be done to determine the occupation of seats available in the different sections in the library.

#### 6.2.4.2 *Lack of group discussion rooms*

The research results revealed that some students come to the library for group discussions. Group study space is the space that students use for collaborative learning which responds with the students' preference for learning by doing and other active learning behaviours (Bennett 2006:6). Many students commented that the library lacks group discussion rooms. There were suggestions that group discussion rooms should be provided inside the library. Since the availability of group discussion rooms will accommodate the need for talking, noise in the study areas could be reduced.

#### 6.2.4.3 *Lack of access to electronic and Internet resources*

Electronic resources play a vital part in supplementing information sources. Research findings for example revealed that there is a high demand for Internet access. Most students commented about the lack of relevant information for their assignments and research projects. Some of the students have complained that there were few computers available for Internet use as well as OPAC access. Students commented that they have to wait in long queues before they can have a chance of searching the online catalogue. Students also complained that half the time the catalogue workstations are out of order.

More library staff should attend computer training courses in order to deal with the problems of the OPACs. This problem is further aggravated by the fact that the library does not have a systems librarian and have to rely on the IT department to maintain the hardware as well as the software. The library should build a strong partnership with the IT department.

#### **6.2.5 Library orientation and user education**

Library services are aimed at helping the students in their task performance. However if students are not trained to use the library, they will be unable to utilize the library resources. The purpose of library orientation is to introduce students to the

services and facilities of the library. Most students responded positively by saying that library orientation is offered to all racial groups.

User education is about training students to use the catalogue, print resources, searching of electronic databases and the Internet. User education is concerned with the incorporating of information literacy skills into the academic programme.

In the model of information usage behaviour of culturally diverse student populations illustrated by figure 3.6, students characteristics also includes emotional factors such as anxiety, uncertainty and confusion and user education services could help reducing these emotional factors.

The improvement of user education services is depended on the collaboration between librarians and academic departments. In case of this library there is a need to improve training facilities. It is important to train students on how to use full text databases as this will assist them to get information much quicker. Using full text databases will also alleviate the problems of the print journals. Sprague and Chambers (2000:19) are of opinion that full text databases can allow students to access resources from home, can reduce interlibrary loan expenses, alleviate shelving shortages and can also reduce binding expenditure.

There is a lack of an electronic classroom with enough computers dedicated for user training. Arko-Cobbah (2004:268) argues that libraries should provide the necessary infrastructure to support instruction of all types of users in order for them to meet information needs.

### **6.3 RECOMMENDATIONS**

It is necessary to make recommendations regarding the provision of services to culturally diverse student populations. The results of the study show that the majority of the students who responded to the survey have positive perceptions about services provided by the library. But there is room for improvement. Students have identified some needs that the library should try to meet.

The findings about students' needs, call for a client-centred approach. This approach should be based on what students want from the service and not on what the library thinks the students should have. To adequately address the needs of student learners, a client-centred approach that reflects the complexities inherent in the current information environment should be adopted (Maybee 2006:79).

The recommendations will be based on the results by including the following main areas: Materials and information sources; the physical environment; efficiency and competitiveness of library staff; facilities, and partnerships between the academic library and the academic departments.

### **6.3.1 Collections and materials**

#### *6.3.1.1 Availability of materials and information sources*

The improvement in the task performance of students requires the availability of relevant and sufficient materials that supports the students' subject specific needs. The library should make sure that its collection is recent at all times. The availability of the information sources such as textbooks, journals, core textbooks being those that support the syllabus, general reference, specialized reference, bibliographic databases and full text databases could help in meeting the needs of the students and also reduce the demands placed on the reserve collection. Materials that are needed by the students for their personal needs, such as leisure materials should also be considered.

The existing materials need to be strengthened for maximum usage. Students should be exposed to other available information sources that they may not be aware of the other sections of the library.

This could ease the burden of the reserve services. The problems of high demands of materials could be solved by continuously identifying the gaps in the collection. Gap analysis should be based on the usage statistics and changes in the curriculum and availability of physical space.

Marketing of library materials to students and the academics should be an ongoing process. The interaction between students and the librarians should be emphasized. Trujillo and Weber (1991:159) say that the marketing of library services to ethnic and racial groups on campus requires librarians to develop outreach or liaison programmes that engage students and faculty in an effective manner.

#### 6.3.1.2 *Collection development and academic departments*

The relevance of the collection should be monitored by building partnerships with academic departments. Librarians should continuously liaise with the academic departments in order to find out about new courses and modules that have been introduced. In addition to the information about the academic departments' budget allocation and the names of the faculty library representatives, librarians should find out about how many majors are there in the subject areas as well as the departments' existing collection development policy (Herzog 2004:150).

The partnerships between librarians and the academic departments make it possible for librarians to attend faculty meetings and inform the faculty about the library's collection development policy as well as the acquisitions procedures. In most cases, librarians have more knowledge about information needs of the students than the academic departments. Thus partnerships make the communication about the information needs of students to their faculties possible.

In order to provide services for culturally diverse students it is important that academic librarians develop mission statements with a clear focus on building partnerships with their campus constituencies. Simmons-Welburn and Welburn (2001:12) point out that libraries should cultivate partnerships with those campus programmes that are directly responsible for diversifying their student bodies. Love (2001:79) is of opinion that in order for academic libraries to meet the needs of their multicultural society, diversity must be the central focus of the university community and faculty involvement is a critical element of the whole process.

Opaleke (1999:286) believes that the low usage of various library facilities by students could improve if librarians and teachers pull together.

### 6.3.1.3 *Accessibility of collection and information sources*

Materials that are in high demand should be made accessible. In order to meet the information needs of students, the collection development should allow librarians to be proactive in buying additional copies in the reserve section even if it means using the library's collection development funds.

Barriers to access to the reserve collection should be removed. The reserve collection loan rules should be reviewed periodically with the guidance of the usage statistics. The service procedure of the reserve collection should also be reviewed. Providing subject specialist assistance can help in solving the problems of the high demand of the reserve collection. The library can introduce the electronic reserve system.

Belonging to the library consortia also helps academic libraries to have access to more information sources. The sharing of resources helps in alleviating the problems of shrinking budgets.

## **6.3.2 The library staff**

### 6.3.2.1 *Efficiency of the library staff*

Staff communication skills should be well developed. The library services are measured by the library staff attitude. Diversity training can help staff to communicate and interact better with students from different cultural backgrounds. Staff should be sensitive towards the needs of the students. Staff competencies should be evaluated so that gaps in their subject knowledge can be identified. Staff should be knowledgeable, thus it is important for the library staff to get information about subjects and courses that are being offered by the academic departments.

Librarians should be approachable and helpful. Librarians should interact with other staff members in order to exchange ideas and share knowledge. The library staff should be responsible for their own development, by attending library conferences and workshops. Scanning current issues of various library journals can help in the

personal improvement of librarians (Pellack 2003:65). Librarians should attend additional training that is offered by the consortia.

### **6.3.3 The physical environment**

#### *6.3.3.1 Library operating hours*

The library is faced with the pressure to extend its operating hours. Extending library hours will allow students to have time to fully utilize library resources. In most cases the effectiveness of the library services is measured by its operating hours. In a client-centred service, the decision to extend library hours should be based on the students' needs. The extension of library hours should be introduced gradually.

User surveys focusing on library hours should be conducted in order to find out if there is a need for the further extension of existing hours.

Since the lengthening of library hours impacts on the availability of additional staff and more security, the short term solution could be to employ student assistants. The long term solution could be the provision of remote access to all students. Remote access will help the students who want to use journals and books, in the sense that they could remotely access journals and e-books from full text databases without having to come to the library. Another solution could be to employ more full time staff which will make the extension of library hours possible.

The existing twenty four-hour-study-area's security should be improved. A good heating and air conditioning system should be considered.

#### *6.3.3.2 Controlling noise*

The library's available space should be divided into an area which will allow silence studying and an area where students will be able to talk without disturbing others. The cleaning staff should only vacuum the library before it is opened or after it is closed for users. Old shelving trolleys should be replaced with new ones because their wheels make noise.

### 6.3.3.3 *Availability of library materials on shelves*

Library shelves should be maintained regularly by shelving library materials on time. Regular shelf reading helps in solving the problems of locating books and journals that are missing.

A misshelved library item is actually a missing item because there is no way that a user could find that item. Misshelving of library materials can impact on most of library services. For instance the information librarians, information or reference desk staff and the circulation or lending desk staff should spent more time trying to help students to locate these materials.

Shelving staff should be given training and should also use proper shelving procedures.

### **6.3.4 Facilities**

#### 6.3.4.1 *Increasing the study and seating spaces*

The library is the place where students come in between their classes to study or write assignments or to prepare for their next lecture, thus there is a need for more study spaces. Study carrels should be increased to ensure that every student has a place to sit and study. Benchmarking with libraries from similar institutions to see how they solved their space problems is important. The availability of study cubicles could help in alleviating the problems of study spaces. Availability of seating will encourage students to come to the library.

#### 6.3.4.2 *Provision of group discussion rooms*

The library should consider the building of discussion rooms for students. The library should seek the advice of the institution's space committee when considering building discussion rooms in order to determine its effect on the future collection expansion. If there is no space available the library should consider building a new library. The library should try to adopt best practices.

#### 6.3.4.3 *Provision of electronic and Internet resources*

The number of computer workstations with electronic databases should be increased and made available to students. The selection of databases should be based on subject areas whose journals are highly in demand. Students should have access to full text databases, because bibliographic databases could be of no use to them if the library does not have holdings of those journals in print format. Librarians should have skills necessary to help students find information from electronic databases. A systems librarian should be appointed in order to help in the maintenance of the computer's software and hardware system.

Remote access can make electronic databases more accessible to students who have access to computers. Additional public access computers with Internet facilities should be acquired.

The availability of electronic databases on the library's web page makes it possible for students to access databases from the cyber café and from computer laboratories in their faculties. Librarians should make sure that there are clear usage instructions printed next to all the workstations.

The library should purchase databases that allow multi-user site licences. Emailing facilities should be provided in order to alleviate the problems of shortage in photocopying and printing facilities. Students should be trained to use electronic databases and the Internet.

#### 6.3.4.4 *Improving photocopying services*

Additional photocopying machines should be purchased. Since this library's photocopying services were outsourced, a search for best photocopying service providers must be undertaken.

#### 6.3.4.5 *Provision of library orientation and user education services*

Library orientation should be an ongoing process. Information about library services should be made available on the library's orientation brochures as well as the library web page. Library orientation brochures and the web page should be regularly updated. According to Young (2006:371) academic libraries should use their Web sites as a primary means of delivering both diverse library collections and library services to diverse audiences.

Librarians should work together with academic departments in designing subject related user education programmes. The research results show that 47.2% of English and Afrikaans students stated that instruction in the use of the library or library education is given to all racial groups sometimes. Thus user education programmes should be designed to meet the needs of all cultural groups on campus. The academic departments should cooperate with librarians by giving students library based assignments. Librarians should encourage academic departments to attend user education sessions with their students. There should be collaboration between librarians and lecturers in the teaching of information literacy skills to students.

There should be an improvement of training facilities by adding more computer work stations set aside for training purposes. The library should consider building a training laboratory to provide for better interaction during training sessions.

Feed back about user education sessions is important. Therefore, user education sessions should be followed by an evaluation session. This will ensure that the librarians gain insight into students' perceptions of training needs and the success of educational programmes. Portmann and Roush (2004:461) believe that the student satisfaction approach which is data gathered from students to gain insight into their experiences and reactions to library instruction, can help in improving the quality of the library instruction.

#### 6.3.4.6 *Providing effective reference services*

Web-based reference services such as “the Question Point” should be made available to all computer workstations and OPAC stations. Increasing the number of Peer information counsellors at the information desk can be a solution to a problem of students who are reluctant to ask help from librarians. The importance of conducting reference interviews by librarians cannot be overemphasized. The marketing of reference services to students and the faculty is very important.

### **6.4 TOPICS FOR FURTHER RESEARCH**

The findings of the study revealed that English and Afrikaans speaking students are experiencing more problems in the use of the library than African students. This requires further research. The future investigation into this topic requires a larger randomised sample which includes undergraduate and postgraduate students. Extending the study to postgraduate students could contribute to more knowledge about this topic.

The academic librarians’ perceptions of the needs of culturally diverse student populations and services to satisfy these needs should be the subject of study in the future research. Therefore empirical investigation of librarians and general library staff should be undertaken during further research.

### **6.5 CONCLUSION**

The study has provided a picture of the culturally diverse student populations’ perceptions about the Technikon Witwatersrand library services. Overall, the research results have revealed that, the majority of the students were satisfied with the library services and resources. There was an assumption that African students have some problems with the use of the library, but the cross-tabulation results in chapter 5 showed that the English and Afrikaans speaking students were less satisfied with the librarians and some of the library’s user education efforts.

It was recommended that user education programmes that aimed at meeting the needs of specific cultural groups should be designed. It was discovered that, both the focus group interviews and the survey were useful in identifying areas of the library services that needs to be improved and adjusted.

Many areas that need to be improved or adjusted will have huge financial implications. For instance extending library hours requires more staff and security personnel and acquiring more computers to access databases mean providing infrastructure and furniture.

Since the improvements of library services have financial implications, the library should use its staff more efficiently.

## APPENDIX A

### Focus Group interview schedule

#### PURPOSE

The purpose of the interview is to discover whether library services of the Technikon Witwatersrand meet information needs of undergraduate students from culturally diverse background and to determine problems these students have in using the library.

#### 1. Personal profile of focus group participants

Gender -----  
Age -----  
Year of study -----  
Discipline of study -----  
Faculty -----  
Home Language -----  
Race -----  
South African or Foreign-----

#### 2. Library interests and preferences (Why do you use the library?)

1. for term paper, assignments and research projects.
2. for group discussions.
3. To study.
4. To meet friends
5. for leisure reading

#### 3. Personal usage of the library

1. When do you use the Technikon library?
2. How often do you use the Technikon library?
3. Where else do you go for library services (Friends, colleagues, family, public library and faculty?)

#### 4. Satisfaction with services (Are you satisfied with the following)

1. Reserve collection
2. Study space
3. Photocopying services
4. Current newspapers
5. Collection (relevant to course need)

**5. Satisfaction with accessibility of services and sources**

1. Library operating hours (is the library operating hours convenient for you?)
2. Do you find it easy to use the online catalogue?
3. Is it easy to find where materials (i.e. books, journals, etc.) are located in the library?
4. Do you find books and journals in their proper places on the shelves?

**6. Orientation and training in the use of the library (will the following help you in learning how to use the library?)**

1. Library orientation tours
2. Pamphlets about library services; collection and facilities
3. Group and individual training by library staff
4. More clearer directional signs

**7. Getting help from the library staff**

1. Are most of library staff approachable (i.e. friendly and helpful?)
2. Are library staff members usually competent when dealing with student queries?
3. Are they helpful to all type of users and various cultural groups?
4. Are they available when you need them?

**8. What barriers have you encountered when trying to use the library?**

1. Unavailability of books, other materials and information?
2. Negative attitude and incompetent library staff?
3. Language problems?
4. Lack of computer and information handling skills?
5. Problematic location of library (distance from classes?)
6. Other problems (e.g. library noise)

**9. What is the biggest problem with your library?**

**10. What suggestions do you have for improving services?**

## **APPENDIX B**

### **Covering letter**

Dear Participant

#### **SURVEY ABOUT THE INFORMATION NEEDS OF CULTURALLY DIVERSE STUDENT POPULATIONS**

I am conducting a survey about the information needs of undergraduate students in order to fulfil the requirements for the Masters degree in information Science at the Department of Information Science, Unisa.

The results of the study will help to provide insights on how library services could be made more relevant to the information needs of the students.

All your inputs and opinions will remain confidential.

Thank you very much for your kind cooperation.

Yours sincerely

Thuli Khoza

# APPENDIX C

## Questionnaire

**A survey on information needs of culturally diverse student populations.**

The purpose of this survey is to determine your information needs and library services that are important in fulfilling these information needs.

Please make a cross in the relevant box.

### **SECTION A: Personal profile**

#### **1. Gender**

Male	<input type="checkbox"/>	1
Female	<input type="checkbox"/>	2

#### **2. What is your age?**

Under 20 years	<input type="checkbox"/>	1
21-30 years	<input type="checkbox"/>	2
31 - 40 years	<input type="checkbox"/>	3
41 years and above	<input type="checkbox"/>	4

#### **3. Indicate your year of study and field of study, e.g. Environmental Health.**

First year	<input type="checkbox"/>
Second year	<input type="checkbox"/>
Third year	<input type="checkbox"/>
Fourth year	<input type="checkbox"/>

Field of study \_\_\_\_\_

#### **4. Indicate your faculty**

Health	<input type="checkbox"/>
Engineering	<input type="checkbox"/>
Business	<input type="checkbox"/>
Art & Design	<input type="checkbox"/>

**5. What is your home language?** \_\_\_\_\_

**6. Indicate your race** \_\_\_\_\_

#### **7. Please specify your nationality**

South African \_\_\_\_\_

Specify other \_\_\_\_\_

**8. Which library do you use to support your studies?**

- |  |                      |   |
|--|----------------------|---|
| Academic (eg technikon, university etc.) | <input type="text"/> | 1 |
| Public library                           | <input type="text"/> | 2 |
| Never use a library                      | <input type="text"/> | 3 |
| Other                                    | <input type="text"/> | 4 |

**SECTION B: Use of library services**

**9. Indicate your motives for library use:**

- 9.1 I use the library for term paper or assignments
- 9.2 I come to the library for group discussions
- 9.3 I use the library for studying
- 9.4 I use the library to meet my friends
- 9.5 I use the library for leisure reading

	Often	Some-times	Never	
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3

**10. Indicate your preference for information sources:**

- 10.1 Library text books and journal collection
- 10.2 Get information from your faculty
- 10.3 Colleagues or fellow students
- 10.4 Personal collection of materials
- 10.5 Use of Internet for information

	Often	Some-times	Never	
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3

**11. Indicate your opinion about services being offered by the technikon library:**

- 11.1 The reserve collection provides sufficient text books
- 11.2 The reserve collection provides sufficient loan service
- 11.3 The library collection is relevant to your course needs
- 11.4 The library has required suitable leisure reading materials
- 11.5 The library collection in general is current

	Agree	Disagree	Not Sure	
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3

**12. Indicate your opinion about the physical accessibility of the library:**

- 12.1 The library is well situated and in reach of most students
- 12.2 The library is open when needed
- 12.3 It is easy to access the catalogue
- 12.4 Library materials are shelved as indicated in the catalogue
- 12.5 Library materials are quickly reshelfed after use
- 12.6 There is adequate lighting in the library
- 12.7 There is proper air conditioning in the library
- 12.8 There are clear directional signs in the library
- 12.9 Helpful instructions are available at the computer workstations

	Agree	Disagree	Not Sure	
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3

**13. Indicate your views on user education efforts in the library:**

- 13.1 The librarian provides sufficient library orientation to all racial groups
- 13.2 Library brochures provides clear information about services and resources

	Often	Some-times	Never	
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3
	<input type="text"/>	1 <input type="text"/>	2 <input type="text"/>	3

- 13.3 Library user education programmes are relevant to course needs
- 13.4 Instruction in the use of the library and sources is given to all racial groups

	1		2		3
	1		2		3

**14. Indicate the characteristics of the library staff:**

- 14.1 Librarians are available and helpful when needed
- 14.2 Librarians are approachable and friendly to all racial groups
- 14.3 Librarians conduct interviews to determine information needs
- 14.4 Interaction with librarians helps to satisfy information needs
- 14.5 Information librarians show relevant subject knowledge
- 14.6 Librarians show willingness to seek help from other staff members
- 14.7 I find it easy to understand the librarian

Agree      Disagree      Not Sure

	1		2		3
	1		2		3
	1		2		3
	1		2		3
	1		2		3
	1		2		3
	1		2		3
	1		2		3

**15. Indicate your personal characteristics:**

- 15.1 I have the language ability to express myself clearly
- 15.2 I have experience in the use of the library
- 15.3 I have received training in the use of the library and its resources
- 15.4 I have computer and information handling skills

Agree      Disagree      Not Sure

	1		2		3
	1		2		3
	1		2		3
	1		2		3
	1		2		3

**16. What is the biggest problem in the use of the technikon library? Please specify:**

.....

.....

.....

.....

.....

**17. What suggestions do you have for improving services? Please indicate:**

.....

.....

.....

.....

.....

Thank you for taking your time to fill in this questionnaire. Your opinions are greatly appreciated.

## Bibliography

Alire, Camila & Stielow, Frederick J. 1995. Minorities and the symbolic potential of the academic library: reinventing tradition. *College and research libraries*, 56(6): 509-517.

Arko-Cobbah, Albert. 2004. The role of libraries in student-centred learning: the case of students from the disadvantaged communities in South Africa. *The international information & library review*, 36:263-271.

Association of College & Research Libraries. 1987. The mission of an undergraduate library: model statement. *College and research libraries news*, 48(9):542-544.

Balderrama, Sandra Rios. 2000. This trend called diversity. *Library trends*, 49 (1):194-214.

Ball, Mary A & Mahony, Molly. 1987. Foreign students: libraries and culture. *College & research libraries*, 48(2):160-166.

Bailey, Kenneth D. 1994. *Methods of social research*. 4<sup>th</sup> ed. New York: The Free Press.

Baron, Sara, & Strout-Dapaz, Alexia. 2001. Communicating with and empowering international students with a library skills set. [Online.] <http://ninetta.emeraldinsight.com/vl=4519070/cl=16/nw=1/rpsv/cw/mcb/00../p314.htm> . [Accessed 08/05/2002.]

Behrens, S.J. 1993. User education at tertiary level: a review of recent literature. *South African journal of library & information science*, 61(3):124-130

Bennett, Scott. 2006. The choice for learning. *The journal of academic librarianship*, 32(1):3-13.

Berger, Kenneth W. & Hines, Richard W. 1994. What does the user really want? The library user survey project at Duke University. *The journal of academic librarianship*, 20(5/6):306-309.

Bernard, H. Russell. 2000. *Social research methods: qualitative and quantitative approaches*. Thousand Oaks, Calif.: Sage Publications.

Blandy, Susan Griswold. 1994. What to do until the expert comes: dealing with demands for multicultural, information now. *The reference librarian*, 45/46:119-135.

Blenkinsopp, Heather. 1994. Communication across cultures for reference librarians who supervise. *The reference librarian*, 45/46: 39-43.

Blom, A. 1983. The task performance of the scientist and how it affects an information service. *Mousaion*, 1(1):3-40.

Bopp, Richard E. 2001. The reference interview, in: *Reference and information services: an introduction*, edited by Richard E. Bopp & Linda C. Smith. Englewood, Colo.: Libraries Unlimited.

Borgers, R., Mullen, P.D., Meertens, R., Rijken, M., Eussen, G., Plagge, I., Visser, A.P. & Blijham, G.H. 1993. The information seeking behaviour of cancer outpatients: a description of the situation. *Patient education and counselling*, 22:35-46.

Bot, Monica. 1992. Educational integration: some considerations about its role in addressing South Africa's educational challenges, in *McGregor's education alternatives*, edited by Robin and Anne McGregor. Cape Town: Juta.

Bristow, A.P. 1985. Libraries and library services in Venda. *Mousaion*, 3(2):49-61.

Broidy, Ellen. 1999. Celebrating diversity ten years later.[Online.]  
<http://elvira.emeraldinsight.com/vl=8336223/cl=13/nw=1/rpsv/cw/mcb/009.../p266.htm>. [Accessed 28/11/2002.]

- Brophy, Peter. 2005. *The academic library*. 2<sup>nd</sup> ed. London: Facet Publishing.
- Buchanan, William E. 2002. Developing library collections when everyone thinks the Internet is everything and other challenges on the road to diversity. *Rural libraries*, 22 (1):31-40.
- Budd, John M. 1998. *The academic library: its context, its purpose, and its operation*. Englewood, Colo.: Libraries limited.
- Bunge, Charles A. & Richard E. Bopp. 2001. History and varieties of reference services. 3<sup>rd</sup> ed., in *Reference and information services: an introduction*, edited by Richard E. Bopp & Linda C. Smith. Englewood, Colo.: Libraries Unlimited.
- Burns, Robert B. 2000. *Introduction to research methods*. London : Sage Publications.
- Butlar, Lois. 1994. Facilitating cultural diversity in college and university libraries. *Journal of academic librarianship*, 20:10-14.
- Cadman, Kate. 2000. Voices in the air: evaluations of the learning experiences of international postgraduates and their supervisors. *Teaching in higher education*, 5(4): 476-491.
- Castro, Rafaela and Chabran, Richard. 1994. Discourse and discord: voices from an academic library. *The reference librarian* 45/46: 279-296.
- Chen, Ching-Chih & Herson Peter. 1982. *Information seeking: assessing and anticipating user needs*. New York: Neal-Schuman Publishers.
- Coats, Reed, Goodwin, Jane G. & Bangs, Patricia C. 2000. Seeking the best path: assessing a library's diversity climate. *Library administration & management*, 14(3):148-54.

Conteh-Morgan, Miriam. 2002. Connecting the dots: Limited English Proficiency, second language learning theories, and information literacy instruction. *The journal of academic librarianship*, 28(4):191-196.

Cooper, M. 1983. Collection management in science and technology: a focus on books. *Monographs in sci-tech libraries*, 3(3):15-29.

Cox, Taylor. 1994. Cultural diversity in organizations: theory, research & practice. San Francisco, Calif.: Berrett-Koehler.

Curry, A. 2003. Opening hours: the contest between diminishing resources and a 24/7 world. *The journal of academic librarianship*, 29(6):375-385.

Dalrymple, Connie. 2002. Perceptions and practices of learning styles in library instruction. *College & research libraries*, 63(3):261-273.

Datta, Suman & Simsova, Sylvia. 1989. Cultural diversity in libraries: today & tomorrow. London: PNL Press.

Davenport, T.R.H. and Saunders, Christopher. 2000. *South Africa: a modern history*. 5<sup>th</sup> ed. London: MacMillan Press.

De Hart, Florence E. 1979. The librarian's psychological commitments: human relations in librarianship. West Port, Conn.: Greenwood Press.

De Jager, Karin and Nassimbeni, Mary. 2002. Institutionalizing information literacy in tertiary education: lessons learned from South African programs. *Library trends*, 51(2):167-184.

De Vos, A.S. (ed.). 1998. *Research at grassroots: a primer for the caring profession*. Pretoria: Van Schaik.

Dervin, Brenda & Nilan Michael. 1986. Information needs and uses, in *Annual review of information science and technology*, edited by Marth E. William. New York: Knowledge Industry Publications for American Society for Information Science.

Downing, Karen. 1994. Diversity in the undergraduate library, in *Cultural diversity in libraries*, edited by Donald E. Riggs and Patricia A. Tarin. New York : Neal-Schuman Publishers.

Dunn, Kathleen. 1986. Psychological needs and source linkages in undergraduate information-seeking behaviour. *College & research libraries*. 47(5): 475-481.

Dunn, Rita. 1993. Learning styles of the multiculturally diverse. *Emergency librarian*, 20(4): 24-31.

Edwards, H.M. 1999. Managing multicultural staff in a South African University: library paper presented at the 65<sup>th</sup> IFLA Council and General Conference, Bangkok, [www.ifla.org/iv/ifla65/65cp.htm](http://www.ifla.org/iv/ifla65/65cp.htm).

Evans, G.E. 1992. Needs analysis and collection development policies for culturally diverse populations. *Collection building*, 11:16-27.

Fidzani, B.T. 1998. Information needs and information seeking behaviour of graduate students at the University of Botswana. *Library review*, 47 (7):329-340.

Fish, James. 1992. Responding to cultural diversity: a library in transition. *Wilson library bulletin*, 66:34-37.

Fouché, B. 1977. *General readership: study guide 1 for Readership I*. Pretoria: University of South Africa.

Fourie, J.A., Gericke, E.M. & Machet, M.P. 1996. *Applied information user studies: only guide for TIN402-W*. Pretoria: University of South Africa.

Gericke, E M. 1996. Aspects of user studies: historic and systematic user studies. Pretoria: University of South Africa.

Gericke, EM. 2001. *Information users: only study guide for INS303-6*. Pretoria: University of South Africa.

Given, Lisa M. 2002. The academic and the everyday: investigating the overlap in mature undergraduates' information-seeking behaviors. *Library & information science research*, 24:17-29.

Glaviano, Cliff & Lam, R Errol. 1990. Academic libraries and affirmative action: approaching cultural diversity in the 1990s. *College and research libraries*, 51: 513.

Goldberg, Martin and Hamburger, Susan. 1998. The challenges to change: creating diversity in libraries. *College & research libraries news* , 59(11):840-842.

Green, Jonathan. 1994. Dictionary of new words. London: Bloomsbury.

Green, Tracey. 1994. Images and perceptions as barriers to the use of library staff and services. *New library world*, 95(1117):19-24.

Groeschl, Stefan & Doherty, Liz. 2000. Conceptualising culture. *Cross cultural management: an international journal*, 7(4):12-17.

Guirdham, Maureen. 1999. Communicating across cultures. Basingstoke: Palgrave.

Hammond, Carol. 1994. Nontraditional students and the library: opinions, preferences, and behaviors. *College & research libraries*, 55(4): 323-341.

Hawkins, Rebecca, Saunders, Michele & Situ, Ping. 2003. Diversity initiatives vs residency programs: agents of change? *College and research libraries news*, 64(5):308-315.

Heery, Mike. 1996. Academic services to non-traditional students. [Online.] <http://lucia.emeraldinsight.com/vl=46595699/cl=53/nw=1/rpsv/cw/mcb/01435.../p3.htm> [Accessed 19/03/2002]

Heine, M H., Winkworth, I. & Ray, K. 2000. Modeling service-seeking behaviour in an academic library: a methodology and its application. *The journal of academic librarianship*, 26(4):233-247.

Herzog, Susan. 2004 Collection development for the 21<sup>st</sup> century academic librarian, in *Selecting materials for library collections*, edited by Fenner Audrey. Haworth Information Press: New York.

Hofmeyr, J. & Buckland, P. 1992. Education system change in South Africa, in *McGregor's education alternatives*, edited by R. McGregor & A. McGregor. Cape Town: Juta.

Hofstede, G. 1980. Culture's consequences: international differences in work-related values. Beverly Hills, Calif.: Sage.

Howland, Joan S. 2001. Challenges of working in a multicultural environment. *Journal of library administration*, 33(1/2):105-123.

Intner, Sheila S. 1997. Integrating the activities of librarians and paraprofessional workers in evaluating academic library collections, in *Collection management for the 21<sup>st</sup> century: a handbook for librarians*, edited by G. E. Gorman & Ruth H. Miller Westport, Conn.: Greenwood Press.

Jiao, Qun G. & Onwuegbuzie, Anthony J. 1998. Perfectionism and library anxiety among graduate students. *Journal of academic librarianship*, 24(5):365-371.

Josey, E.J. 1994. The state of diversity. *The reference librarian*, 45/46:5-11.

Josey, E.J., Abdullahi, Ismail. 2002. Why diversity in American libraries. [Online.] <http://barbarina.emeraldinsight.com/vl=6106331/cl=47/nw=1/rpsv/cw/mcb/0.../p10.htm> [Accessed 05/04/2002]

Kflu, Tesfai and Loomba Mary A. 1990. Academic libraries and culturally diverse student populations. *College and research library news*, 51(6): 524-527.

Kishun, Roshen. 1998. Internalization in South Africa, in *The globalization of higher education*, edited by Peter Scott. Buckingham: Society for Research into Higher Education & Open University Press.

Kravitz, R.R., Lines, A. & Sykes, V. 1991. Serving the emerging majority: documenting their voices. *Library administration & management*, 5(4):184-188.

Kroeber, A.L. & Kluckholm, C. 1952. *Culture: a critical review of concepts and definitions*, Cambridge, Mass.: Peabody Museum of American Archaeology and Ethnology.

Kuhlthau, Carol C. 1991. Inside the search process: information seeking from the user's perspective. *Journal of the American Society for information science*, 42(5):361-371.

Kuhlthau, Carol. 1994. Students and the information search process: zones of intervention for librarians, in *Advances in librarianship*, edited by Irene P. Golden. San Diego: Academic Press.

Lam, R. Errol. 1988. The reference interview: some intercultural considerations. *RQ*, 27: 390-395.

Leedy, Paul D. 1993. *Practical research : planning and design*, 5<sup>th</sup> ed. New York : Macmillan

Li, Suzanne D. 1998. Library services to students with diverse language and cultural backgrounds. *The journal of academic librarianship*, 24(2): 139-143.

Li, Haipeng. 1999. Diversity in the library: what could happen at the institutional level, in *Managing multiculturalism and diversity in the library: principles and issues for administrators*, edited by Mark Winston. New York: The Haworth Press.

Lin, Poppin. 1994. Library instruction for culturally diverse population. *Research strategies*, 12(3): 168-173.

Litoselliti, Lia. 2003. Using focus groups in research. London: Continuum.

Liu, Mengxiong. 1995. *Ethnicity and information seeking*. S.I. : The Haworth Press.

Liu, Ziming. 1993. Difficulties and characteristics of students in developing countries. *College and research libraries*, 54(1):25-31.

Lomofsky, Lilian & Lazarus, Sandy. 2001. South Africa: first steps in the development of an exclusive education system. *Cambridge journal of education*, 31(3): 303-317.

Love, Johnnieque B. 2001. The assessment of diversity initiatives in academic libraries. *Journal of library administration*, 33(1/2):73-103.

Mabry, C.H. 2003. The reference interview as partnership: an examination of librarian, library user, and social interaction, in *Cooperative reference: social interaction in the workplace*, edited by Celia Hales Mabry. New York: The Haworth Information Press.

Mandernack, Scott B., Poping Lin & Hovide, David M. 1994. Cultural awareness and bibliographic instruction in academic libraries, in *Diversity and multiculturalism in libraries*, edited by Katherine Hoover Hill. Greenwich, Conn.: JAI Press.

Martin, Rebecca R. 1994a. *Libraries and the changing face of academia: responses to growing multicultural populations*. Metuchen, N.J.: The Scarecrow Press.

Martin, Rebecca R. 1994b. Changing the university climate: three libraries respond to multicultural students. *The journal of academic librarianship*, 20(1): 2-9.

Massey-Burzio, Virginia. 1998. From the other side of the reference desk: focus group study. *The journal of academic librarianship*, 24(3):208-215.

Maybee, Clarence. 2006. Undergraduate perceptions of information use: the basis for creating user-centered student information literacy instruction. *The journal of academic librarianship*, 32(1):79-85.

McNeer, Elizabeth J. 1991. Learning theories and library instruction. *The journal of academic librarianship*, 17(5): 294-297.

McSwiney, Carolyn. 2002. Think globally. [Online]  
<http://www.alia.org.au/conferences/alia2000/proceedings/carolyn.mcswiney.html>  
[Accessed 20/08/2002]

Metoyer, Cheryl A. 2000. Missing links in reaching culturally diverse students in academic libraries. *The journal of academic librarianship*, 26(3):157-158.

Moeckel, Nancy and Presnell Jenny. 1995. Recognizing, understanding, and responding: a program model of library instruction services for international students, in *Library instruction revisited: bibliographic instruction comes of age*, edited by M. Martin. New York: The Haworth Press.

Norris, Brian. 1996. Managing diversity within South African technikons: a strategic management approach. *South African journal of higher education*, 10(2): 25.

Norris, Brian. 1997. Managing cultural diversity within higher education: a South African perspective. [Online.] [www.immi.se/intercultural/nr3/norris.htm](http://www.immi.se/intercultural/nr3/norris.htm). [Accessed 20/05/2002].

Ocholla, Dennis N. 2002. Diversity in the library and information workplace: a South African perspective . [Online]

<http://lucia.emeraldinsight.com/vl=46595699/cl=53/nw=1/rpsv/cw/mcb/0143.../p59.htm> [Accessed 19/03/2002].

Opaleke, J. S. 1999. Effect of the user education programme on undergraduate on undergraduate students' library exploration at the University of Ilorin. *International information & library review* , 30: 275-287.

Onwuegbuzie, Anthony & Jiao, Qun G. 1998. The relationship between library anxiety and learning styles among graduate students: implications for library instruction. *Library and information science research*, 20(3): 235-249.

Owens, Irene. 2002. South African libraries from pre-apartheid to apartheid in the 1960s and 1970s: the beginning of the end. *Library management*, 23(1/2):53-58.

Paisley, William J. 1968. Information needs and uses. *Annual review of information science & technology*, 3(1): 1-30.

Papert, S. 1980. *Mindstorms: children, computers, and powerful ideas*. New York: Basic Books.

Parker, Diane C. 1989. Librarians: an element of diversity within the faculty. *College & research libraries news*, 8: 675-677.

Pellack, Lorraine J. 2003. Interpersonal skills in the reference workplace, in *Cooperative reference: social interaction in the workplace*, edited by Celia Hales Mabry. New York: The Haworth Information Press.

Peterson, Lorna. 1995. Multiculturalism: affirmative or negative action? *Library journal*, 120(12): 30-33.

Peterson, Lorna. 1994. Teaching the practitioners: one professor's attempt at library education and sensitivity to multicultural diversity. *The reference librarian*, 45/46:23-28.

Piette, Mary I. Library instruction: principles, theories, connections and challenges, in *Library instruction revisited: bibliographic instruction comes of age*, Edited by Lynne M. Martin. New York: The Haworth Press.

Portmann, Chris A. & Roush, Andrienne Julius. 2004. Assessing the effects of library instruction. *The journal of academic librarianship*, 30(6):461-465.

Prytherch, Ray. 1995. *Harrod's librarians' glossary*. 8<sup>th</sup> ed. Aldershot, Hants: Gower.

Quarton, Barbara. 2003. Research skill and the new undergraduate. *Journal of instructional psychology*, 30:10-124.

Quezada, Shelley. 1992. Mainstream library services to multicultural populations: the evolving tapestry. *Wilson library bulletin*, 66: 28-29.

Raliphada, Lufuno & Botha, Deonie. 2006. Testing the viability of Henczel's information audit methodology in practice. *South African journal of libraries and information science*, 72(3):242-250.

Rehman, Sajjad Ur & Mohammad, Gloria P. 2001. Relationship of library skills with selected personal and academic variables: a study of the undergraduate students of Kuwait University. *International information & library review*, 34:1-20.

Reichel, Mary. 1994. Library literacy. *RQ*, 33(3): 336-341.

Roach, Patrick and Morrison, Marlene. 2002. Pursuing the wind of change. [Online] <http://dandini.emeraldinsight.com/vl=1218462/c/=18/nw=1/rpsv/cw/mcb/10.../p112.htm> [Accessed 30/04/2002]

Rosen, C. Martin, Wrihten, Mary & Stearns, Beverly. 1994. Student employees and the academic library's cultural mission. *The reference librarian*, 45/46:45-55.

Rude, Renee and Hauptman, Robert. 1990. To serve the unserved: social responsibility in the academy. *The journal of academic librarianship*, 15(6):364-365.

Sarkodie-Mensah, Kwasi. 1994. The international student in the US academic library: building bridges to better bibliographic instruction, in *Diversity and multiculturalism in libraries*, edited Katherine Hoover Hill. Greenwich: JAI Press.

Schurick, W.J. 1998. Focus group interviewing and audio-visual methodology, in *qualitative research*, in *Research at grassroots: a primer for the caring professions*, edited by A.S. De Vos. Pretoria: Van Schaik: 313-333.

Silverman, David. 2000. *Doing qualitative research: a practical handbook*. London: Bloomsbury.

Simmons-Welburn, Janice. 1999. Diversity dialogue groups: a model for enhancing work place diversity, in *Managing multiculturalism and diversity in the library: principles and issues for administrators*, edited by Mark Winston. New York: Haworth Press.

Simmons-Welburn, Janice and Welburn, William C. 2001. Cultivating partnerships/ realizing diversity. *Journal of library administration*, 33(1/2):5-19.

Smelser, Neil J. 1991. *Sociology*. 4<sup>th</sup> ed. New Jersey: Prentice Hall.

Soper, Mary. 1990. *The librarians' thesaurus: a concise guide to library and information terms*. Chicago: American Library Association.

Sprague, Nancy & Chambers, Mary Beth. 2000. Full-text databases and the journal cancellation: a case study. *Serials review*, 26(3):19-31.

Stewart, David W. & Shamdasani, Prem N. 1990. *Focus groups: theory and practice*. London: Sage.

Sturges, Paul. 2005. Understanding cultures and IFLA's Freedom of Access to Information and Freedom of Expression (FAIFE) core activity. *Journal of documentation*, 61(2):296-305.

Valentine, Barbara. 1993. Undergraduate research behavior: using focus groups to generate theory. *The journal of academic librarianship*, 19(5):300-304.

Van Zijl, Carol Wendy. 2005. Developing and managing information collections for academics and researchers at a university of technology: a case study. Ph.D thesis, Pretoria: University of South Africa.

Wayman, Sally G. 1984. The international student in the academic library. *The journal of academic librarianship* , 9(6):336-341.

Weiler, Angela. 2005. Information-seeking behavior in generation y students: motivation, critical thinking and learning theory. *The journal of academic librarianship*, 31(1):46-53.

Welburn, William C. 1994. Rethinking theoretical assumptions about diversity: challenges for college and university library planning, in *Diversity and multiculturalism in libraries*, edited by Katherine Hoover Hill. Greenwich: JAI Press.

Whitmire, Ethelene. 1999. Racial differences in the academic library experiences of undergraduates. *The journal of academic librarianship*, 25(1):33-37.

Whitmire, Ethelene. 2001. A longitudinal study of undergraduates'academic library experience. *The journal of academic librarianship*, 27(5): 379-385.

Whitmire, Ethelene. 2002. Disciplinary differences and undergraduates information-seeking behavior. *Journal of the American Society for Information Science and Technology*, 53(8):631-638.

Whitmire, Ethelene. 2003. Cultural diversity and undergraduates' academic library use. *The journal of academic librarianship*, 29(3):148-161.

Wilkinson, B.R. 1986. Academic libraries: services for users, in *ALA world encyclopedia of library and information services*. 2<sup>nd</sup> ed. Chicago: ALA.

Wilson, T.D. 1997. Information behaviour: an interdisciplinary perspective. *Information processing & management*, 33(4):551-572.

Winston, Mark. 1995. Cultural sensitivity: or how to make the library a better place, *Reference services review*. 7-12.

Winston, Mark D. & Haipeng Li. 2000. Managing diversity in Liberal Arts College libraries. *College & research libraries*, 61(3): 205-215.

Yates, Carol J, Castro, Rafaela & Castillo-Speed, Lillian. 1994. Voices of diversity in university of California: impact, initiatives and impediments for cultural and racial equity, in *Diversity and multiculturalism in libraries*, edited by Katherine Hoover Hill. Greenwich, Conn.: JAI Press.

Young, Vicki. 1993. Focus on focus groups. *College & research libraries*, 54(7): 391-394.

Young, Courtney L. 2006. Collection development and diversity on CIC academic library Web sites. *The journal of academic librarianship*, 32(4):370-376.

Zondi, L.E. 1992. Library-use skill and information-seeking patterns of first year students at the University of Zululand. *South African journal of library and information science*, 60(4): 204-208.