

**PLAGIARISM AMONG UNDERGRADUATE STUDENTS IN THE FACULTY OF  
APPLIED SCIENCE AT A SOUTH AFRICAN HIGHER EDUCATION INSTITUTION**

BY

MAPULE PATRICIA SENTLENG

Mini thesis submitted in partial fulfilment of the requirement for the degree of  
MAGISTER BIBLIOTHECOLOGIAE in the Department of Library and Information  
Science, University of the Western Cape

Supervisor: Dr Lizette King

Date Submitted: NOVEMBER 2010

UNIVERSITET VAN WES-KAAPLAND  
BIBLIOTEK  
808 SEN  
LIBRARY  
UNIVERSITY OF THE WESTERN CAPE

## DECLARATION

I, Mapule Patricia Sentleng, declare that the content of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represent my own opinion not necessarily those of the University of the Western Cape.

Signed: .....

Date: .....

## KEYWORDS

Academic writing, Higher education, Higher education institution, Internet, Plagiarism, Undergraduate students, South Africa

## ABSTRACT

The purpose of this study was to investigate plagiarism among undergraduate students at a higher education institution in South Africa. There is evidence from previous studies that plagiarism is increasing world wide among higher education students. The emergence of the Internet has made plagiarizing worse as students can easily copy and paste information from the World Wide Web. This study investigated the occurrence, causes and trends of plagiarism among students in the Faculty of Applied Science at a higher education institution. It also examines student awareness of institutional policies and guidelines regarding plagiarism.

The methodology used to achieve the desired outcomes of this study was a quantitative research method. It involved the distribution of questionnaires to undergraduate students to gain information about certain aspects of student plagiarism. The participants were first, second and third year students of the departments of Chemistry and Mathematical Technology within the Faculty of Applied Science.

The results of the study confirm that student plagiarism is fairly common within the departments of Chemistry and Mathematical Technology. The study shows that 41% of undergraduate students think that plagiarism is very serious, but plagiarism is still being practiced within these departments. It was also found that 73% of students admit to using the Internet to compile their assignments. This implies that the Internet is the most possible source of plagiarism. Students also used books and journal articles as possible sources to plagiarise.



The study made recommendations regarding how a higher education institution can reduce incidences of plagiarism and make students more aware of the implications and penalties involved. Immediate responses that this higher education institution can do to prevent plagiarism, includes teaching students to be information literate, teaching referencing techniques and academic writing. Students must be assisted in understanding plagiarism by being made aware of the different forms of plagiarism and how to avoid being accused thereof. The institution must also fight technology with technology by investing in plagiarism detection software that will help academic staff to identify copied pieces of information. It is the responsibility of any higher education institution to create policies and guidelines regarding plagiarism and to ensure students are aware of their existence. Students should be informed about the procedures that will be implemented when dealing with cases of plagiarism.

## DEDICATION

To my late grandparents, Mr & Mrs Sentleeng, for their love and guidance.

## ACKNOWLEDGEMENT

I wish to thank the following

- My supervisor, Dr Lizette King, for her guidance and support throughout the study.
- Dr Elisha Chiware for his encouragement, support and his generous assistance.
- Students and staff at the faculty that participated in the study.
- My supervisor at work, Ms Audrey Patrick, for her understanding and cooperation during my studies.
- PET assistant Mr Anthony Oejakale for editorial duties and advice.
- PET assistant Mr Abu Elgasim Ahmed Atta-Almanan Osman for statistical analysis.
- Library staff at the University of the Western Cape for assistance in finding sources.
- My family for their love and patience.
- God almighty for giving me the strength.

## DEFINITION OF KEY TERMS

Plagiarism is the intentional and unintentional use of another's work or ideas, published and unpublished, without acknowledging the source of the work (Jameson, 1993: 18 and Logue, 2004: 40). This definition includes content from unpublished work, such as masters and doctoral dissertations, which have not been published but readily accessible.

Cormeny (as cited in Hannabus, 2001: 312) defined plagiarism as using the words or phrases of another person and restating another person's thoughts in slightly different words while Badke (2007: 58) defined plagiarism as representing someone's ideas as one's own, constitute misrepresentation and fraud.

Unintentional plagiarism occurs when students use the words or ideas of others but fail to quote or give credit, usually because they do not know how. Examples of unintentional plagiarism include omitting a citation or citing inaccurately, paraphrasing by only changing the sentence structure of the original text or by changing the sentence structure but not the words, and putting quotation marks around only a part of a quotation (Strayer University iCampus, 2010a).

Intentional plagiarism occurs when a student knows that he or she is passing off someone else's words or ideas as their own. Purchasing pre-written research papers via the internet is one of the most blatant forms of intentional plagiarism. Other examples include fabricating a quotation or a source, copying an essay or article from the internet, on-line source or electronic databases without quoting or giving credit and cutting and pasting from more than one source to create a paper without quoting or giving credit (Strayer University iCampus, 2010b).

Academic integrity is the norm of the scholarly community. In the scholarly community, plagiarism is not taken lightly. All the members need to abide by the rules (Wang, 2008: 751).

Academic writing is any writing that fulfils an educational purpose in an institution of higher education. The term implies student writing, such as academic assignments, as well as professional writing by academics, teachers and researchers for publication and conferences (Thaiss & Zawacki, 2006: 4).

The South African Higher Education Act 101 of 1997 defines a higher education institution as 'any institution that provides higher education on a full-time, part-time or distance basis and which is (a) established or deemed to be established as a public higher education institution under this Act; (b) declared as a public higher education institution under this Act; or (c) registered or conditionally registered as a private higher education institution under this Act' (Gillard, 2004: 11).

## TABLE OF CONTENTS

DECLARATION.....	ii
KEYWORDS .....	iii
ABSTRACT .....	iii
DEDICATION .....	v
AKNOWLEDGEMENT .....	vi
DEFINITION OF KEY TERMS .....	vii
TABLE OF CONTENTS .....	ix
LIST OF FIGURES.....	xiii
LIST OF TABLES.....	xiii
1. INTRODUCTION.....	1
1.1. Background of the study.....	1
1.2. Statement of the problem .....	3
1.2.1. Objectives of the study .....	3
1.2.2. Research questions.....	3
1.3. Significance and limitations of the study.....	4
2. LITERATURE REVIEW.....	5
2.1. Introduction .....	5
2.2. What is plagiarism? .....	5
2.2.1. Definitions .....	5
2.2.2. Types of plagiarism .....	6
2.2.3. Forms of plagiarism.....	7
2.2.3.1. Cheating.....	7
2.2.3.2. Patch writing.....	8
2.2.3.3. Non attribution of sources .....	8
2.2.4. Methods of using literature sources.....	9
2.2.4.1. Paraphrasing .....	9
2.2.4.2. Summarizing .....	9
2.2.4.3. Quoting.....	9
2.3. Plagiarism in higher education institutions .....	10
2.4. Causes of plagiarism in higher education institutions.....	17
2.4.1. School instruction .....	17
2.4.2. Subjective and objective factors .....	18
2.4.3. Referencing skills .....	20

2.4.4. Internet plagiarism.....	21
2.5. Common trends of student plagiarism.....	24
2.6. Policies regarding plagiarism .....	25
2.7. Conclusion .....	28
3. RESEARCH DESIGN AND METHODOLOGY .....	30
3.1. Introduction .....	30
3.2. Research design .....	30
3.2.1. Survey methodology.....	31
3.2.1.1. Advantages of survey methodology .....	31
3.2.1.2. Disadvantages of survey methodology.....	31
3.2.2. Population .....	32
3.3. Sampling .....	32
3.4. Data collection instruments .....	33
3.4.1. Questionnaires .....	33
3.4.1.1. Questionnaire design .....	35
3.4.2. Pilot study.....	35
3.5. Data collection process .....	36
3.6. Data analysis and presentation .....	37
3.7. Ethical statement.....	38
3.8. Conclusion .....	38
4. RESULTS AND DISCUSSION .....	40
4.1. Introduction .....	40
4.2. Demographic profile of respondents.....	40
4.2.1. Gender of respondents.....	40
4.2.2. Age.....	41
4.2.3. Level of study .....	42
4.2.4. Marital status .....	42
4.2.5. Country of origin .....	43
4.2.6. Home language .....	44
4.3. Student awareness of plagiarism .....	45
4.3.1. Seriousness of plagiarism .....	45
4.3.2. Defining plagiarism.....	46
4.3.3. Forms of plagiarism.....	47
4.3.4. Sources used for assignment writing and possible plagiarism .....	50
4.3.4.1. Books as a source for assignment writing and potential source.....	51

of plagiarism.....	51
4.3.4.2. Internet as a source for assignment writing and potential .....	52
source of plagiarism .....	52
4.3.4.3. Journal articles as a source for assignment writing and potential.....	53
sources of plagiarism .....	53
4.3.4.4. Newspaper articles as a source for assignment writing and potential .....	54
source of plagiarism .....	54
4.3.5. Use of Internet.....	54
4.3.6. Access to the Internet.....	55
4.4. Causes of plagiarism.....	56
4.4.1. Reasons for plagiarism.....	56
4.4.2. Difficulties experienced with assignment writing.....	58
4.4.3. Reasons for not referencing properly .....	59
4.5. Plagiarism policies.....	60
4.5.1. Awareness of plagiarism policies .....	60
4.5.2 Awareness of faculty guides.....	61
4.5.3. Work being plagiarised.....	61
4.5.4. Penalties for plagiarizing .....	62
4.5.5. General understanding of plagiarism.....	63
4.6. Conclusion .....	64
CHAPTER 5 .....	65
5. INTERPRETATION OF FINDINGS .....	65
5.1. Introduction .....	65
5.2. Student awareness of plagiarism .....	65
5.3. Trends regarding plagiarism at this South African higher.....	66
education institution.....	66
5.3.1. Defining plagiarism.....	66
5.3.2. Forms of plagiarism.....	67
5.3.3. Sources used for assignment writing and possible sources of plagiarism.....	68
5.3.4. Use of the internet.....	68
5.3.5. Access to the internet.....	68
5.4. Causes of plagiarism.....	69
5.4.1. Reasons students plagiarise .....	69
5.4.2. Difficulties students experience in assignment writing.....	70
5.4.3. Reasons for not referencing properly .....	70
5.5. Plagiarism policies.....	70



5.5.1. Penalties for plagiarism .....	71
5.6. Conclusion .....	71
5.6.3. Causes of plagiarism.....	72
5.6.3.1. Reasons students plagiarise intentionally were:.....	72
5.6.3.2. Reasons students plagiarise unintentionally were:.....	72
5.6.3.3. Difficulties students experienced in assignment writing were:.....	73
5.6.3.4. Reasons for not referencing properly were: .....	73
5.6.4. Plagiarism policies.....	73
5.6.4.1. Penalties of plagiarism .....	73
CHAPTER 6 .....	74
6. RECOMMENDATIONS .....	74
6.1. Introduction .....	74
6.2. Defining plagiarism.....	74
6.3. Information literacy .....	75
6.3.1. Designing assignments .....	75
6.3.2. Teaching citation and referencing skills.....	76
6.4. Plagiarism detection software .....	77
6.5. Institutional policies and guidelines about plagiarism .....	78
6.6. Conclusion .....	79
CHAPTER 7 .....	80
7. CONCLUSION .....	80
7.1. Further research into student plagiarism .....	82
8. BIBLIOGRAPHY.....	83
APPENDIX A: Questionnaire .....	93
APPENDIX B: Consent form .....	102

## LIST OF FIGURES

Figure 4.2.1. Gender of respondents.....	41
Figure 4.2.2. Age of respondents .....	41
Figure 4.2.3. Level of study .....	42
Figure 4.2.4. Marital status of respondents .....	43
Figure 4.2.5. Country of origin .....	44
Figure 4.2.6. Home language .....	45
Figure 4.3.1. Plagiarism seriousness .....	46
Figure 4.3.2. Definition of plagiarism.....	47
Figure 4.3.4.1. Books usage .....	51
Figure 4.3.4.2. Internet usage .....	52
Figure 4.3.4.3. Journal article usage .....	53
Figure 4.3.4.4. Newspaper usage .....	54
Figure 4.3.5. Internet usage frequency.....	55
Figure 4.5.1. Awareness plagiarism policies .....	60
Figure 4.5.2. Awareness faculty guides.....	61
Figure 4.5.3. Work plagiarised .....	62

## LIST OF TABLES

Table 2.1. Procedure and penalties for plagiarism .....	27
Table 4.3.3. Forms of plagiarism committed by the students .....	48
Table 4.3.4. Sources for assignment writing and possible plagiarism .....	50
Table 4.3.6. Access to the internet.....	55
Table 4.4.1. Reasons for plagiarizing .....	57
Table 4.4.2. Difficulties students experienced with writing assignments .....	58
Table 4.4.3. Reasons for not referencing properly .....	59
Table 4.5.4. Penalties for plagiarizing .....	63

## CHAPTER 1

### 1. INTRODUCTION

#### 1.1. Background of the study

The purpose of this study was to investigate plagiarism among undergraduate students at a higher education institution in South Africa. This study also investigated students' awareness of what constitutes plagiarism and the higher education institution's policy and guidelines regarding plagiarism practices. The study addressed how the institution can improve students' awareness of the various guidelines and policies regarding plagiarism.

Plagiarism is a modern Western construct which arose with the introduction of copyright laws in the eighteenth century. Before then, there was only a little sense of artistic ownership. Since then, the ideas of originality in writing as well as the "autonomous text" have been highly valued (Angelil-Carter, 1995: v and Angelil-Carter, 2000: 2).

Plagiarism is derived from the Latin word *plagiarius* (kidnapper) which means the theft of words or slaves. It was first used by Martial, a Roman poet, in the first century A.D. (Howard, 1995: 790; Jameson, 1993: 21 and Walker, 1998: 89). Jameson (1993: 18) pointed out that there is no universal definition of plagiarism. Plagiarism depends on the context, circumstances, audience, expectation and genre of the written work.

Librarians and academic staff can be easily convinced that students are expert users of information because of the way they embrace and use technology. From the internet students use a variety of sources quickly, easily and with little assistance. The perception of students that information on the internet is freely accessible leads them to think that it can be used without acknowledgement and this contributes to plagiarism (Madray, 2007).

The aim of the study conducted by Baruchson-Abbi & Yaari (2004: 2) was to investigate students' perceptions on internet and printed material plagiarism. In the 1990s plagiarism was restricted to printed sources such as books, encyclopaedias, newspapers and journal articles. Information on the internet is highly accessible. It is accessible anywhere at anytime, whereas printed material are stored in places such as libraries and available to borrowers for a limited time. The common argument about the internet is that it is a public domain. Because rules to guide the citation of internet sources are not well known yet, students perceive information on the Internet as free to use. The study concluded that students plagiarise more from the internet than from printed materials and plagiarism of internet sources is taken less serious than that of printed sources.

Plagiarism includes a mixture of legal, intellectual, social, professional, and moral issues as well as matters of reputation, acceptance, shame, economic loss, self esteem and indignation (Hannabuss, 2001: 311). Plagiarism is a moral issue, because it raises important ethical and moral questions about good or bad, right or wrong and acceptable or unacceptable practices in academic and professional writing. Responsibility for these issues must be taken. It is unsure who must decide on the behavioural norms in the context of plagiarism. According to higher education institutional policies and guidelines, plagiarism is the same as stealing. It is illegal and unethical to submit someone else's work as your own. Creative and original work has been protected by copyright, patent and trademark laws for many years. It is fair and morally right to acknowledge other people's work (Hannabuss, 2001: 311).

Devlin (2006: 45) pointed out that it is understandable that universities do not want to risk their reputation by accepting that they have a problem with plagiarism. Park (2004: 291) argued that it will be inappropriate for higher education institutions not taking responsibility and admitting that they have a problem. The main reason will be the unfairness towards those students who choose not to plagiarise.

Plagiarism can devalue the academic credibility and reputation of the institution and the academic integrity amongst students and academic staff could be undermined.

If a higher education institution does not accept that they have a plagiarism problem, they might be denying the sense of responsibility, good study skills and independent learning among students.

## **1.2. Statement of the problem**

### 1.2.1. Objectives of the study

The objectives of the study are to:

- Investigate the awareness for plagiarism among undergraduate students at a South African higher education institution.
- Investigate the causes and trends of plagiarism in academic work among undergraduate students at a higher education institution in South Africa.
- Examine if undergraduate students are aware of the policies and guidelines regarding plagiarism of this higher education institution.
- Make recommendations as to how higher education institutions can improve student's awareness of plagiarism.

### 1.2.2. Research questions

A higher education institution should ensure that students have basic referencing and writing skills. If students are able to summarize from information sources and to synthesise other people's ideas into their own work and to acknowledge these sources, unintentional plagiarism will be eliminated. Undergraduate students must also receive clear guidelines regarding policies on plagiarism and any disciplinary action that can be taken against them when found guilty of plagiarism. If plagiarism among undergraduate students is detected, students should receive training about plagiarism and referencing technique before disciplinary action is taken.

The purpose of the study was to find answers to the following questions about student plagiarism at a specific higher education institution in South Africa:

- Are undergraduate students aware of plagiarism?

- What are the current trends regarding plagiarism among undergraduate students?
- What are the causes of plagiarism among these undergraduate students?
- Are undergraduate students aware of this higher education institution's policies and guidelines regarding plagiarism?
- What recommendations can be made to improve the awareness of plagiarism by undergraduate students?

### **1.3. Significance and limitations of the study**

Ellery (2008: 508) stated that there are few studies on plagiarism done in South Africa. International studies showed that there is a lack of research worldwide, especially in Japan and China. The mission of most higher education institutions in South Africa is to empower students through teaching, learning and research. This study hoped to contribute to the mission and values of these institutions.

The significance of this study was to:

- Establish causes and trends of plagiarism among undergraduate students in a higher education institution.
- Examines the effectiveness of institutional plagiarism policies and guidelines regarding plagiarism among undergraduate students.
- Assist academic staff to deal with cases of plagiarism and to reduce or prevent plagiarism.
- Assist students to understand what constitutes plagiarism.

The limitations of the study were the following:

- The investigation was carried out in one faculty of one higher education institution. No comparison between faculties or different higher education institutions was therefore possible.
- The participants were limited to undergraduate students in their first, second or third year of study. Third year students busy with internships off campus were not included.

## CHAPTER 2

### 2. LITERATURE REVIEW

#### 2.1. Introduction

This chapter will focus on the literature related to the study of plagiarism at higher education institutions.

#### 2.2. What is plagiarism?

##### 2.2.1. Definitions

According to Norris (2007: 3) one question that needs to be addressed when dealing with plagiarism is whether it is a universally understood concept or does the meaning differ from country to country? There is no agreed worldwide definition of plagiarism. Every institution develops its own definitions, even if the definition is interpreted differently by individuals (Colin, 2007: 28 and Leask, 2006: 185). Jameson (1993: 19) stated that plagiarism depends on the context, the situation, people's expectation, the writer's intention, or the genre or subgenre of the work. There is therefore a need for a broader definition of plagiarism.

Plagiarism can be defined as the misappropriation of materials, ideas, facts, words that are created, originated, or discovered by someone else (Jameson, 1993: 19). Stefani & Carroll (2009) defined plagiarism as an attempt to gain personal, academic, financial, professional or public advantage by trying to fool a teacher, an editor or an employer into thinking that you wrote, thought or discovered something which in actual fact was the writings, thoughts or discoveries of somebody else. Logue (2004: 40) defined plagiarism as the intentional and unintentional use of another's work or ideas, published and unpublished, without acknowledging the author of the work. This definition includes contents from unpublished work, such as masters and doctoral dissertations, which have not been published, but are readily accessible. It might seem harsh to include the unintentional use of another's words in

any definition, but lack of intention does not change the act itself. According to Cronin (2003: 253) plagiarism is the use of someone's words without appropriate citation and referencing.

From the above mentioned definitions, plagiarism can be broadly defined as the misappropriation of materials, ideas, facts or words created originated or created by someone else to gain financial, academic, professional or publicity advantage. The broader definition of plagiarism does not really give a clear indication of what constitutes plagiarism. Plagiarism is more than just using someone else's words without acknowledgement of the intellectual work.

### **2.2.2. Types of plagiarism**

The literature showed that there are various types of plagiarism. Pecorari (2003: 318), for example, differentiates plagiarism into two types. The first type is called prototypical plagiarism; meaning the intention to deceive. The second type is called non-prototypical plagiarism; meaning unintentional plagiarism.

It is difficult to prove or disapprove the intention of plagiarism because the conclusive evidence exists only within the head of a perpetrator (Park, 2003: 476 and Pecorari, 2003: 318). Plagiarism is intentional if it is pre-mediated, designed to deceive and thus will be a deliberate act of literary theft (Park, 2003: 476). Taylor (as cited in Marsh & Bower, 1993: 673) stated that unintentional plagiarism is caused by what psychologists describe as cryptomnesia or hidden memory. Cryptomnesia is unconsciously plagiarizing or copying of other people's work and thinking that you are producing the original work. According to Harris (2001: 11) unconscious plagiarism happens because of three reasons. Firstly, there are more people than before working with a lot of information. Secondly, the quality of information each person is working with is questionable. And thirdly, information is coming from more sources than before. When cryptomnesia happens in academic writing, the phenomena constitute unconscious or unintentional plagiarism and it is difficult to study because no laboratory analogue has been constructed to prove it (Marsh & Bower, 1993: 673).



Hayes & Introna (2005: 229) argued that plagiarism is not always about cheating. Some forms of plagiarism can be influenced by other complex and diverse issues especially by students studying in other countries. The definitions mentioned in paragraph 2.2.1 are more specific to tertiary education.

Plagiarism can thus be categorised into two types, intentional and/or unintentional usage of someone's work, whether presented as exact words, a paraphrase, a summary or quoted phrase, published or unpublished without acknowledging the source, whether the source is printed, electronic or spoken words.

### **2.2.3. Forms of plagiarism**

#### **2.2.3.1. Cheating**

Cheating is copying another person's work, with or without their consent, and claiming or pretending it as your own work (Colin, 2007: 29). Cheating is according to Howard (1995: 799) borrowing, purchasing and obtaining work composed by someone else and submitting it as one's own. This form of plagiarism is committed deliberately, which means the writer had the intention to deceive. There are various practices that constitute cheating such as paraphrasing an argument or wording without proper acknowledgement of the original source. Students might submit the same or very similar work more than once to gain academic credit. Work done by a group of students can be presented by one student as his or her own effort. This is usually done without the other students' knowledge or consent.

Pre-written papers can be bought from the internet. These papers are submitted as if it is the original work of the writer. Falsification of data or making up of statistical results and reporting them as part of the assignment or research report is fraud. During examination, impersonation of another student in an examination, communication with others to get answers, obtaining a copy of an examination paper before the examination is cheating (Colin, 2007: 29).

#### 2.2.3.2. Patch writing

Patch writing is “copying from a source presenting an argument that is the combination of your own and a significant percentage of copied words of the original author without acknowledging the source” (Colin, 2007: 29). It also involves copying text from a source, deleting some words, changing grammar or plugging in one-for-one synonyms (Howard, 1993: 233). Plagiarism can assume various forms: an uncited idea, copying an organizing structure, copying information or data from another source, or using a verbatim phrase or passage that is not quoted. Even when the author is using words he or she wrote previously requires appropriate citation.

According to Howard (1995: 800) patch writing is not always a form of plagiarism and is not always committed with the intention to deceive. Pecorari (2003: 338) justified patch writing by concluding that patch writing does not have an element of intentional deception and that people guilty thereof are usually inexperienced students using sources inappropriately. It is therefore not a terminal stage because they can be taught to use information appropriately. It is a developmental stage for an inexperienced writer. The extreme of patch writing will be when a student aims deliberately to deceive. In such a case the minimum penalty should be failing the course and the maximum penalty suspension from university.

#### 2.2.3.3. Non attribution of sources

Non attribution of sources involves writing a paper including passages copied exactly from the work of another, regardless whether the work is published or unpublished or whether it comes from a printed or electronic source, without providing firstly footnotes, endnotes, in-text-references or parenthetical notes that cite the source, and secondly quotation marks or block indentation to indicate precisely what is copied from the source (Howard, 1995: 799). According to both Colin (2007: 29) and Howard (1995: 799) it is sometimes the result of inexperience regarding referencing and academic writing skills by students.

## **2.2.4. Methods of using literature sources**

There are three methods of using sources effectively without plagiarising, namely paraphrasing, summarizing and quoting.

### **2.2.4.1. Paraphrasing**

Paraphrasing is rewriting information from a source using your own words, new synonyms and vocabulary (University of Ottawa, 2006). It is used when writing an assignment or a research paper when other people's ideas and knowledge are incorporated into the new work. It is used to clarify, simplify and emphasis the argument and ideas in the source (Harris, 2005: 53). According to the University of Ottawa (2006) the purpose of paraphrasing is to condense the source using your own words without changing the meaning of the original text.

### **2.2.4.2. Summarizing**

Summarizing is the rewriting of sources in order to present the ideas in a focused and shortened way. The purpose is to reduce the long article into an abstract, without going into specific details and examples. The summary should be written in the writer's own words just as for paraphrasing (Harris, 2005: 59).

### **2.2.4.3. Quoting**

Quoting someone's exact words (verbatim) is different from summarizing and paraphrasing. When quoting someone's exact words it is indicated with quotation marks and the author is acknowledged. One is not allowed to change the wording in the statement even if the spelling is incorrect. In a case where there is a missing word, you may insert the words and indicate with a bracket (Harris, 2005: 49).

When dealing with your own ideas or common knowledge, no references to sources are needed. Although common knowledge needs no citation or acknowledgement, Armstrong (1993: 479) raised an important question of what constitute common

knowledge that does not need acknowledgement. Some authors find it difficult to differentiate between common and owned knowledge. According to the University of Ottawa (2006), information can be regarded as common knowledge when it appears in several sources without acknowledgement or referencing and if it is considered facts, information that any knowledgeable person is likely to know. Because inexperienced writers might not understand the difference between common knowledge and owned knowledge it is advised that the necessary citation and acknowledgment should be given if there is any doubt that the information constitutes common knowledge (Errey, 2002: 18 and Harris, 2005: 18).

### **2.3. Plagiarism in higher education institutions**

The Council of Higher education recommended that institutions should be:

- Multipurpose, for example broad-based covering several programmes fields and levels of study, should produce graduates that possess a range of competencies and skills. The principle aim is develop an increasing level of intellectual maturity in learners to enable them to contribute to the creation and application of new knowledge.
- Involved in teaching, scholarship and research, appropriate to the institution's agreed mission, with appropriately qualified staff (Gillard, 2004: 38).

Plagiarism is a common problem amongst students in higher education institutions. Plagiarism is the failure to distinguish between the student's own words or ideas, and the ideas of the source the student consulted. The ideas derived from other authors, whether presented as exact words, a paraphrase, a summary, or quoted phrase must always be acknowledged. The rule applies whether the source is printed, electronic or spoken words (Harris, 2001: 132). In simple terms plagiarism is theft of words and ideas. Park (2004: 292) went a bit further and stated that plagiarism is a form of cheating or academic malpractice, including cheating in examinations, fabrication of results, duplication of sources and false declaration.

Plagiarism is a controversial issue in higher education (Flint, Clegg & Macdonald, 2006: 145). Plagiarism amongst university students is perceived by many as a

widespread and increasing problem. Dordoy (2002) pointed out that the solutions to plagiarism require a deeper examination of teaching and assessment practices, and addressing the question of what can be done in tertiary education in the 21<sup>st</sup> century. Plagiarism should be taken seriously, as students get good grades for plagiarised work. The validity of qualifications they obtained can therefore be questioned. It can also be a disadvantage to those who choose not to plagiarise. It also offends academic integrity and undermines the traditions of academic teaching, learning and research (Walker, 1998: 90). "Plagiarism is outrageous, because it undermines the whole purpose of education itself. Instead of becoming an individual thinker, the plagiarist denies the self, and the possibility of learning. Someone who will not, or can not, distinguish his or her ideas from those of others offends the most basic principles of learning" (White, 1993: A44).

Although students are exposed to library orientations and information literacy education when they enter higher education institutions, many undergraduate students do not know how to search the library catalogue for books, databases for journal articles or the internet for websites. They are unfamiliar with referencing techniques and how to compile a bibliography. Higher education institutions are obliged to assist students to acquire these skills by imbedding it in the academic programs and working in conjunction with the library. To ensure that academic writing skills are mastered, lecturers should teach small groups of students how to use sources effectively and correctly (Straw, 2002). It is important that students consult their librarians since they have expertise in searching and locating reliable, accurate and current sources. They are also familiar with subject matter and various subject databases available.

The purpose of education is learning how to think, write and work with other people's ideas. In order to raise awareness among students, academic staff must communicate what constitutes plagiarism, and why it is not acceptable. As students are from different cultural backgrounds, it is important not to assume that every student will know what plagiarism is and how to prevent being accused of it (Wilhoit, 1994: 163). Most students are academically unprepared to face the challenges of higher education. Students entering tertiary education often lack academic writing

skills such as analyzing and summarizing information, note-taking, paraphrasing, referencing, citing sources and developing an argument. It is the duty of higher education institutions to teach students the proper academic writing skills. Teaching in tertiary education is a challenge, because of the diverse students admitted every year and large number of students in each classroom (Zimitat, 2008: 11).

The study by Youmans (2000: 119) of the understanding of plagiarism in the United States uncovered three groups of students. There were students who do not understand plagiarism but they were aware of their confusion; those who think they understand it but they do not really know and those who understand plagiarism but choose not to practice it.

Pickard (2006: 218) conducted research at the University College Northampton in the United Kingdom. The purpose was to investigate attitudes of staff and students towards plagiarism. For many years, the university has provided students with a definition of plagiarism, and has developed procedures to deal with it. The definition did not provide adequate guidelines, which resulted in misunderstandings between students and staff members. Understanding both staff and student perceptions, was important in directing student learning, guiding staff development and formulating institution policies to ensure that students were treated fairly and consistently.

The results showed that 38 of academic staff had detected cases of plagiarism in the previous year, 33 had not dealt with any and have not seen one case in the last ten years. Of the 38 academic staff that detected plagiarism only 33 had taken action against the plagiarist. The results raised the need for a qualitative approach to plagiarism: criteria used, staff development training on the issue and differences in staff towards detecting plagiarism (Pickard, 2006: 225).

At the Northumbria University staff and students perceptions on plagiarism and cheating were investigated. The aim of the research was to explore the problems, raise awareness, and encourage debate since academic staff were concerned about plagiarism. A comparison of students and academic staff perceptions was done asking both groups what percentage of the assessment they thought were affected

by cheating. The most common form of cheating by students was copying from books, cutting and pasting from the internet, buying essays from the internet paper mills, cheating in examinations and falsifying of data. The results showed that students cheat intentionally in order to gain personal advantage. Staff members seemed to be taking plagiarism seriously even if it is time consuming to detect plagiarism by searching in their own books and designing tasks that makes plagiarism difficult. Approximately 90% of academics had dealt with cases of student plagiarism. The results also gave clear evidence that there is no easy solution to these problems (Dordoy, 2002).

The study by Flint, Clegg & Macdonald (2006: 152) investigated staff perceptions on student plagiarism in Sheffield Hallam University in the United Kingdom. Twenty six academic staff took part in the open and semi structured interview. The analysis of results showed that there were different definitions of plagiarism in existence. There was also inconsistency in the way staff educate students about plagiarism therefore students received conflicting views about what is acceptable and unacceptable. The different definitions of plagiarism influenced the inconsistencies of implementation of policies, and this resulted in students being treated differently.

Wheeler (2009: 18) reviewed the literature on plagiarism in Japan. He stated that plagiarism in Japan is culturally and morally acceptable. Japanese higher education institutions have a more forgiving approach to plagiarism than Western universities. The consequences that may result for excusing plagiarism as a cultural difference can be problematic. A survey conducted among first year students at the University of Hokkaido showed that although instructions were given in both English and Japanese, Japanese students copy sources without acknowledging the authors. The reasons thereof were that they had no formal training regarding plagiarism in high school and most Japanese universities do not have policies concerning plagiarism. Both studies by Norris (2007: 5) and Rinnert & Kobayashi (2005: 54) showed that undergraduate students do not have much knowledge of citation of sources. Japanese students do not regard using what is already written as wrong.

The study conducted by Hayes & Introna (2005: 215) explained why students from different cultures plagiarise while studying abroad. The participants were 46 masters

degree students studying at the management school, Lancaster University. Being Asian, Chinese, Greek and British they were of diverse nationalities. The study showed that student behaviour was influenced by their background and academic culture. Some students were taught to copy from textbooks and were expected to memorize exact sentences for examinations. Chinese students copy from books word by word (verbatim) because they were taught to respect other people's words and that they can not improve on what is already written. In general English not being their first language sometimes causes difficulties in expression (Hayes & Introna, 2005: 221).

Wood (2004: 240) has made several observations and concluded that students are confused about paraphrasing, attribution of sources, working in groups and producing their own unique ideas. One reason for the confusion might be that they do not analyze information, especially information from internet sources. They are only interested in the end product. Because they do not see it as a negative trend, students are willing to share information and answers with others students.

### 2.3.1. Plagiarism in South African higher education institutions

Recent research indicated that the acts of plagiarism, whether intentionally or unintentionally are on the increase among university students in South Africa (Cronin, 2003: 253).

Coetzee & Breytenbach (2006: 38) conducted an extensive study amongst academic staff members to investigate plagiarism at South African higher education institutes. The aim of the study was to determine the extent of plagiarism and to investigate what measures are taken against students committing plagiarism. One of their findings was that if students are found guilty of plagiarism at the University of the Free State, they must either re-submit the assignment or receive a zero for that assignment. At the University of Cape Town more than fifty cases of plagiarism were recorded in 2004. In order to emphasise the seriousness of plagiarism, the university published these cases in different national newspapers. Students guilty of plagiarism at the University of KwaZulu Natal are penalised depending on the seriousness of the case. Students might receive a warning, lose their mark for their work or might be



suspended from the university. At the University of Pretoria it was found that 80% of students copied and pasted information from the internet. As a result, the university implemented Turnitin to detect plagiarism. The University of South Africa reported only a few cases of plagiarism. At Rhodes University students found guilty of plagiarism appear before a disciplinary hearing and can be suspended. The University of Stellenbosch stated that it is the duty of academic staff to educate students about plagiarism and reasons why it cannot be tolerated (Coetzee & Breytenbach, 2006: 43).

Each department of the University of Witwatersrand has a policy on plagiarism. Students found guilty are either fined or suspended. Border Technikon suggested that students guilty of plagiarism should be suspended either permanently or for a few years and that the names of guilty students must be reported to other universities. The University of Zululand will suspend students who have committed plagiarism for approximately two years.

The study concluded that universities need formal policies on plagiarism. Students should be educated about strategies to prevent plagiarism and receive training on how to acknowledge sources properly. Students must also sign a declaration with all their work stating that is their own work (Coetzee & Breytenbach, 2006: 44).

Ellery (2008: 508) conducted a study to investigate plagiarism among first year students at the University of KwaZulu Natal. The aim of the study was to find reasons why student plagiarise, identify if there is a correlation between plagiarism and gender, language or ethnic groups and whether students are educated about plagiarism. Written essays were used to detect plagiarism. Google was used to detect internet plagiarism. Despite the fact that students were informed about the consequences and penalties of plagiarism before hand, students still plagiarised. The findings identified different forms of plagiarism, such as paraphrasing without acknowledging the source, word by word (verbatim) plagiarism whereby one or two words in the paragraph are changed, author's ideas incorrectly acknowledged, verbatim but not quoted with acknowledgement, verbatim without acknowledgement and verbatim off the internet. The students guilty of plagiarising for the first time,

were given a chance to consult with the lecturer, to re-write and re-submit the essay. Students guilty for the second time, were given a zero. Ellery (2008: 514) concluded that first year students are inexperienced and have no clue on what constitutes plagiarism. She also recommended that if higher education institutions are serious about improving student academic skills and preventing plagiarism, they should incorporate plagiarism into an academic writing framework in which clear instruction will be provided.

A study investigating incidence of plagiarism within the Engineering Faculty at the Cape Peninsula University of Technology (Cape Town campus) was conducted by Beute, Van Aswegen & Windberg (2008: 201). The causes of plagiarism were hypothesized as pressure to produce research, freely available information on the internet, inexperienced multicultural students and inaccurate citing and referencing (Beute, Van Aswegen & Windberg, 2008: 201). Various forms of plagiarism like copying and pasting were found. Difficulties with in-text referencing, citing, direct quotation and paraphrasing were identified. The overuse of sources was also a problem.

The results of a qualitative and quantitative questionnaire completed by the academic staff working in the Engineering Faculty of the Cape Peninsula University of Technology (Cape Town campus) showed that although 74% of lecturers explained plagiarism to students, academic staff members still felt that 70% of students plagiarise intentionally. Fifteen percent of academic staff was unsure about the effectiveness of their explanation of plagiarism and 23% felt students do not know what constitutes plagiarism. Sixty five percent of lecturers indicated that laziness of students leads to plagiarising. Some academic staff members recommended that students guilty of plagiarism should be expelled permanently (Beute, Van Aswegen & Windberg, 2008: 203).

The aim of this study was to investigate student plagiarism within the Faculty of Applied Science at a particular higher education institution in South Africa. Evidence of plagiarism and reasons why students plagiarise was compared with results from the above mentioned studies. The insight gained from the study will be used to

understand student perceptions of and to develop appropriate behaviour concerning plagiarism. Academic staff members need to understand what constitute plagiarism and what the institution policy on plagiarism is, before they can even deal with plagiarism cases.

South Africa is a culturally and linguistically diverse country. Higher education institutions are admitting each year students with diverse economic, cultural, educational and language backgrounds. Plagiarism becomes even more problematic when students must do academic writing in a language that is not in their mother tongue.

## **2.4. Causes of plagiarism in higher education institutions**

### **2.4.1. School instruction**

The roots of plagiarism can be traced to high school instruction (White, 1993: A44). According to Logue (2004: 42), Walker (1998: 93) and White (1993: A44) learners have earned good grades because their teachers have approved their work that they copied from encyclopaedias and other reference books. The study conducted by Sisti (2007: 220) among one Catholic, two private and two public schools in the Pittsburgh and Philadelphia areas consulted 160 grade 9 -12 learners on copy and paste plagiarism and purchasing of assignments online. The results of the study indicated that 58% of the learners use the internet 2- 4 hours a day, while 82.5% indicate that they use almost half of their online time for school work. Almost 35% indicated that they have copied and pasted material into their assignments without proper citation. Only 2% have purchased a paper on the internet and submitted it as their own work. Justifications for their actions were the need to upgrade marks or because of the lack of being well prepared.

Many students blame their actions regarding copying and pasting on time constraints, because everybody is doing it and because there is no clear policy. Madry (2007) stated that many incoming university students are unaware and underprepared for tertiary education. Although the ideal situation is that the

recognition thereof should begin during high school years, early detection and instruction might reduce plagiarism.

#### 2.4.2. Subjective and objective factors

Plagiarism occurs as a result of two possible motivations: an absence of ethics, or an ignorance of academic writing skills. Some students do not appreciate academic values and therefore deliberately submit work that is not their own. Others do not understand academic writings skills and therefore plagiarise unintentionally (Howard, 1995: 788).

Eckstein (2003: 43) stated that plagiarism is caused by subjective and objective factors. Subjective causes include:

- The trend towards fraud,
- Attitudinal and individual circumstances,
- Ambition and competitive energies of participants of academic life,
- Ignoring the rules and conventions that represent what is right and what is acceptable.

Objective causes include pressures and expectation directed at individuals by society, family and other external sources. It also includes society's demands for skilled and educated workers and professionals. Inconsistencies in defining proper behaviour and lack of rules to maintain and enforce this behaviour will also play a role.

The purpose of the study conducted by Devlin & Gray (2007: 184-185) was to investigate why Australian students plagiarise. This qualitative study gathered the views of 56 Australian students. The results indicated a wide range of contributing reasons for plagiarism. One reason was that higher education institutions do not have adequate admission criteria and will admit students with no background for the courses they are doing. Most of these students have no understanding of what constitutes plagiarism and what it means in practice. A large percentage of the students had no academic writing skills. They were unable to demonstrate, for example research, writing, referencing and time management skills. If assessment

methods for students are poorly designed, students may feel that they have too many assignments, most of them due at the same time. Lack of adequate subject knowledge can force students to rewrite exactly from sources. Because tertiary education fees are expensive, students will rather spend money on buying assignments online than risking failure (Devlin & Gray, 2007: 187).

In North America, Park (2003: 479) identified the main reason for plagiarism as the lack of understanding of academic writing. Students lack academic writing skills and are unclear of what constitute common knowledge, they might plagiarise unintentionally by using incorrect ways of quoting, referencing, citing and paraphrasing. Most inexperienced students will involve themselves in an active social life or commit themselves to sport. When they have to complete multiple assignments in a short period of time, they are unable to manage their time properly. Plagiarism will be a shortcut to completing the assignment. Students also indicated that they will plagiarise since everybody is doing it, to fulfil social pressure, or tasks given to them are regarded as unimportant or not challenging. Negative attitudes towards their teachers or to the assignment might lead to cheating. To some students the benefits of plagiarizing are more important than the risks, especially if they know that there is little chance of getting caught and there is little or no punishment if they are caught. Some students will deny to themselves that they are cheating or find the ways of justifying their actions by putting the blame on others.

In Asia and Greece many students plagiarise because when they receive good marks, they have better chances of finding a good job. The chances of receiving scholarships and bursaries when they are planning to study in different countries within postgraduate programs are also higher. Greek students suggested that they are forced to cheat because they have lost trust in Greek academics in terms of treating all students fairly and consistently. Some students for example were given examination papers by their academics (Hayes & Introna, 2005: 224). According to Pennycock (1996: 202) among Chinese students copying word of word of the original writer is a form of respect. Memorizing text has always been practiced in all their levels of education. It will be difficult for students to change that culture.

It is clear that most students plagiarise intentionally. Reasons vary from being lazy (Dordoy, 2002), poor time management (Dordoy, 2002), pressure from other students, (Dordoy, 2002; Errey, 2002: 17; Wilhoit, 1994: 162; Devlin & Gray, 2007: 187 and Park, 2003: 479 and), pressure to receive higher grades (Dordoy, 2002; Park, 2003: 479 and Wilhoit, 1994: 162), gaining easy access to material via the internet (Dordoy, 2002), fear of failure and taking risks because they think they will not get caught (Dordoy, 2002 and Sutherland, 2004: 5). Reasons for plagiarising unintentionally may include collaborative team work in producing an assignment (Wilhoit, 1994: 162), misunderstanding of rules (Dordoy, 2002) and not being aware of what plagiarism entails (Dordoy, 2002).

Sutherland (2004: 5) suggested that academic staff must understand why student plagiarise to be able to reduce it. Plagiarism can be reduced if a lecturer put effort in setting the assignments. Topics must, for example, not be too generic. The same topics must not be given every year and assignments with similar topics must not be easily found on the internet.

#### 2.4.3. Referencing skills

Referencing does not include only the list of sources the student consulted, but also the way information is gathered and cited in the text. Whenever one uses another person's word, ideas in their assignment, they must provide a referencing in text (in the assignment). At the end of the assignment a full detail of all resources used, called reference list or a bibliography. When an assignment is well referenced it gives evidence of where the writer had obtained the ideas (Lloyd, 2007: 53).

Many students find referencing difficult because the various ways in which it can be done. Although the Harvard methods are popular referencing guidelines that are used by many universities, different disciplines and institutes have preferred techniques and methods of referencing.

Lloyd (2007: 52) and Dordoy (2002) stated that students do not understand academic writing skills. Students need to be constantly taught and reminded why referencing is important. Students should be provided with the necessary writing

exercises to master academic writing skills and to understand the acceptable practices regarding referencing at the institution. Guideline about what method of referencing should be used must be provided (Brown *et al*, 2008: 140). Students should be educated about the expected referencing techniques and appropriate use and acknowledgement of all forms of intellectual material. The study conducted by Brown *et al*. (2008: 144) reported that 74% of students felt that they have not been taught correct referencing techniques in the past.

Research done by Wang (2008: 753) and Madry (2007) showed that most students, even after instruction, do not know how to cite online sources or how to keep track of online sources used. The pre-test done by Madry (2007) showed that 69% of students did not know how to cite online sources, while the post-test showed 56% still do not know. A comparison between the two tests indicated only 13% difference. The study by Scanlon & Neuman (2002: 379) observed that approximately 19% of students sometimes copied text without citation, while 9.6% do it more often.

From the foregoing discussion and findings, it is clear that students plagiarise because they do not know what is required of them, what method of referencing to use and how to apply the techniques of referencing.

#### 2.4.4. Internet plagiarism

The internet allows easy storage, manipulation and reproduction of ideas. There is confusion whether it is acceptable or not to copy information from the internet. There are sites within the internet that allows free download of images and music, which makes copying legally and ethically right. With so much information on the internet, it is easy for students to fabricate (Townley & Parsell, 2004: 272).

There are also various internet services or paper mills available. Complete essays, assignments and articles can be downloaded either for free or for a fee (Coetzee & Breytenbach, 2006: 40 and Lathrop & Foss, 2000: 22-24). Available to students, for example are Cyber Essays, ThePaperExperts, 1millionpaper.com, School sucks, Evil house of cheat or CheatHouse. Townley & Parsell (2004: 272) observed that most

academics are not aware of new technologies that are emerging from the internet and that students are always one step ahead of them.

Recent research had shown that there is a growing tendency of students copying and pasting from the internet. Plagiarism is a complex issue. When academic professionals find cases of plagiarism, it is not easy to confront students. Academic are not comfortable to talk about plagiarism and they protect their institutions reputation (Youmans, 2000: 115). The internet has made plagiarism easier (Austin & Brown, 1999: 21 and Scanlon & Neuman, 2002: 374) in two ways: students use information from the internet that is not available in printed form and word processing allows students to cut and paste, which make the assignment looks original. Many of the documents published on the internet are copies, or plagiarised from other documents. It is therefore difficult to distinguish plagiarised documents of the same topic (Hoad & Zobel, 2003: 203).

A survey conducted by Errey (2002: 18) at Brookes University showed that 95% of students understood that copying from internet sources constitute plagiarism. However, 69% of these students copied and pasted paragraphs from the internet and made few changes. Students think it is acceptable because they cite the original source.

The policies and procedures developed by institutions should be implemented consistently and fairly. Dealing with plagiarism in this ever changing environment of technology is a challenge for higher education institutions worldwide. Dealing with cases of plagiarism for academics is time-consuming. Most universities are using plagiarism detection software to check student assignments against information readily available on the internet (Keuskamp & Sliuzas, 2007: A93).

The disadvantage of plagiarism detection software is that it can only match information online and overlook printed sources, so if a student has plagiarised from a book, encyclopaedia or any other printed document, the software cannot trace it. The use of plagiarism detection software treats each student as a plagiarist which might lead to an element of mistrust development between the students and



academics. This might hinder the developing of a teacher student relationship. It might also turn academic professionals into detectives or police officers (Gibaldi, 2003: 67; Howard, 2002: 47 and Scanlon, 2003: 164). Sutherland (2004: 8) argued that detection services should be used cautiously, because they are not always reliable, and should not be used as a substitute for teaching academic writing skills.

There are some sites that write assignments or dissertations for students for a fee. This type of plagiarism cannot be detected because it is written specifically for that student (Carroll, 2002: 68 and Logue, 2004: 43).

A study conducted by Baruchson-Abbi & Yaari (2004: 2) investigated the perceptions students have on plagiarism from the internet compared to from printed sources. In the 1990s plagiarism was more common from printed sources such as books, encyclopaedias, newspapers and journal articles. The emergence of new technologies has made information on the internet highly accessible. It can be accessible anywhere at anytime whereas printed material are stored in places such as libraries and available to borrowers for a limited time (Baruchson-Abbi & Yaari, 2004: 2). The common argument about the internet is that it is a public domain, and citation rules of internet sources are not well known yet. Students perceive information on the internet as free to use. The study concluded that students plagiarise more from the internet than from printed materials, and plagiarism of internet sources is taken less seriously than of printed sources.

Another study on student internet plagiarism conducted by Wang (2008: 745) at the School of Education, University of Alabama, investigated the causes of internet plagiarism and student perceptions regarding internet and in-print plagiarism. The study showed that 80% of students understood that copyright applies to internet sources the same way as to printed sources. The internet has made plagiarism worse because of the easy access to information and because students consider internet plagiarism as common practice.

Access to the internet has made plagiarism easy. Students no longer go to the library to search for information manually. Libraries provide off campus access to

their databases, full-text journals and e-books. Students can purchase assignments online or download it from the internet either for free or for a relatively small fee. The seriousness of plagiarism is a reflection on the trustworthiness of information circulated to the public. Society today depends on reliable and quality information, which is used in government, business, tertiary education and the media. If students fail to acquire the skills and knowledge to match their degrees, the institution's reputation is damaged (Gibaldi, 2003: 67).

## **2.5. Common trends of student plagiarism**

There are no doubts that there are students who are more likely to cheat or plagiarise than others (Park, 2003: 480). There is considerable evidence from previous studies that females are cheating less than males (Davis *et al*, 1992: 17 and Newstead, Franklyn-Strokes & Armead, 1996: 230). A literature review on which students are likely to cheat by Newstead, Franklyn-Strokes & Armead (1996: 230) found that students are less likely to cheat if they study for personal reward. Motivated students are less likely to cheat, because they have a stronger sense of morality and responsibility.

Old and mature students tend to cheat more often than young and immature students (Ellery, 2008: 510). According to Kenny (2006: 16) there is an increase of mature students who are entering higher education institutions to further their studies. Most of those students have families, children and full-time jobs. It becomes difficult to juggle parenthood, being a student and working. While Straw (2002) concluded that young male business students compared to students in other disciplines are most likely to cheat, Newstead, Franklyn-Strokes & Armead (1996: 230) identified students studying science and technology as the most likely candidates for plagiarism because they are likely to manipulate data related to their discipline.

Straw (2002) found that students with lower grades tend to cheat more often than students with higher grades. As it is difficult for students to juggle demands of their academic and social life, plagiarism is more common amongst students who party a

lot and have very active social lives. Plagiarism is also more common amongst students who have negative attitudes towards their classes and feel that the subject is unimportant and uninteresting (Park, 2003: 480). As there are inconsistencies in terms of age and maturity, it is clear from the existing research that there are issues that need further investigation and clarification.

## **2.6. Policies regarding plagiarism**

In dealing with plagiarism institutions should ensure that their policies and procedures include clear differentiation between the forms of plagiarism, the measurement of plagiarizing, disciplinary actions, fair and consistent disciplinary procedures, and instruction about how the institution deals with plagiarism (Carroll, 2002: 81). The policies should be circulated among students and academic staff (Austin & Brown, 1999: 23). When plagiarism is detected, it is important that the student is punished fairly, consistently, and according to the procedures in place. A study by Carroll & Appleton (2009) investigated the fairness and consistency of policies and procedures of student plagiarism at Oxford Brookes University, United Kingdom. There were cases whereby the decision makers used the same process, but came up with different conclusions. Fairness means that the outcome of the particular case is appropriate for the student that committed the offence. The student should be presented with the evidence of plagiarism and the opportunity to challenge that evidence in front of the committee that will determine the punishment. Students must be regarded as innocent until proven guilty. They therefore have the right to a fair hearing as well as the right to appeal if not satisfied (Carroll, 2002: 73 and Harris, 2001: 114).

Lancaster University developed a framework for dealing with student plagiarism. The institutional framework put a strong emphasis on prevention through education, intervention and punishment for violation (Park, 2004: 294). It encourages openness, consistency and transparency, specifies roles and responsibilities of different stakeholders, and tackles the causes and symptoms of plagiarism. The framework incorporates policies and procedure to deal with minor and major plagiarism offences. The minor offenses are poor referencing, unacknowledged quotations,

inappropriate paraphrasing, incorrect and incomplete citations, and copying directly without acknowledging the source. Major offenses include copying multiple paragraphs without acknowledging sources, copying essays from the internet without revealing the source, copying work of other students with or without their consent, and submitting the same piece of work for more than one course.

Carroll (2002: 74) as well as Macdonald & Carroll (2006: 238-239) suggested that the appropriate punishment for plagiarism should look at the amount of text plagiarised by matching the text to the original document and the nature of the material copied. Students do not always plagiarise intentionally, even if the intention is difficult to prove. When punishing a student for a violation, certain criteria should be taken into account. Firstly, if a student is in the early stage of his or her studies (for example a first year student) he or she is less informed, the institution will therefore be more forgiving. Secondly the number of offences that the student has committed must be taken into account. It is therefore important to keep records of cases of plagiarism. The learning background of the student, in other words how familiar the student is with academic writing skills must also be considered. The academic writing skills might differ according to different faculties or departments.

Academics should be provided with the list of penalties and guidelines, because academic staff members find it difficult to deal with different levels of plagiarism. Although each case will be dealt with on its own merits, inconsistencies can be eliminated if the correct penalty is matched to the offense. There should be guidelines which can be applied across all faculties and departments in an institution. According to Park (2004: 301) the common punishments for plagiarism will range from allowing students to rewrite the assignment and remarking it to failing the course, withholding the degree or permanent exclusion from graduation.

According to Carroll (2002: 77) and Walker (1998: 102-104) plagiarism guidelines should include categories of plagiarism, types graded according to the seriousness of the offense, a clear set of procedures for dealing with each type as well as a list of penalties related to the type of plagiarism depending on the seriousness of the

offense. The types, procedures and penalties related to plagiarism are summarized in the table 2.1 below.

Table 2.1: Procedures and penalties for plagiarism (Walker, 1998: 102-104 and Carroll, 2002: 77).

Plagiarism type	Procedure	Penalty
Sham plagiarism (copied verbatim from text and source acknowledged but represented as paraphrase).	Academic staff member brings to attention of student.	Minor: marks deducted equal to 10-50% of assignment value, depending on amount, no resubmission. Major: marks deducted equal to 10-100% of assignment value depending on amount, no resubmission permitted.
Illicit plagiarism (paraphrased from text without acknowledging the source)	Academic staff member officially censures student, copy of letters to Head of department and dean of faculty.	Minor: marks deducted equal to 10-50% of assignment value, depending on amount, no resubmission. Major: marks deducted equal to 51-100% of assignment value depending on amount, no resubmission permitted.
Two students submit identical assignments (copied another student assignment with their consent)	Students interviewed by Head of department and officially censured in writing. Send copy of letter to the dean of faculty.	Minor: original assignment marked and assessed at no more than 50%, copy assignment and at no more than 25% Major: original assignment marked and assessed at no more than 50%, copy assignment rated at 0%

Students copying substantially from books and journals (both students completed course previously)	Students interviewed by Head of department and officially censured in writing. Copy letter to dean of faculty	Minor: copy assignment marked and assessed at no more than 25%, course credit of colluding student reviewed. Major: copy assignment rated 0%; course credit colluding student reviewed.
Verbatim (word by word) copying	Students interviewed by Head of department and officially censured in writing. Send copy of letter to the dean of faculty	Minor: assignment marked and assessed at no more than 25% of total marks. Major: assignment assessed at 0%; no resubmission permitted.
Recycling (same assignment submitted more than once)	Student brought before the dean/disciplinary committee; entry in official record.	Assignment rated at 0%; Student placed on probation for the rest of the periods of study.
Ghost writing (assignment written by the third party and represented by students as their own).	Student brought before the dean/disciplinary committee; entry in official record.	Assignment rated at 0%; Student placed on probation for the rest of the periods of study.

## 2.7. Conclusion

Plagiarism is a complex issue (Macdonald & Carroll, 2006: 244 and Wang, 2008: 756). Before students are educated about plagiarism, academic staff members need to understand all the forms of plagiarism (Beute, Van Aswegen & Windberg, 2008: 205). Academics must communicate openly about plagiarism, share their teaching experiences and strategies, suggest specific institutional guidelines and formulate unified strategies to reduce student plagiarism. Not only lecturers, but the other stakeholders, namely the students and the institution, must be involved before the complexity of the plagiarism issue can be reduced (Macdonald & Carroll, 2006: 244).

The various reasons students plagiarise should be understood before plagiarism can be addressed. Understanding why students plagiarise can help the academic staff to

consider how to reduce plagiarism in their classrooms. Students should be provided with the necessary training. Academics should develop educative strategies aimed at clarifying the meaning of plagiarism to students and helping them to integrate other people's ideas into their own work and documenting the sources.

The studies conducted on student internet plagiarism showed that students see the information on the internet as free to copy and paste. Students need to be taught that the same rules and procedure that are used in acknowledging print sources are applied to internet sources. Scanlon (2003: 163) stated that especially internet plagiarism is misunderstood by students. Higher education institutions have to try harder to raise awareness about internet plagiarism and the current trends regarding the internet.

All higher education institutions are facing the challenge of student plagiarism. Each institution can develop a basic framework of policies, guidelines, and penalties which will be appropriate for the culture and situation of their own institution. They can also develop an atmosphere of openness and trust (Walker, 1998: 103). Devlin (2006: 48) recommended that institutions should provide a clear definition of plagiarism, with procedures and guidelines that could be followed when plagiarism was detected. The institution should have formal procedures of dealing with cases of plagiarism to ensure that there is consistency across the institution and the rights of students are protected.

## **CHAPTER 3**

### **3. RESEARCH DESIGN AND METHODOLOGY**

#### **3.1. Introduction**

The purpose of this chapter is to describe the research methodology and techniques that were used in the study. The survey research method as applied in the quantitative approach in the gathering and analysis of data was used. The chapter outlines different ways in which such surveys can be conducted and the mostly widely used methods of gathering information. It also outlines the methods used in the selection of a population. It is important that the sample is drawn from the population in such a way that the results would be generalised to the entire population.

#### **3.2. Research design**

The study used the survey research methodology to investigate plagiarism among undergraduate students in a South African higher education institution. A research design is defined as the strategy to approach the central research problem. It provides the overall structure for the procedure that the researcher follows, the data the researcher collects, and the analyses that the researcher conducts (Leedy & Ormrod, 2001: 91).

The methodology used to achieve the desired outcomes of this study was quantitative research. The quantitative method involved the distribution of questionnaires to undergraduate students to gain information about certain aspects of the phenomena. Quantitative research is empirical research where the data is in the form of numbers (Punch, 2005: 3) and uses numerical data, structured and predetermined research questions and designs (Punch, 2005: 28). This study used a



quantitative survey based on questionnaires about student plagiarism amongst undergraduate student in a higher education institution.

### 3.2.1. Survey methodology

Surveys are information collection methods used to describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behaviour. A survey can be a self administered questionnaire that people can fill in alone or with assistance or it can also be an interview done in person or by telephone (Fink, 2009: 1). According to Groves *et al.* (2009: 2) a survey is a systematic method of gathering information from a sample of entities for the purposes of constructing quantitative descriptors of the attributes of the larger population of which the entities are members.

Survey research methodology is simple in design and is the mostly used method for gathering information from people (Leedy & Ormrod, 2001:196). This type of methodology can use a series of questions to willing participants, summarises their responses with percentages, frequency counts and statistical indexes. It is a common method used to investigate human activities.

#### 3.2.1.1. Advantages of survey methodology

A survey is particularly useful in describing the characteristics of a large population. Surveys are flexible and many questions may be asked on a given topic. Standardised questions have strength in regards to measurements generally.

#### 3.2.1.2. Disadvantages of survey methodology

The survey questionnaire has several weaknesses. The standardised questionnaire represents the common denominator in assessing people's attitude, orientation, circumstances and experiences. Designing questionnaires that are the least minimally appropriate to all respondents, the research might miss what is most appropriate from most respondents. Surveys are inflexible, for example the initial study design remains unchanged throughout (Babbie, 2001: 268).

### 3.2.2. Population

Population is the set of target population members that have a chance to be selected into the survey sample (Groves *et al.*, 2009: 45 and Russel & Pursel, 2009: 174). A study population is that aggregation of elements from which the sample is actually selected (Babbie, 2001: 185). The population is the entire group of persons or set objects and events the researcher wants to study. The population contains all the variables of interest to the researcher. The sample of this study was chosen from the undergraduate research in a Faculty of Applied Science of a higher education institution in South Africa.

### 3.3. Sampling

A sample is a part of a whole or a subset of measurement drawn from the population. A sample then is a selected group of elements from a defined population in which the researcher is interested (Russel & Pursel, 2009: 174-175). It is usually impossible to include the entire population in the study, the main restrictions being time and costs. The size sample has to be taken into consideration. Bigger samples are better in terms of representation, statistical analysis and accuracy. The goal of survey methodology is to draw a sample from the population. It is important that the sample can be drawn in such a way that it can be generalised to the population (Maree & Pietersen, 2007b: 176-177). For this study the participants were hundred and thirty nine students from the Faculty of Applied Sciences. Two departments within this faculty were chosen randomly, namely the Department of Chemistry and of Mathematical Technology.

Stratified sampling is the process whereby the researcher chooses subsets of the respondents at random from a population. In a stratified random sampling the population is divided into subgroups or strata and a proportion of respondents from each stratum are drawn to get a sample (Groves *et al.*, 2009: 53). In this study a random was used whereby respondents were from different strata. The respondents were undergraduate students studying at a higher education institution in South

Africa. The strata represented in the study were full-time first, second and third year students.

### **3.4. Data collection instruments**

Survey research uses face to face interviews, telephone interviews or written questionnaires. Survey interviews are more structured and researchers ask a standard set of questions. The disadvantages are that interviews take time and are therefore not practical to use in a very large sample size. Telephone interviews are less time consuming and less expensive. Both the strengths and weaknesses of survey methods are discussed briefly below.

#### **3.4.1. Questionnaires**

The survey method can use questionnaires as a data collection technique. A survey is also excellent in measuring attitudes and behaviour from a large population. Questionnaires can be sent to a large number of people including those that live geographically far away. The most used form of self administered questionnaires is the mail survey. According to Leedy & Ormrod (2001: 197) questionnaires that are sent via mail have drawbacks. Firstly the majority of people that receive the questionnaire do not return them, and those who do not return are not necessarily represented in the sample. Secondly, even if they will want to participate in the study, respondents will respond according to their understanding of the questions. Misinterpretation of questions and weak writing skills might lead to misunderstanding between respondent and researcher.

According to Maree & Pietersen (2007a: 156) there are advantages and disadvantages of group administration questionnaires. The advantages are that the respondents answer the questions in a short space of time, the administrator can check for accuracy, the administrator can clarify queries by respondents, it is cheap and easy to administer.

The disadvantages of questionnaires are that if administered by different administrators could lead to different response. The condition in which the questionnaires are administered cannot be controlled by the primary researcher (Kobus & Pietersen, 2007:157). The majority of people who receive questionnaires don't return, and the people who do return are not necessarily representative of the original selected sample. More often people who are willing to participate in a questionnaires study their response will reflect their reading and writing skills. They might misinterpret one or more questions (Leedy, 2001:197).

Survey research can make use of a variety of questions types. They are characterised as closed and open questions. In closed questions respondents are presented with multiple answers or options. The respondents have to select, from several alternative responses, the one that best applies to them. Closed questions tend to be quicker to administer, easier to code, and often easier and quicker for the researcher to record responses.

In survey research, scales are used to measure how respondents feel or think about something. The use of scaling will ensure uniformity in response. The mostly used are the Likert scales. The most common use of the Likert scale is asking respondents whether they agree or disagree with a statement. The most common scale is 1-5, where 1 will equal strongly disagree, 2 disagree, 3 agree, 4 strongly agree and 5 do not know. For this study a five point scale was used to measure the attitude of undergraduate students towards plagiarism.

At the end of the questionnaire students have the opportunity to comment generally on the issue. According to (Maree & Pietersen, 2007a: 161) the advantages of the open question are the following:

- The respondent can give honest and detail answers
- Thinking process can be revealed.
- Complex issues can be adequately answered.

The disadvantages of open questions are as follows:

- The amount of detail may differ among respondent.
- Coding of answers may be difficult.

- Respondent may need time to think and write their responses.
- Statistical analysis is difficult.

#### 3.4.1.1. Questionnaire design

For this study, a questionnaire which addressed plagiarism among undergraduate student at a South African higher education institution was used. It had a total of nineteen closed questions and two open questions. The questionnaire consisted of four sections, namely section A to D. The aim of section A was to collect demographic data such as age, gender, home language, level of education, marital status and country of origin. Section B collected data on the awareness of plagiarism among students, how they define plagiarism, their understanding of different forms of plagiarism, different plagiarism sources, internet usage and how often and where they access the internet.

Section C was designed to collect data on the causes of plagiarism. In order to establish why students plagiarise, reasons for plagiarism like the difficulties student face when writing assignments and reasons for not referencing properly were investigated.

Section D was designed to collect data on student plagiarism policies at the higher education institution involved. It focused on collecting data on student awareness of faculty guides to avoid plagiarism and penalties for plagiarising. Finally students were given the opportunity to comment on their general understanding of plagiarism.

#### 3.4.2. Pilot study

To determine if questions were clear and understood by respondents, questionnaires were piloted prior to the study. The questionnaires were administered to fifteen student assistants working in the library of this higher institution. Feedback received about terminology used, such as students did not understand what the term plagiarism means. The solution was to give a brief overview of the study, before giving out the questionnaires to students. Other minor changes were made to clarify meaning of terms.

### **3.5. Data collection process**

For this study, group administration of questionnaires was used. Permission for the research and to use students from the Faculty of Applied Sciences was gained. The support of all the academics of the Faculty of Applied Science was gained. To ensure full concentration, adequate time to complete the questionnaires and effective response, permission to use lecture time to administer questionnaires was gained from the lecturers in the Department of Chemistry and Mathematical Technology. The date and time for the administration were negotiated with the lecturers involved via email and face to face follow-up.

The survey was conducted in March 2010, during the first term of the year when most of the first year students had limited experience of the academic environment. The researcher administered the questionnaires during the allotted lectures. A brief introduction to the study was given to students outlining the objectives of the study and assuring anonymity. Consent of students was asked verbally. To increase the validity of the study, students were asked not to mention their names, student identification numbers or the name of the higher education institution. All the students participated voluntarily. Volunteer, convenience and purposive sampling were used.

Questionnaires were then distributed and some questions students had were clarified. As the questionnaire took 15-20 minutes to complete, the researcher waited to collect it. Although a total of 150 questionnaires were printed, 139 were distributed and received back. The 139 questionnaires represent 100% of the students who attended the selected lectures on the day.

Students were asked to give their own understanding, a definition of plagiarism, to explore their awareness of policies and guidelines about plagiarism, to identify possible causes of plagiarism and to suggest how plagiarism can be avoided.

Only two departments within the faculty were chosen for the study, the Department of Chemistry and the Department of Mathematical Technology. The Mathematical Technology programme equips learners with the relevant mathematical knowledge, skills, attitudes and values required to operate confidently in business, applied sciences and the chemical industry. Graduates will be skilled with competencies in applied mathematics, statistics, programming and numerical methods, and will be prepared to pursue their career choices through electives in business, applied science or the chemical industry.

The Chemistry programme enables students to apply basic principles and techniques of quantitative and qualitative chemical analysis, quality control of raw materials and finished products, research and development. Learners benefit from the practical hands-on laboratory skills component with up-to-date equipment as well as direct exposure to the work situation. Graduates may be employed in a laboratory or do productions work. Quality control and assurance is a field with a growing demand for these graduates. Graduates are able to conduct routine tests on raw materials, products or environmental samples, or prepare basic chemical compounds.

In order to ensure representation of the existing diversity of Applied Sciences department students, a stratified random sampling strategy was used. The target population consist of three strata, first year, second year and third year students. According to Leedy & Ormond (2001: 215) the advantage of stratified random sampling is that it guarantees equal representation of each of the identified strata. The third year students were included in the survey but were not fairly represented since some of them were doing fieldwork or in-service training.

### **3.6. Data analysis and presentation**

The data was entered in a Microsoft Excel 2007 spreadsheet and manually checked for accuracy. Once the accuracy of the data was verified, data was imported into a statistical package for social science (SPSS) file for analysis. The data was analysed with both Microsoft Excel and SPSS to ensure validity and accuracy. Data analysis

involved breaking up the data into manageable themes. The findings of this research are presented in tables and graphical forms as bar or pie charts that present data in an easy to understand format. The tables and graphs illustrate the findings from the questionnaires and demonstrate understanding and attitudes of students towards plagiarism. The aim of the analysis was to understand various constitutive elements of the data through an inspection of the relation between variables and to see if there were any patterns or trends that can be identified or established.

### **3.7. Ethical statement**

There are ethical implications with any research conducted with humans, but as far as possible students were guaranteed that no person's right would be violated in any manner. A letter asking permission for conducting this research within the faculty was sent via e-mail to the Research Committee of the Applied Sciences Faculty. The Research Committee ensured that the researcher considered ethical issues that were likely to arise and that the participants were protected from harm (Piper & Simons, 2005: 57). The permission was granted under the following conditions:

- That the methodology be standardised and
- That the name of the higher education institution will not be published with the results.

The participants participated voluntarily, and they were allowed to withdraw at any stage of the research process for any reason without prejudice. Responses of participants were anonymous.

### **3.8. Conclusion**

This chapter has outlined the methods and techniques that were used to investigate student plagiarism in a South African higher education institution. This chapter discussed the research design, reasons for selecting the survey methodology as well as advantages and disadvantages of survey methodology. Survey methodology can achieve a certain level of success in that it obtains results from the representative sample of a target group. All responses were kept anonymous.



The different data collection methods used in survey methodology were introduced and discussed briefly. The disadvantages and advantages of questionnaires were also discussed.

Newstead, Franklyn-Stokes & Armead (1996: 240) suggested that although questionnaires are justifiable for collecting data, they have limitations. There is limited information that one can receive from asking students why they plagiarise. More qualitative methods such as interviews, structured individual questionnaires or focus groups will be required to investigate the topic more deeply. The research population and sampling for the study were explained. The administration of the questionnaire used for the study was also discussed.

## **CHAPTER 4**

### **4. RESULTS AND DISCUSSION**

#### **4.1. Introduction**

The aim of this chapter is to present the findings of the study. It will secondly aim to discuss the results and compare them with results from other studies on the same topic. One hundred and thirty nine questionnaires distributed were received. Scanlon & Neuman (2002: 383) investigated internet plagiarism among college students and suggested that for studies like this, it is convenient to sample a small number of students in a single campus.

Because lecture time was used for the completion of the questionnaires, a 100% response rate was achieved. After the completed questionnaires were collected it was analyzed both quantitatively and qualitatively.

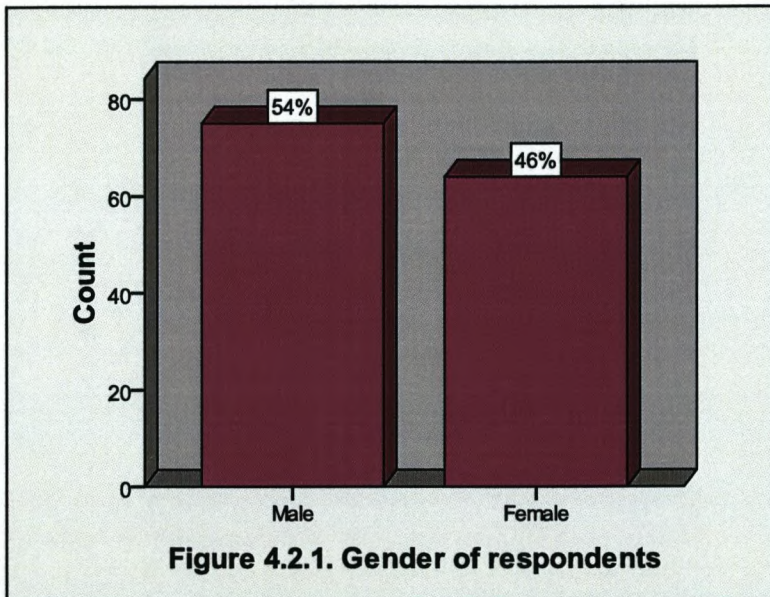
The results are arranged under four main sections, (A) Demographic profile, (B) Student awareness of plagiarism, (C) Causes of plagiarism and (D) Plagiarism policies.

#### **4.2. Demographic profile of respondents**

This section presents the demographic profiles of the respondents. The aim was to establish the age, gender, home language, level of education, marital status and country of origin of the respondents.

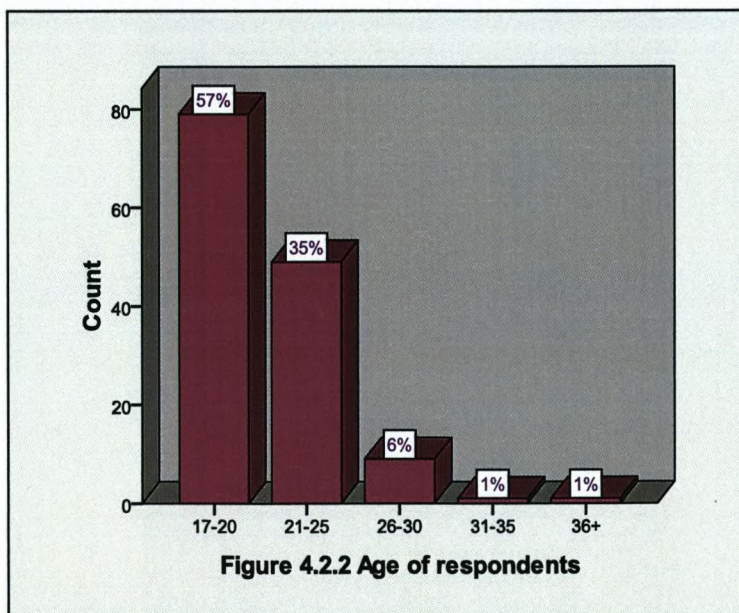
##### **4.2.1. Gender of respondents**

Figure 4.2.1 shows the gender of the respondents. Of the 139 respondents, forty six percent (46%) were female and fifty four percent (54%) were male students.



#### 4.2.2. Age

As can be seen from Figure 4.2.2, 57% of students were between the age of 17 and 20, 35% were between 21 and 25, 6% were between 26 and 30, 1% were between 31 and 35 while 1% were 36 years or older. The majority was therefore aged between 17 and 20 years. The reason might be some of these students are fresh from high school, with limited experience in the academic environment.

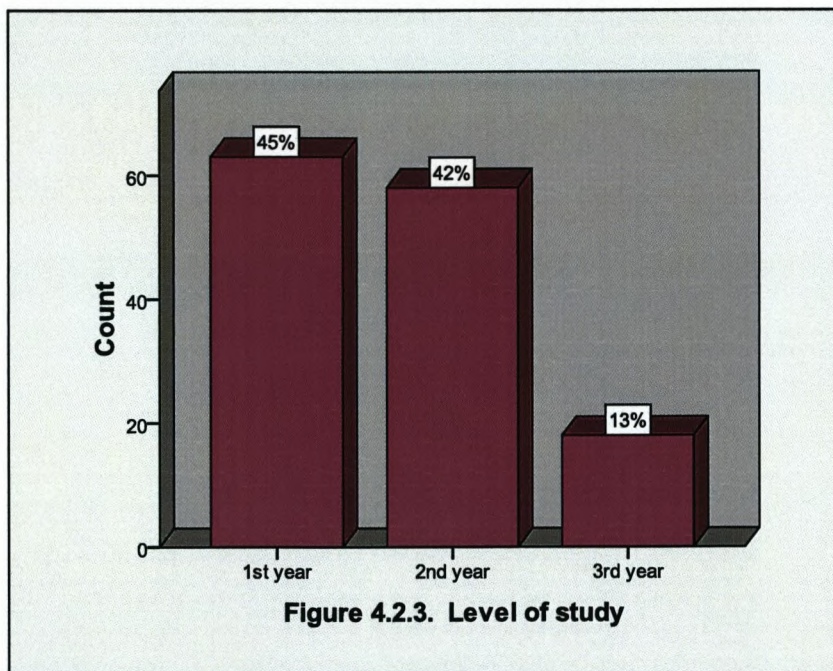




#### 4.2.3. Level of study

Figure 4.2.3 below indicates that sixty three respondents (45%) were first year, 58 (42%) were second year and 18 (13%) were third year students. The majority of the third year students registered for Chemistry was doing their field work or in-service training. As Mathematical Technology is a new course that was introduced in 2009, at the time of this research, there were only first and second year students.

All these students were enrolled full time for their respective courses. The study conducted by Franklyn-Strokes and Newstead (1995: 160) showed that plagiarism is more common among first year students and that plagiarism is less common in higher education institutions than in high schools. This study was conducted in the first term. These were undergraduate students still trying to adjust to the academic environment and to meet unfamiliar learning demands.

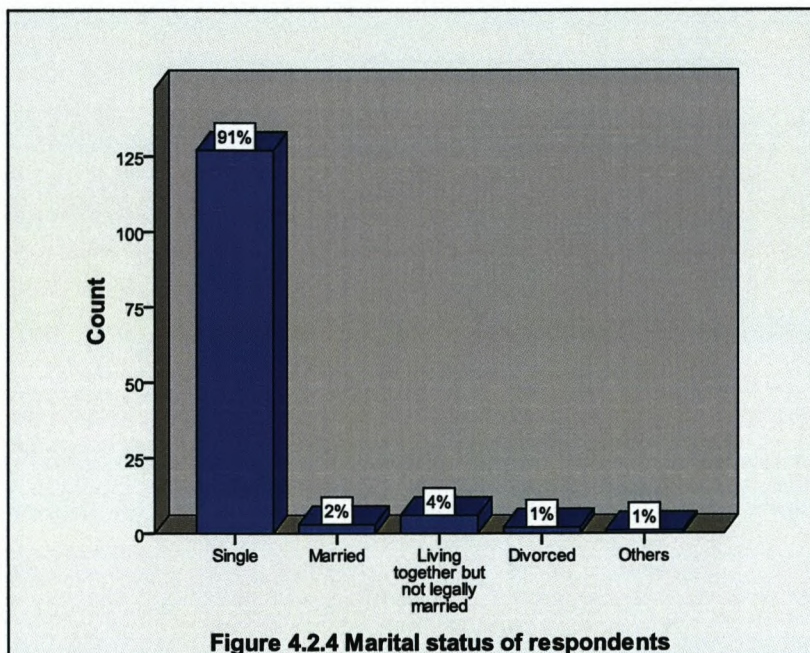


#### 4.2.4. Marital status

Figure 4.2.4 demonstrates the respondents' marital status. Of the students who responded to the question, the majority (94%) was single, 2% were married, 4%



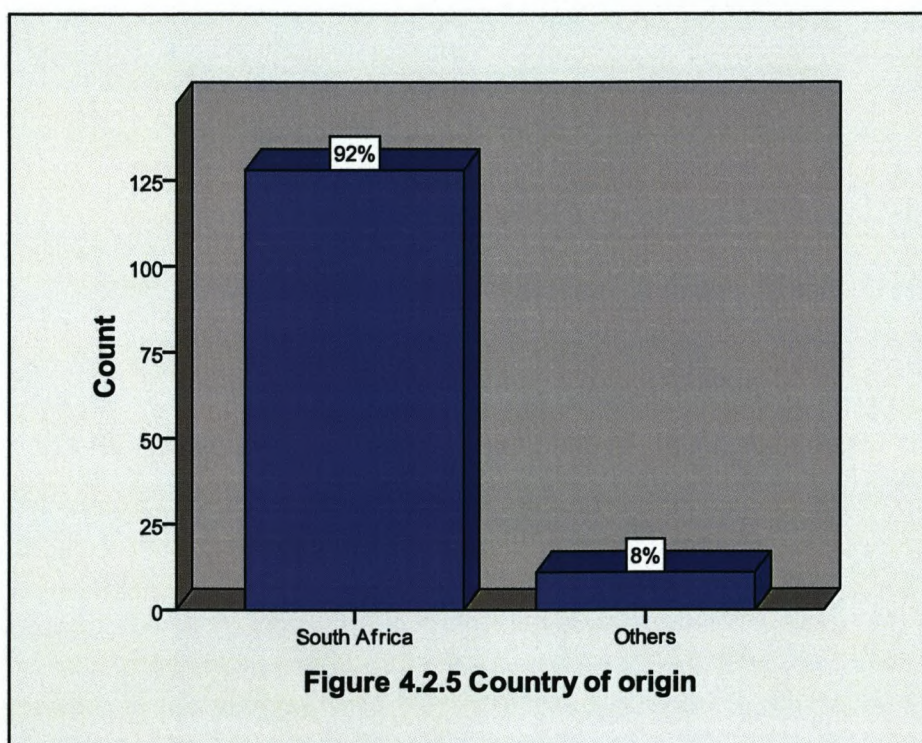
were staying together but were not legally married and 1% was divorced. The one percent indicated as “others” was a respondent engaged to be married. Kenny (2006: 16) stated that there is an increase of mature students who are entering higher education institution to further their studies. Most of those students have families, children and full-time jobs. It becomes difficult to juggle parenthood, being a student and working. Many of these older, married students with children are likely to plagiarise.



#### 4.2.5. Country of origin

In this study, it was taken into consideration that students from different countries might have different understandings of plagiarism. Figure 4.4.5 shows that 128 respondents (92%) were South African and 11 respondents (8%) were from other countries. The 11 students hailed from the United States of America, Rwanda, Congo, Gabon, Russia and Jamaica. Plagiarism is a complex issue and is misunderstood by most students. According to Norris (2007: 3) plagiarism is not a universally understood concept and the meaning differs from country to country. There is therefore no universally agreed definition for plagiarism. Every higher education institution develops its own definition, even if the definition is interpreted differently by other individuals.





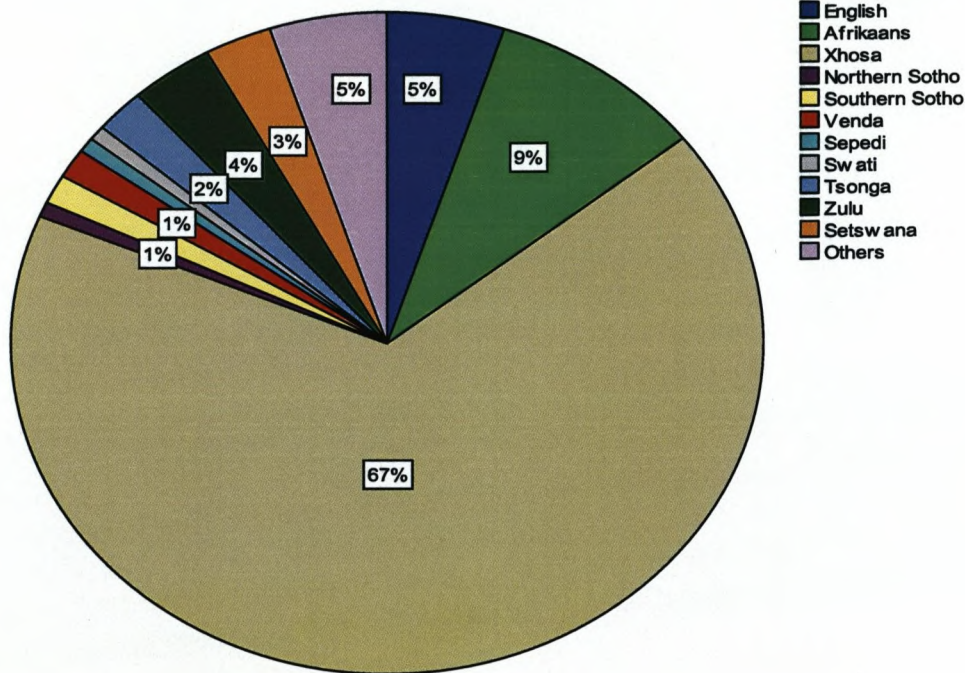
#### 4.2.6. Home language

Figure 4.1.6 shows that the home language of students was by far Xhosa. A majority of 97 respondents (67%) were Xhosa speaking. Xhosa as a home language was followed by 13 Afrikaans speaking (9%) and 7 English speaking (5%) students. Fourteen percent (14%) of students used other African languages, namely Zulu, Venda, Sepedi, Northern Sotho, Southern Sotho, Tsonga and Setswana as their home language. The majority of students (81%) speak an African language. Non South African languages were spoken by 5% of the respondents and represented French, Russian and Patois/Creole. This correlates with their countries of origin.

The language might be an influencing factor in plagiarising as students whose mother tongue is not English, might find it difficult to express or explain themselves in English. It might therefore be easier to copy what others have written.



**Figure 4.2.6.Home language**



### 4.3. Student awareness of plagiarism

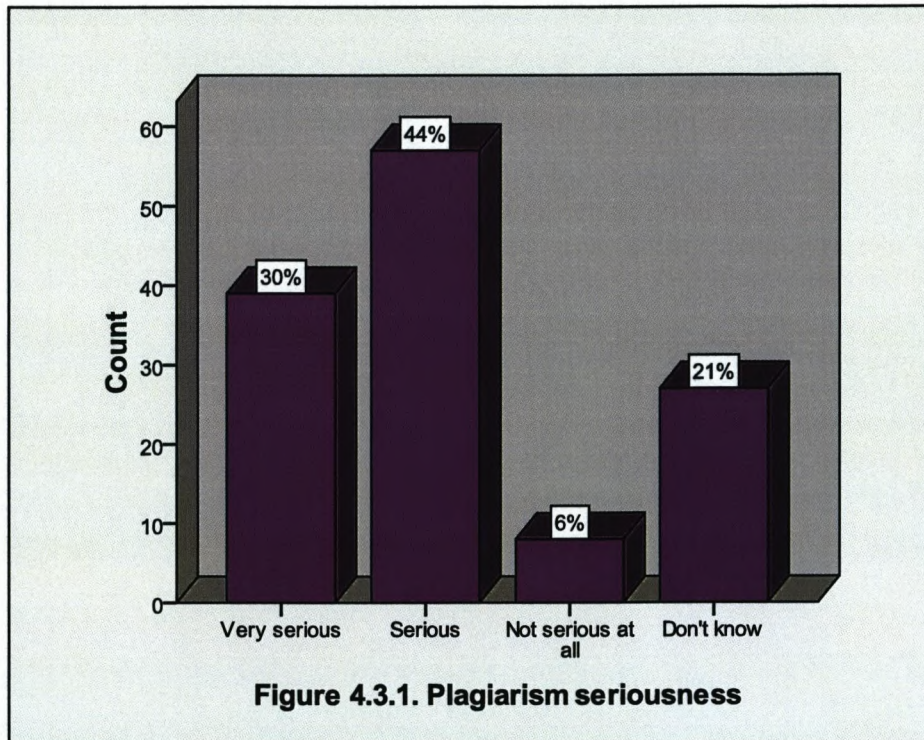
In this section the aim was to establish if undergraduate students are aware of plagiarism, to determine if respondents understand what constitute plagiarism, if they understand the different forms of plagiarism and to determine the different sources used for plagiarising. As the internet contributes to plagiarism, this section also aimed to find out if the internet is easily accessible to students, how often and where they access it.

#### 4.3.1. Seriousness of plagiarism

Figure 4.3.1 reflects the responses to the question, how do respondents rate the seriousness of plagiarism? Approximately 44% of respondents indicated that plagiarism is serious and 30% thought it is very serious, while 21% did not know. Six percent of the respondents indicated that plagiarism is not a serious problem at all.



This was quite different to the findings by Madray (2007) where 74% of respondents were unaware of the seriousness of plagiarism.



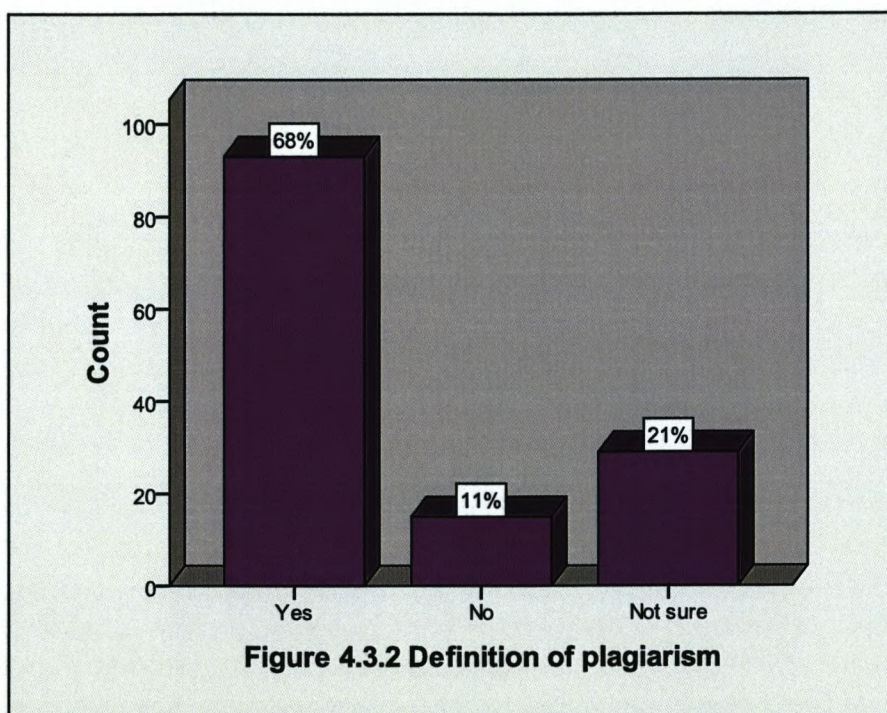
From the pilot study, it was clear that for some of the students plagiarism was a new concept, they did not even know what it meant. The reason might be that most of this students lack information literacy skills and are therefore unaware of how to work ethically, economically and legally with information. If these students can be given a better understanding of plagiarism, they would be less likely to plagiarise.

#### 4.3.2. Defining plagiarism

In question 9 students were asked to indicate if they agree with their higher education institution's definition of plagiarism, namely "Plagiarism is the attempt to represent other person's ideas, expression, artefact's, or work as ones own, cutting and pasting electronic sources into ones own document, copying one students work, overuse of sources".

Students who did not agree had the option to provide their own definition.





From Figure 4.3.2 it can be seen that the majority of students (68%) agreed with the given definition of plagiarism. Of the respondents 11% did not agree, while 21% were not sure.

Students who did not agree had the option to provide their own definition. The number of students who did not agree with the higher education institution's definition of plagiarism, only two of the students gave their own understanding or definition of plagiarism. Student 4 defined plagiarism as "copying someone's work" while student 139 understood plagiarism as "copying illegal". The responses reflect that some students have a clear understanding of what constitute plagiarism. As there is no one agreed universal definition of plagiarism (Leask, 2006: 185), each higher education institution creates their own. Although these definitions are usually complex, they aim to help students understand and avoid plagiarism.

#### 4.3.3. Forms of plagiarism

Question 10 consisted of 10 sub questions dealing with the different forms of plagiarism. The students were asked to indicate which of the forms of plagiarism

listed they have committed while studying in this higher education institution when doing assignments. Respondents had to choose from the options always, frequently, sometimes, rarely or never for each question. Table 4.3.3. lists the results of responses in numbers and percentages. No responses were not included.

Table 4.3.3. Forms of plagiarism committed by the students

Student activities		Always	Frequently	Sometimes	Rarely	Never
Paraphrased without acknowledging the source		2	16	54	20	38
	Count					
	%	1.5	12.3	41.5	15.4	29
Summarizing a text without acknowledgement		9	18	40	26	38
	Count					
	%	6.9	13.7	30.5	19.8	29
Copy a text without acknowledgement		2	11	24	33	59
	Count					
	%	1.5	8.3	20.5	25	44.7
Submitted someone's work without their permission		1	0	6	8	118
	Count					
	%	1.8	4.5	0	6	88.7
Invented or altered data		5	11	35	28	46
	Count					
	%	4	8.8	28	22.4	36.8
Writing an assignment for your friend		4	1	12	13	105
	Count					
	%	3	0.7	8.9	9.6	77.8
Using quotation marks without proper acknowledgement		7	2	32	36	56
	Count					
	%	5.3	1.5	24.2	27.3	41.7
Invented references or bibliography		16	14	40	21	41
	Count					
	%	12.1	10.6	30.3	15.9	31.1
Submitted work as an individual while written by a group		11	10	21	13	77
	Count					
	%	8.3	7.6	15.9	9.8	58.3
Copy a work from the internet & submit as one's own		8	7	27	26	62
	Count					
	%	6.2	5.4	20.8	20	47.7

Most plagiarism happens because students do not understand the different types and forms of plagiarism. Only 2 students admitted that they have always paraphrased without acknowledging the source, 16 students (12.3%) do it frequently and 54 students (41.5%) do it sometimes. Thirty eight students (29%) have never

engaged in this form of plagiarism. The reason that the majority (55.3%) of students had been guilty of paraphrasing to some extent without acknowledging the source, might be that many students are entering into higher education without paraphrasing and analyzing skills (Madray, 2007).

A small majority of students (51.1%) admitted that they have used summarized text in assignments without acknowledging the source. Of these students, 9 (6.9%) reported they have always, 18 (13.7%) frequently and 40 (30.5%) sometimes summarised without acknowledging the source.

A relative low percentage of respondents admitted that they always (1.5%), frequently (8.3%) or sometimes (20.5%) copied text without acknowledging the source. In contrast the majority of students (69%) indicated that they will acknowledge the source if they have quoted. Seven students (5.3%) will use a quotation without referring to the original author. Students might think that paraphrasing, summarizing or copying text without acknowledging the source is acceptable and that it is only necessary to acknowledge the author if it is a direct quote.

Because submitting someone's work without their permission is a serious offense, the majority (88.7%) of students stated that they have never committed this type of plagiarism. Most students (77.8%) also indicated that they have never written an assignment for a friend. Only 4 students (3%) acknowledged that they are guilty doing so. Relatively few students (32.4%) have admitted to submitting group work as if it was their individual work.

Although inventing data or references is regarded as fraud, 40.8% of students admitted to being guilty of inventing or altering data always (4%), frequently (8.8%) or sometimes (28%). The majority of students (53%) admitted to inventing references always (12.1%), frequently (10.6%) or sometimes (30.3%). The reasons for the high occurrence might be that students do not know how to reference or neglected to record the information about the sources used (Madry, 2007 and Wang, 2008: 753).

Although it is easy to copy work from the internet and submit it as your own work (Errey, 2002: 18), 47.7% students indicated that they have never done it. Twenty percent of students admitted to have done it rarely. A total of 32.4% of students admitted that they have done it, always (6.2%), frequently (5.4%) or sometimes (20.8%).

Comparison of the different forms of plagiarism presented here clearly indicates that some forms of plagiarism are regarded by students as less serious than others and are also more commonly admitted to. The only forms of plagiarism where the majority of students indicated that they have never been guilty of doing, are submitting someone's work without their permission (88.7%), writing an assignment for a friend (77.8%) and submitting group work as individual work (58.3%). The forms of plagiarism that students committed most are paraphrasing without acknowledging the source (71%), summarizing without acknowledging the source (71%) and inventing references (68.9%).

#### 4.3.4. Sources used for assignment writing and possible plagiarism

For question 11, respondents were asked to indicate which resources they have used for assignment writing and will use as potential sources when engaging in any of the activities mentioned in the previous question. Findings are listed in Table 4.3.4 below. No response are not included.

Table 4.3.4 Sources for assignment writing and possible plagiarism

Sources		Always	Frequently	Sometimes	Rarely	Never
Journal articles	Count	6	18	40	39	22
	%	4.8	14.4	32	31.2	17.6
Books	Count	46	48	29	5	1
	%	35.7	37.2	22.5	3.9	0.8
Internet	Count	100	28	9	0	0
	%	73	20.4	6.6	0	0
Newspapers	Count	5	14	41	35	30
	%	3.9	10.9	31.8	30.2	23.3

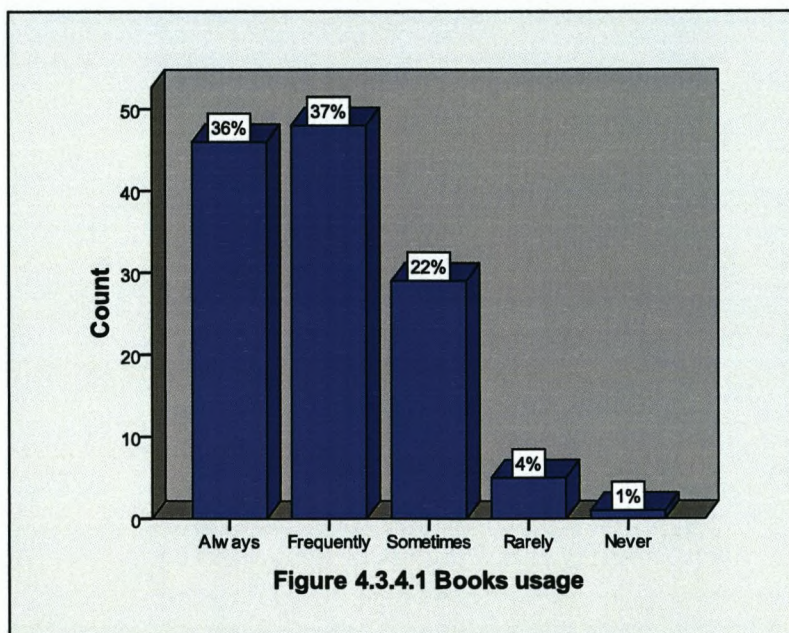


From the table it is clear that most students (73%) will always use the internet for assignment writing and activities related to plagiarism. Thirty seven percent of students have and will always use books, while 4.8% journal articles and 3.9% newspaper articles. Students choose to use the internet, because it is easy to copy and paste and therefore takes very little effort (Sisti, 2007: 224). With adequate access to the internet, computer literacy and internet navigation skills, students can engage in internet plagiarism with ease if they choose to.

Some students may use different sources to plagiarise from. In a study by Sharma (2007: 137) one student reported that she completed her assignment by copying from different sources. She copied 75% from books and journals and 3% from websites. Of the completed work, 5% was paraphrased from other works and only 7% was her own original work.

#### 4.3.4.1. Books as a source for assignment writing and potential source of plagiarism

From Figure 4.3.4.1 it can be deduced that 99.2% of students use books to write their assignments and as a potential source of plagiarism. Of the total 36% use books always, 37% frequently, 22.5% sometimes and 3.9% rarely. The use of books as information source are less popular than the internet.



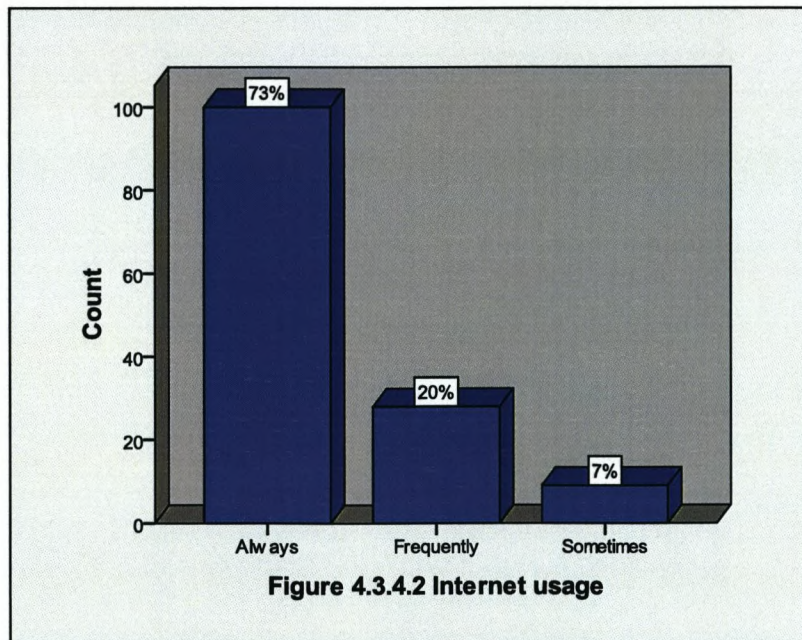


The 1% of respondents that have never used a book might be those students who do not know how to use the catalogue to search for books or to find the book in the library. Many students do not understand the catalogue record, the Dewey system that is used by the library to classify books and find it difficult to locate books using the shelf number (King, 2007: 144).

#### 4.3.4.2. Internet as a source for assignment writing and potential

source of plagiarism

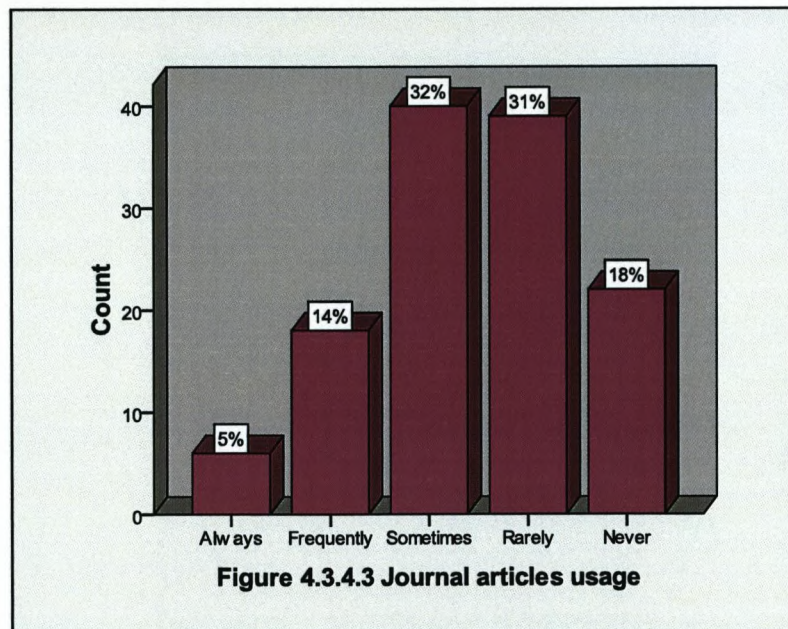
Figure 4.3.4.2 shows the internet as a source of information and potential source of plagiarism. Most students (73%) always used the internet, while 20% used it frequently and 7% sometimes. As mentioned already, students choose to use the internet, because it is easy to copy and paste and it take very little effort to plagiarise (Sisti, 2007: 224). The finding also showed how the internet has shaped the new generation. All students use the internet to do research and complete their assignments.



#### 4.3.4.3. Journal articles as a source for assignment writing and potential sources of plagiarism

As shown in figure 4.3.4.3, 5% of students will always use journal articles, 14% frequently, 32% sometimes and 31% rarely for assignment writing and potential plagiarism. Eighteen percent of students have never used journal articles. The reason for the low usage of journal articles might be that students do not know how to search electronic databases for full-text articles (King, 2007: 128) and will rely on using a popular search engine like Google to find relevant journal articles. These full text articles can be downloaded by students and therefore make cutting and pasting possible.

The results are on the one hand alarming because libraries of higher education institutions are spending a substantial part of their budgets to buy electronic and printed journals. On the other hand, it seems as if students have not yet realized the potential of using full text journal articles as a source for cutting and pasting and therefore for plagiarising.

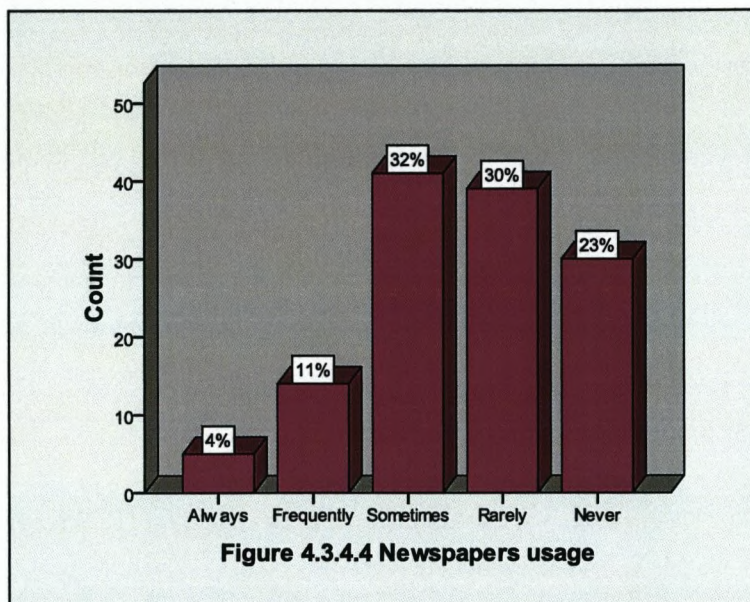




#### 4.3.4.4. Newspaper articles as a source for assignment writing and potential

##### source of plagiarism

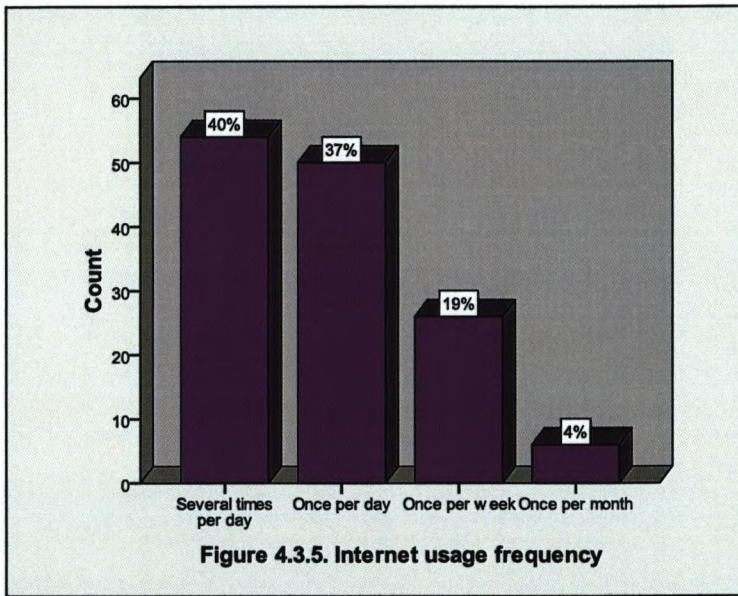
The use of newspaper articles as a source for assignment writing and potential plagiarism was the lowest of all the information resources. Few students (4%) used the newspaper articles always and 11% reported that they will use them frequently. The majority of students (32%) used newspaper articles sometimes, 30% rarely and 23% had never used it. The reason for the low usage of newspaper articles might be similar to journal articles, namely students do not know how to find them using indexing databases or on line newspapers.



#### 4.3.5. Use of Internet

Question 12 requested students to score their frequency of using the internet, in other words how often do they use the internet. Results indicated in Figure 4.3.5 correlate with result for the previous question, namely that students prefer to use the internet as an information source. A large percentage of students (40%) indicated that they use the internet several times a day, while 30% use it once per day. Nineteen percent of respondents indicated that they use it once a week and 4% once a month.





These results correspond with results of the study conducted by Sisti (2007: 220) which indicated that 58% of the learners use the internet 2 to 4 hours per day, while 82.5% indicated that they use almost half of their online time for school work. The findings by Scanlon and Neuman (2002: 377) indicated that students use the internet and e-mail facility as frequently as three to four times per week.

The internet has made plagiarism easier. Departments and academic staff should be concerned about the high usage of the internet as an information source for writing assignments (Scanlon & Newman, 2002: 374).

#### 4.3.6. Access to the Internet

Question 13 asked respondents to indicate from where they access the internet.

TABLE 4.3.6 Access to the internet

	Library	Computer lab	Home	Work	Others
Count	44	105	11	2	1
%	31.7	75.5	7.9	1.4	0.7

From Table 4.3.6 it is clear that the majority of respondents (75.5%) was accessing the internet from computer laboratories on the campus where they study. Others use a library (31.7%), their own computer at home (7.9%) or at their work (1.4%) for access. One respondent indicated that access to the internet is gained via the cell phone. The internet is therefore a convenient and easily accessible source of information. No responses are not included.

#### **4.4. Causes of plagiarism**

The aim of this section was to identify and understand the different causes of plagiarism as well as to attempt to determine the underlying reasons why student plagiarise.

##### **4.4.1. Reasons for plagiarism**

Because there are various reasons why students plagiarise intentionally or unintentionally, question 14 asked students to indicate reasons for plagiarising. Results are summarized in Table 4.4.1.

Forty two students (35.3%) strongly agreed that laziness and/or bad time management is the reason for plagiarising. This is followed by 36 students (30.3%) indicating that they strongly agree that they plagiarise in order to gain better marks. Twenty five students (20.8%) agreed strongly that that they plagiarised because they do not understand assignments, while 21 students (17.8%) indicated that the reason for them plagiarising was because they did not understand plagiarism. Seventeen respondents strongly agreed that they might have poor writing skills and 12 respondents (10.3%) strongly agreed to the lack of referencing skills.

Other reasons that students agreed strongly to, were because everybody is doing it (11), pressure from family and friends (11), education costs (10) and the teaching and learning methods used (8). From previous studies laziness and bad time management were identified as two of the common reasons for plagiarising (Errey, 2002: 17 and Wilhoit, 1994: 162). It might be that students put off their assignments until the last moment. The quickest way out is to plagiarise.

Table 4.4.1 Reasons for plagiarising

Reasons for plagiarising	Strongly agree		Agree		Disagree		Strongly disagree		Don't know	
	Count	%	Count	%	Count	%	Count	%	Count	%
Poor writing skills	Count	17	54	11	11	11				
	%	14.2	45	22.5	9.2	9.2				
Lack of referencing skills	Count	12	57	29	10	8				
	%	10.3	49.1	25	8.6	6.9				
Teaching and learning methods	Count	8	42	35	12	21				
	%	6.8	35.6	29.7	10.2	17.8				
Laziness/bad time management	Count	42	32	21	16	8				
	%	35.3	26.9	17.6	13.4	6.7				
Don't understand assignments	Count	25	36	37	15	7				
	%	20.8	30	30.8	12.5	5.8				
Education costs	Count	10	17	35	31	24				
	%	8.5	14.5	29.9	26.5	20.5				
Pressure from family & friends	Count	11	20	33	41	14				
	%	30.3	38.7	16	11.8	3.4				
To better marks	Count	36	46	19	14	4				
	%	30.3	38.7	16.0	11.8	3.4				
Poor understanding of plagiarism	Count	21	35	22	22	18				
	%	17.8	29.7	18.6	18.6	15.3				
Everybody is doing it	Count	11	19	32	40	20				
	%	9	15.6	26.2	32.8	16.4				

If the number of students who strongly agreed as well as those who agreed were added together, most students (82) indicated that they plagiarise to gain better marks. It is followed by 74 students who will plagiarise because of laziness and/or bad time management, 71 because of poor writing skills, 69 because of lack of referencing skills and 61 because they did not understand the assignment. Fifty six students agreed that poor understanding of plagiarism was the reason for plagiarising, while 50 students blamed teaching and learning methods. Because everybody is doing it, 30 students thought that it is acceptable for them to plagiarise as well. Devlin & Gray (2007: 187) also concluded that students might be plagiarising because they do not understand what constitutes plagiarism.

A total of 139 students indicated that they strongly agreed or agreed that the reasons for plagiarising were because of educational costs (27), family and friends (31) as well as to get better marks (82). It seems as if pressure to perform well in order to pass courses, were causing students to plagiarise intentionally.

#### 4.4.2. Difficulties experienced with assignment writing

Table 4.4.2 indicates the main difficulties students face when writing different assignments. Most students (39) identified the lack of resources as the major difficulty experienced when doing assignments. This is followed by 31 respondents who indicated that the lack of ideas, the challenges of the task (26), the problem with content (24) and because tasks given were de-motivating as major difficulties when writing assignments.

Table 4.4.2 Difficulties students experienced when writing assignments

Difficulties when writing	Major difficulty		Medium difficulty		Low difficulty		Not a difficulty		Don't know	
	Count	%	Count	%	Count	%	Count	%	Count	%
Content problem	Count	24	36	31	27	3				
	%	19.8	29.8	25.6	22.3	2.5				
Task challenges	Count	26	50	27	7	3				
	%	21.1	40.7	22	13.8	2.4				
Lack of ideas	Count	31	49	25	14	1				
	%	25.8	40.8	20.8	11.7	0.8				
De-motivating tasks	Count	17	40	32	19	14				
	%	13.9	32.8	26.2	15.6	11.5				
Lack of resource	Count	39	28	27	27	6				
	%	32.2	23.1	22.3	17.4	5				

The majority of students (105) indicated that the lack of ideas caused low, medium as well as major difficulties. A total of 103 students identified the challenges of tasks, problems with content (91), tasks as de-motivational (89) and lack of resources (84) as low, medium or major difficulties.

#### 4.4.3. Reasons for not referencing properly

Table 4.4.3 summarises the results of question 16. Respondents were asked to indicate the reasons they can not reference properly.

Of the respondents, a total of 78 indicated that the reason for not referencing properly is because they lost track of where the information came from. Fifty five students thought the reason was because internet sources are too difficult to reference, while 54 students were never taught how to reference properly. For both the reasons too much effort and time involved, a total of 47 students agreed or strongly agreed.

Table 4.4.3 Reasons for not referencing properly

Reasons for not referencing		Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Never taught how to reference properly	Count	16	38	36	26	6
	%	13.1	31.1	29.5	21.3	4.9
Lost track of where the information come from	Count	21	57	26	14	3
	%	17.4	47.1	21.5	11.6	2.5
Referencing internet sources is too difficult	Count	21	34	43	19	4
	%	17.4	28.1	35.5	15.7	3.3
Too much effort	Count	9	38	35	28	10
	%	7.5	31.7	29.2	23.3	8.3
Time it takes is not worth the marks received	Count	14	33	42	25	8
	%	11.5	27	34.4	20.5	6.6

In the study by Brown *et al.* (2008: 144) 74.5% of respondents reported that they were never taught about referencing and 62.7% lost track of information when writing their assignments. Referencing internet sources was a problem for 56.9% of the respondents. In the study by Madray (2007), the majority (69%) of students stated that they do not know how to cite online sources. Wang (2008: 753) concluded that because students lose track of their information sources, unintentional plagiarism occurred.



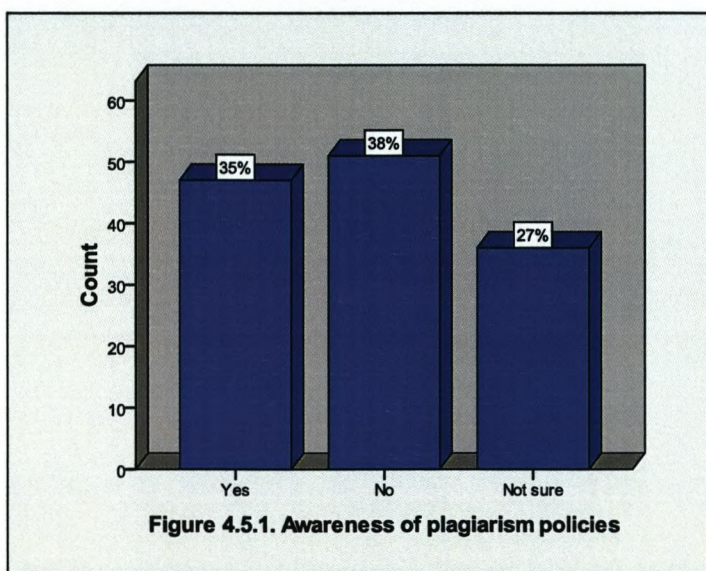
It is clear from the results that students did not think that referencing techniques were important. It is too much effort for them and that the marks they will receive are not worth the effort. The majority of these students were fresh from high school where it can be assumed that they had never received formal training on referencing and academic writing.

#### 4.5. Plagiarism policies

The aims of this section were to establish if students were aware of the plagiarism policies of their higher education institution, if they were aware of the official penalties regarding student plagiarism and if they understood the fairness of the penalties.

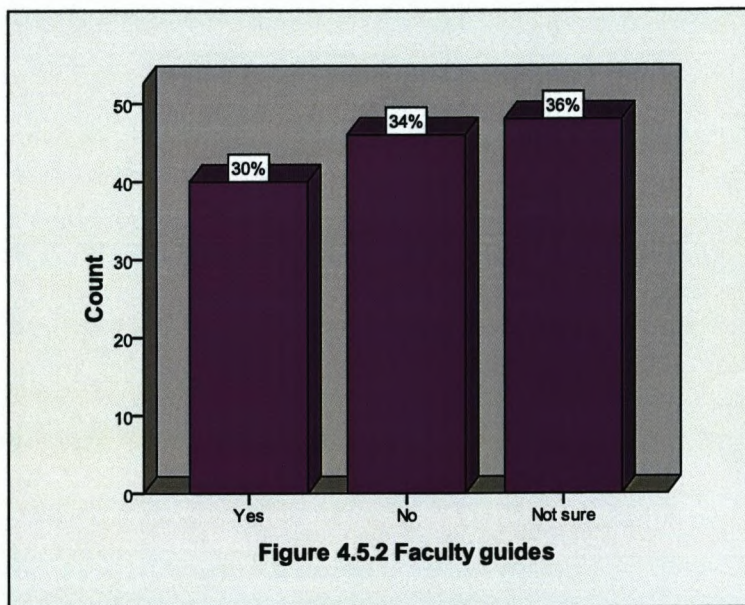
##### 4.5.1. Awareness of plagiarism policies

Question 17 asked students if they were aware of the plagiarism policies of the higher education institution. Figure 4.5.1 shows that only 35% of respondents were aware of their institution's policies on plagiarism. Thirty eight percent were not aware of formal policies on plagiarism, while 35 students (26%) were not sure. The responses show that most students (65%) did not know or were not aware whether their institution has policies regarding plagiarism.



#### 4.5.2 Awareness of faculty guides

Students were asked to indicate if they were aware of faculty guides on how to avoid plagiarism. Responses are summarised in Figure 4.5.2.



Forty respondents (30%) indicated that they were aware of the procedure mentioned in their faculty guides to avoid plagiarism. They knew that the procedures and guidelines are documented within the website of the higher education institution and in the faculty handbook. Some mentioned that they have read circulars and posters on plagiarism.

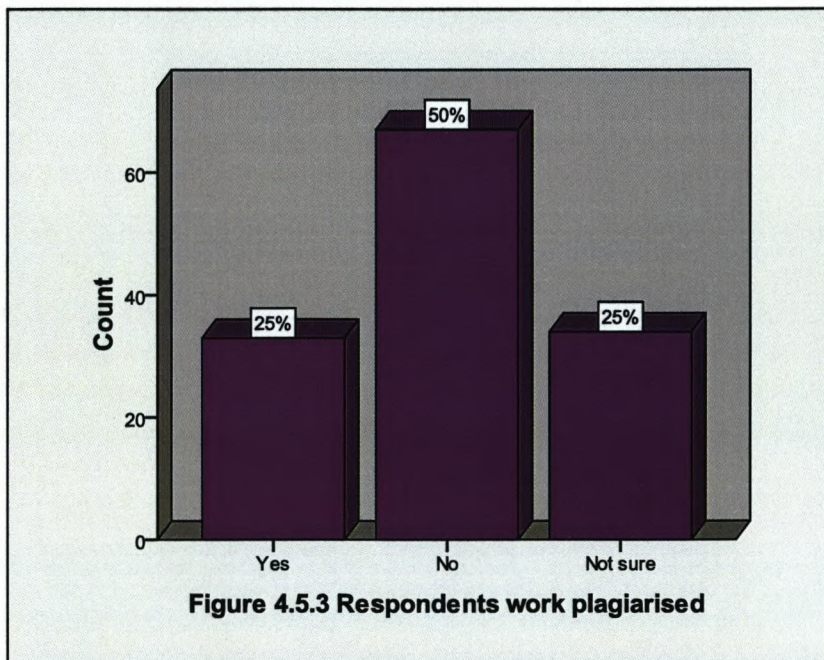
Of the rest, 46 respondents (34%) were not aware of guides and 48 respondents (36%) were not sure.

#### 4.5.3. Work being plagiarised

In Question 20, students were asked if their work had ever been plagiarised. From Figure 4.5.3 it is clear that half of the respondents (50%) regarded their work as never been plagiarised, whereas 33 respondents (25%) admitted to their work being plagiarised. The remaining 25% of the respondents were not sure whether their work



had been plagiarised or not. From these results it can be deduced that students might be submitting the work of other students as their own without getting permission from the student who did the work originally, that individuals might submit work done in a group as their own and that students might copy from each other.



#### 4.5.4. Penalties for plagiarizing

Question 21 posed five penalties that can be enforced by this higher education institution against a student found guilty of plagiarism. Students were asked to indicate which of these penalties they considered fair. The results are reflected in Table 4.5.4.

Table 4.5.4 shows that the majority of students (39.7%) thought being given a warning is a fair and appropriate penalty. Forty (31.3%) students thought being referred to a disciplinary board or being suspended is fair. Thirty four (26.6%) students regarded expulsion or dismissal as a fair penalty while a total of 52 (40.7%) regarded it as a strict or very strict penalty. Fourteen students thought it fair that no action is taken against plagiarism.



Table 4.5.4 Penalties for plagiarising

Penalties	Very strict    Strict    Fair    Lenient    Very weak					
	Given a warning	Count	39	28	52	6
	%	29.8	21.4	39.7	4.6	4.6
Suspension	Count	22	27	40	25	14
	%	17.2	21.1	31.3	19.5	13.3
Expulsion/dismissal	Count	34	18	34	25	17
	%	26.6	14.1	26.6	19.5	13.3
No action taken	Count	13	17	14	17	65
	%	10.3	13.5	11.1	13.5	51.6
Referred to disciplinary board	Count	26	31	40	17	12
	%	20.6	24.6	31.7	13.5	9.5

Quite a high number of students (65.1%) regarded no action taken as a lenient or very weak penalty. In contrast students regarded being given a warning (51.2%), suspension (38.3%), being referred to the disciplinary board (45.2) and expulsion (40.7%) as strict or very strict penalties. It seems as if some students were regarding plagiarism as acceptable, while others wanted students guilty of plagiarizing penalized.

#### 4.5.5. General understanding of plagiarism

The last question of the questionnaire forty one students comment on their general understanding and opinions of plagiarism. Some of the comments are:

Student 110: "Plagiarism sometimes is regarded as an option because some books cannot be found and we have to study and we have no choice".

Student 136: "More attention should be alerted to plagiarism and people should [be] alerted about the penalty that goes with it".

Student 121: "I think plagiarism is not taken seriously by the lecturers and institution".

Student 31: "Punishment due to plagiarism must be taken seriously in order for student to appreciate some people's work, it's really unfair". From these comments it can be deducted that some students who plagiarise do so intentionally. Students justify their behaviour by saying that there were not enough resources to do their assignments. One student was of the opinion that the higher education institution and academic staff do not take plagiarism seriously. Another student felt strongly that students who plagiarise must be punished because it is unfair towards other students. Similar feelings about the unfairness towards students who choose not to plagiarise were found by Ashworth, Bannister & Thorne (1997: 190).

#### **4.6. Conclusion**

Findings did not show a significant statistical difference regarding age, gender, level of study or language background. Contrary to expectation, there was no evidence that there is a correlation between plagiarism and student gender and age. There was evidence from a previous study by Davis *et al* (1992: 17) that male students are more likely to plagiarise than females and that university students are more likely to plagiarise than learners in high school. Brown & Howell (2001: 115) suggested that in order to change student perception about the seriousness of plagiarism, they must be provided with information about the issue.

The results from this study indicated that students were willing to take the risks of plagiarising, even if they know it is unacceptable. Various reasons for plagiarizing were identified. The findings confirmed that student plagiarism is fairly common within the Departments of Chemistry and Mathematical Technology at this higher education institution. The results of the study raised many questions that need a qualitative exploration. Although 41% of undergraduate students regarded plagiarism as very serious, plagiarism was still occurring. It was also found that most students (73%) admit to using the internet to compile their assignments and use it as a possible source of plagiarism. Most undergraduate students are unaware of the higher education institution's policies and guidelines on plagiarism.

## CHAPTER 5

### 5. INTERPRETATION OF FINDINGS

#### 5.1. Introduction

This chapter will interpret and discuss the findings presented in the previous chapter. The interpretation of the data is based on the objective of the study, namely to investigate the trends and causes of plagiarism among undergraduate students at a South African higher education institution as well as to determine if undergraduate students are aware of the plagiarism policies and guidelines of this higher education institution.

The purpose of the study was to find answers to the following questions about student plagiarism at a specific South African higher education institution:

- Are undergraduate students aware of plagiarism?
- What are the current trends regarding plagiarism among undergraduate students?
- What are the causes of plagiarism among these undergraduate students?
- Are undergraduate students aware of this higher education institution's policies and guidelines regarding plagiarism?
- What recommendations can be made to improve the awareness of plagiarism by undergraduate students?

#### 5.2. Student awareness of plagiarism

The findings of this study showed that there are students who rate plagiarism as very serious, serious or not serious at all and there are students do not know whether it is serious or not. Approximately 44% of students thought that plagiarism is a serious problem while 30% reported that it is very serious. The majority of students (74%)

regarded plagiarism as serious or very serious, while 6% indicated that plagiarism is not a serious problem at all.

The fact that most students regarded plagiarism as serious or very serious correlates with students from other higher education institutions who regarded plagiarism as serious, a violation of academic integrity, a law violation or disrespectful towards the author (Madray, 2007 and Youmans, 2000: 118).

### **5.3. Trends regarding plagiarism at this South African higher education institution**

#### **5.3.1. Defining plagiarism**

From the literature it is clear that there is no universally agreed definition of plagiarism. Every higher education institution must develop their own definition and make it known to students (Colin, 2007: 28 and Leask, 2006: 185).

The majority (68%) of respondents of this study agreed with the plagiarism definition of their higher education institution. Only two students provided their own definitions. Alarming is the fact that 21% of the undergraduate students indicated that they are unsure if they agree or not. It seems as if these students did not have a clear understanding of plagiarism. The reason might be that because plagiarism is defined differently by different individuals, students might be confused as to the meaning thereof. Youmans (2000: 119) recorded similar findings concluding that there are students who do not understand the definition of plagiarism, some who think they understand and some who do understand it. Brown & Howell (2001: 115) suggested that in order to change perception about the seriousness of plagiarism, students must be provided with information about it.

The fact that some students do not understand the concept or seriousness of plagiarism might be an underlining reason why they plagiarise.

### 5.3.2. Forms of plagiarism

There are different forms of plagiarism that students commit while writing assignments or do research projects. Plagiarism can be intentional or unintentional. According to the Strayer University iCampus (2010a) unintentional plagiarism occurs when the students use words and ideas of others without acknowledging the source, usually because they do not know that they must acknowledge the source or because they do not know how to cite. Intentional plagiarism occurs when the students use the ideas and words of others without acknowledging the source, because they want the plagiarised work regarded as their original work. This form of plagiarism is regarded as cheating, because the student had intended to deceive (Howard, 1995: 799). Even if students are aware that plagiarism is illegal or not acceptable, they will still copy work without acknowledging the source (Sharma, 2007: 137).

Some forms of plagiarism are regarded more serious than other forms. In this study the majority of students (118) have never submitted someone's work as their own work, wrote an assignment for a friend (105) or have submitted group work as if it was written by an individual (77). Students admitted to either sometimes, frequently or always paraphrasing without acknowledging the sources (72), inventing references (70), summarising without acknowledging the sources (67), inventing or altering data (51) or copying work from the internet and submitting it as their own (42).

Forms of plagiarism such as paraphrasing, summarising and quoting without acknowledging the source are mostly regarded as unintentional plagiarism. This is regarded as patch writing and when committed, does not have the intention to deceive. It is usually committed while undergraduate students are still in a developmental stage and still learning how to write academically (Colin, 2007: 29; Howard, 1995: 800 and Pecorari, 2003: 338).

Poor understanding and perceptions of plagiarism influence plagiarism. Students for example will think that if they change a few words they do not need to acknowledge

the source or that word to word text does not need quotation marks when the source is acknowledged (Ellery, 2008: 512).

From these results, it can be concluded that most students at this South African higher education institution have committed some forms of plagiarism during their studies.

### 5.3.3. Sources used for assignment writing and possible sources of plagiarism

Students use different sources to write assignments and might use these sources to plagiarise from. This study indicated that students used frequently or always the internet (93.4%), books (72.9%), journal articles (19.2%) and newspapers (14.8%) as sources for assignments. Students choose to use the internet, because it is easy to copy and paste and it takes very little effort (Sisti, 2007: 224). The students also perceived plagiarism from the internet as less dishonest than plagiarism from books. Students think that information from the internet belongs to the public, and because it has no restriction it does not require citation (Baruchson-Abbi & Yaari, 2004: 5).

### 5.3.4. Use of the internet

The results showed that most students (73%) always use the internet for their assignments and research projects. These results correlate with the trend of the younger generation to use the internet as the only source of information (Scanlon & Neumann, 2002: 377 and Sisti, 2007: 220).

### 5.3.5. Access to the internet

The findings confirmed that the internet is highly accessible. The majority of students access the internet from computer laboratories (75.5%). Others use the library (31.7%), their own computers at home (7.9%) or at their work place (1.4%). The reason why most students used the facilities provided by the higher education facility was because it is convenient and accessible during the day as well as until late at night.

## **5.4. Causes of plagiarism**

### **5.4.1. Reasons students plagiarise**

This study showed that students practice plagiarism for various reasons, either intentional or unintentional. Most students plagiarise with the intention to deceive, whether they are lazy, feel the pressure from family or friends or to receive a high mark (Wilhoit, 1994: 162). In general it can be said that the reasons for students to plagiarise are because of their lack of experience regarding expectations of tertiary education or because they are not aware of the seriousness of plagiarism.

The majority of students plagiarise intentionally. Results from this study indicated that most students (82) plagiarise to gain better marks. Seventy four students plagiarised because of laziness and bad time management and because everybody is doing it, 30 students thought that it is acceptable for them to plagiarise as well. The results of the study conducted by Devlin & Gray (2007: 189) showed that students were given many assignments that are due at the same time and they are therefore bombarded with a lot of work.

It seems as if pressure to perform well in order to pass courses, were also causing students to plagiarise intentionally. A total of 139 students indicated that they strongly agreed or agreed that the reasons for plagiarising were because of educational costs (27), family and friends (31) as well as to get better marks (82).

Students are also plagiarising unintentionally. Findings from this study indicated that 71 student plagiarised because of poor writing skills, 69 because of lack of referencing skills and 61 because they did not understand the assignment. Fifty six students agreed that poor understanding of plagiarism was the reason for plagiarising, while 50 students blamed teaching and learning methods.

Most of these reasons for plagiarism collate with reasons found in similar studies done by Devlin & Gray (2007: 187), Dordoy (2002), Errey (2002: 17), Hayes & Introna (2005: 224) and Wilhoit (1994: 162).

#### 5.4.2. Difficulties students experience in assignment writing

The majority of students found it difficult to write assignments. Thirty nine identified the lack of resources as the major difficulty experienced when doing assignments. This was followed by 31 respondents who indicated the lack of ideas, the challenges of the task (26), the problem with contents (24) and because tasks given are demotivating as major difficulties when writing assignments.

Students might have difficulty not knowing how to retrieve and search relevant sources for their assignments because they have not mastered research and writing skills (Devlin & Gray, 2007: 188). Frustrated students facing deadlines or being overwhelmed with work might lead them to turn to plagiarism. Students are given assignments to demonstrate their information literacy skills and to understand their course work. Plagiarising denies students the opportunity to learn and become individual thinkers (White, 1993: A44).

#### 5.4.3. Reasons for not referencing properly

The results confirmed that referencing of sources was a problem for students. Reasons given for not referencing properly were losing track of where information was found (78 students), referencing internet sources were too difficult (55 students), never taught how to reference (54 students), too much effort (47 students) and too time consuming (47 students). Difficulties with referencing internet sources were also found to be a problem by Brown et al. (2008: 144), Madray (2007), Pears & Shields (2008: 5) as well as Wang (2008: 753).

### **5.5. Plagiarism policies**

Sixty five percent of students were not aware of or not sure about the policies and guideline regarding plagiarism created by their higher education institution. The same applied to student awareness of faculty guides to avoid plagiarism. Seventy percent of students were not aware of or not sure about faculty guidelines to avoid plagiarism. They were therefore unaware of the definition of plagiarism, what plagiarism entails, how to avoid it and what the penalties for plagiarism were.



### 5.5.1. Penalties for plagiarism

From the literature it is clear that penalties for plagiarism will range from allowing students to rewrite assignments to failing the course, withholding the degree or permanent exclusion from graduation. Categories of penalties exist to accommodate types and grades of plagiarism. Factors like the level (year) of studies, number of offences committed, learning background and academic writing skills must be considered (Carroll, 2002: 77; Macdonald & Carroll 2006: 238-239; Park, 2004: 301 and Walker, 1998: 102).

Results from this study showed that the majority of students (52) thought being given a warning was a fair and appropriate penalty. Forty students thought being referred to a disciplinary board or being suspended was fair. Thirty four students regarded expulsion or dismissal as a fair penalty, while a total of 52 regarded it as a strict or very strict penalty. Fourteen students thought it fair that no action is taken against plagiarism. It seems as if some students are regarding plagiarism as acceptable, while others want students guilty of plagiarism to be penalised.

## 5.6. Conclusion

The results from the survey with regards to the research questions asked can be summarised as follows:

### 5.6.1. Awareness of plagiarism

- The majority of students were aware of plagiarism
- The majority of students were aware of the seriousness of plagiarism

### 5.6.2. Trends regarding plagiarism at this South African higher education institution

The majority of students agreed with the definition of plagiarism provided by this higher education institution

It seems as if some students did not have a clear understanding of plagiarism

Not understanding the concept of plagiarism might be an underlining reason for students plagiarising

- Students admitted to the following forms of plagiarism:
  - Paraphrasing without acknowledging the sources
  - Inventing references
  - Summarising without acknowledging the sources
  - Inventing or altering data
  - Copying work from the internet and submitting as their own work
- Most students at this South African higher education institution had committed some forms of plagiarism during their studies.
- Most students used the internet as a source for assignment writing and a possible source of plagiarism
- The majority of students accessed the internet from computer laboratories or the library at their higher education institution
- Students thought that information from the internet belongs to the public, and because it has no restrictions it did not require citation

### **5.6.3. Causes of plagiarism**

5.6.3.1. Reasons students plagiarise intentionally were:

- to gain better marks
- because of laziness and bad time management
- because everybody else is doing it
- educational cost
- pressure from family and friends

5.6.3.2. Reasons students plagiarise unintentionally were:

- poor writing skills
- lack of referencing skills
- lack of understanding assignments
- poor understanding of plagiarism
- teaching and learning methods used

5.6.3.3. Difficulties students experienced in assignment writing were:

- lack of resources
- lack of ideas
- challenges of the task
- problem with contents
- de-motivating of tasks

5.6.3.4. Reasons for not referencing properly were:

- loosing track of where information was found
- did not know how to reference internet sources
- never taught how to reference
- too much effort
- too time consuming

#### **5.6.4. Plagiarism policies**

- Majority of students were not aware of or not sure about the policies and guideline regarding plagiarism created by their higher education institution.
- Majority of students were not aware of or not sure about faculty guides to avoid plagiarism.
- Majority of students were therefore unaware of the definition of plagiarism, what plagiarism entailed, how to avoid it and what the penalties for plagiarism were.

5.6.4.1. Penalties of plagiarism

- Majority of students thought being given a warning is a fair and appropriate penalty.
- Some students regarded plagiarism as acceptable.
- Some students wanted students guilty of plagiarising penalized.

## CHAPTER 6

### 6. RECOMMENDATIONS

#### 6.1. Introduction

From the findings it is clear that student plagiarism is fairly common within the Faculty of Applied Science in the South African higher education institution. There is a lack of awareness of the seriousness of plagiarism among students. This chapter will outline some of the strategies that both academic staff and students can use in order to prevent student plagiarism within the faculty. The immediate responses are:

- Defining plagiarism.
- Teaching information literacy.
- Fighting technology with technology by investing in the plagiarism detection software.
- Developing plagiarism policies further.

#### 6.2. Defining plagiarism

Plagiarism is a broad concept and can be interpreted differently by different people. If a definition of plagiarism is to be helpful to the students, faculty members and academics of this higher education institution, it needs to be simple and direct (Sutherland, 2004: 5). The definition should include both printed and on line sources and must also address intentional and unintentional plagiarism.

This definition should be discussed as part of the contents of academic courses – especially on first year level. Academic staff must ask students to explore their own understanding of and experiences with plagiarism.

### **6.3. Information literacy**

Information literacy is a set of abilities requiring individuals to recognize when information is needed and to locate, evaluate, and use effectively the needed information (Stanger, 2009). The information literate student should be able to determine the extent and nature of the information needed, access information efficiently and effectively to accomplish a specific task, evaluate information and its sources critically and access and use information economically, ethically and legally (Stanger, 2009).

The role of the higher education institution is to educate students to be critical thinkers (Johnson & Webber, 2004: 13). It is therefore important to identify the role of the librarian and academic staff within the faculty. As partners it should be a joint effort of the librarians and academics to teach information literacy, including how to use all the library's resources to find information and academic writing as well as referencing skills. Equipping students with information literacy skills is a life skill that can be adapted to a fast changing environment (Johnson & Webber, 2004: 12).

#### **6.3.1. Designing assignments**

Assignments must be designed to encourage students to investigate the problem by retrieving enough information and analyzing resources. Academics should clarify assignments to students so that they know what is expected of them. Educators should help students to discuss the topic in depth, narrow the focus, personalize their assignment, provide correct references in the text and acknowledge sources consulted (Sutherland, 2004: 7).

Academics must avoid giving assignment topics that are general or common. Topics related to the course objectives or contents and the avoidance of recycling of assignment topics should limit the chances of students buying or copying assignments (Sterngold, 2004: 18). Cooperation between academics should ensure control over sequences of assignments and too many dead lines at the same time.

Internet plagiarism can be controlled by developing types of assignments that will be difficult to plagiarise and by giving unique instructions (Harris, 2001: 43- 46). Students need to engage in the process of research and academic writing. Evidence of original work can be proven by producing notes, drafts and photocopies or printouts of resources (Sterngold, 2004: 20; Sutherland, 2004: 7 and Wilhoit, 1994:163). Writing skills such as paraphrasing, summarizing and quoting must be taught and practiced (DeVoss & Rosati, 2002: 200). Students must also be encouraged to practice time management to ensure that they have enough time for research, retrieving enough information, evaluating retrieved information, developing ideas and arguments, extracting information using their own words, synthesising information from various sources and citing these sources to support their arguments (Pears & Shields, 2008: 12).

### 6.3.2. Teaching citation and referencing skills

Citation and referencing skills need to be taught every year or in every course (Hart & Friesner, 2004: 93 and Sutherland, 2004: 7). Students should know how to cite sources in the assignment text as well as to provide a list of references used (Pears & Shields, 2008: 11). Students must be aware of the different referencing styles like the Harvard methods and which style is prescribed for each assignment. Students can also be taught how to use on-online referencing services such as RefWorks. Students must be encouraged to keep track of all the resources they have used and to ensure that all the bibliographic details they need for the referencing of sources are recorded. Wang (2008: 753) suggested that in order for students to keep track of their sources, they should be encouraged to use spreadsheets like Excel. By recording accurately all the bibliographic details, students will save time when references in the text and the reference list are created.

As students usually struggle understanding it, special attention should be given to the teaching of using online resource, websites and journal articles as references.

#### 6.4. Plagiarism detection software

Dealing with suspected cases of plagiarism is time consuming for academic staff (Keuskamp & Sliuzas, 2007: A93). The easy access and availability of the internet, according to Ledwith & Risquez (2008: 371) and Townley & Parsell (2004: 273) makes detection difficult as the plagiarist is dealing with a lot of information. Most higher education institutions worldwide decided to turn to the internet for a solution. By investing in plagiarism detection software, copied text can be detected quickly and easily. Sutherland (2004: 8) warned that because detection services are not always reliable, they should be used cautiously. It should also not be used as a substitute for teaching academic writing skills.

The following are the detection software that can be used:

- Turnitin.com (<http://turnitin.com/static/aboutus.html>) is a company that also maintain a website called plagiarism.com. For a fee academic institutions can submit papers to Turnitin.com which would search its databases for duplicates.  
Turnitin.com is one of most popular software with over 600 000 registered users from 3500 institution worldwide (Townley & Parsell, 2004: 273).  
Turnitin.com keeps the students papers, whether or not they were plagiarised. The legal community and some scholars have however raised questions about privacy rights, copyright violation of storing original works without permission.
- Essay Verification Engine (EVE2) (<http://www.canexus.com/eve/abouteve.shtml>) is an inexpensive online programme whereby lecturers can trace cases of plagiarism.
- MyDropBox (<http://www.mydropbox.com/>) indicates sections that have been copied either partially or minimally.
- The Glatt Plagiarism Screening Programme (<http://www.plagiarism.com/>) uses writing styles that will detect cases of plagiarism.
- Lexibot (<http://www.lexibot.com>) is a moderately priced tool to search more than five hundred thousand search engines (Harris, 2001: 81)

- Wordcheck (<http://www.wordchecksyste.ms.com>) offers a software application installed at local institutions. This program performs keywords counting and displays comparative information (Harris, 2001: 81).

### **6.5. Institutional policies and guidelines about plagiarism**

Opportunities for plagiarism among students at higher education institutions appear to be on the increase. One of the reasons might be that official policies, procedures and guideline of higher education institutions and those of academic staff members may not be clear. Walker (1998: 89) suggested that higher education institutions need to be practical in developing strategies to raise awareness of the unacceptability of student plagiarism, developing and enforcing policies aimed at controlling student plagiarism and setting up programmes to promote academic integrity.

If plagiarism is detected, proper procedures, guidelines and rules should be followed. The policies and guidelines regarding plagiarism should therefore be updated regularly (Scanlon, 2003: 163) and include:

- Definition(s) of plagiarism
- What constitutes plagiarism
- Procedures what must be followed
- How cases of plagiarism must be reported
- Where cases of plagiarism must be reported
- List of people that need to be informed
- Rights of the student
- Confidentiality policy
- Penalties

Policies and guidelines should be specific and easily understood. They must also be easily available to all the stakeholders. Students especially should be made aware of the availability and the contents of these policies and guidelines (Austin & Brown, 1999: 23 and Harris, 2001: 124). Emphasis should be on why plagiarism is unacceptable and how it can be avoided (Angelil-Carter, 2000: 116 and Park, 2004:



295). To ensure that each student is treated fairly, penalties for plagiarism should be spelled out, fair, transparent and accurate (Park, 2004: 294).

To ensure consistency and fairness Oxford Brookes University in the United Kingdom reduced their penalties to five acceptable penalties, namely 1) having a recorded conversation with the student and issuing a warning, 2) requiring the lecturer to pay no attention to the plagiarised material and assess the remaining coursework, 3) asking the student to correct and re-submit the assignment for a stated percentage reduction and 4) assigning a zero for an assignment or the module (Carroll & Appleton, 2009).

## **6.6. Conclusion**

Plagiarism is a complex issue and is misunderstood by most students. There is no simple solution to this problem. Academic staff should focus on ways to reduce plagiarism. To raise awareness about plagiarism, the issue must be explained to students. Special attention should be given to why it is unacceptable (Born, 2003: 224) and how to avoid being accused of plagiarising (Wilhoit (1994:161).

Although it is the responsibility of the higher education institution to prevent plagiarism, Austin & Brown (1999: 23) suggested that the academic staff in cooperation with the library can prevent or minimise plagiarism by designing assignments correctly and adopting teaching methods and instructions. Students need to understand what plagiarism is, how to avoid it and why they should be penalised for it. Referencing and academic writing skills must be taught by all lecturers at all levels. Special attention should be given to the function and purpose of writing, reliability of information, ethical aspects of using information and how to become thoughtful, careful and critical writers (Born, 2003: 224; Coetzee & Breytenbach, 2006: 49 and DeVoss & Rosati, 2002: 201). Higher education institutions must update policies and guidelines on plagiarism. They must ensure that they are available to students and that students understand them. They must also invest in plagiarism detection software and ensure that students as well as academic staff make use of it.

## CHAPTER 7

### 7. CONCLUSION

Plagiarism is a complex issue (Macdonald & Carroll, 2006: 244 and Wang, 2008: 756). Before students are educated about plagiarism, academic staff members need to understand all the forms of plagiarism (Beute, Van Aswegen & Windberg, 2008: 205). Academics must communicate openly about plagiarism, share their teaching experiences and strategies, suggest specific institutional guidelines and formulate unified strategies to reduce student plagiarism. All the stakeholders must be involved before the complexity of the plagiarism issue can be reduced (Macdonald & Carroll, 2006: 244).

The various reasons students plagiarise should be understood before plagiarism can be addressed. Understanding why students plagiarise can help academic staff to consider how to reduce plagiarism in their classrooms. Students should be provided with the necessary training. The academic staff can develop educative strategies aimed at clarifying the meaning of plagiarism to students and helping them to integrate other people's ideas and provide correct references for sources used in their own work.

The studies conducted on student internet plagiarism showed that students see the information on the internet as free to copy and paste. Students need to be taught that the same rules and procedures that are used in acknowledging printed sources are applied to internet sources. Scanlon (2003:163) stated that plagiarism is misunderstood by students especially internet plagiarism. Higher education institutions have to raise awareness about internet plagiarism and ensure that students know how to reference sources and websites from the internet.

The overall aim of this study was to explore the problem and raise issues regarding student plagiarism within a South African higher education institution. The study provided a detailed statistical analysis of data collected. Although the limitations of questionnaires (Newstead, Franklyn-Stokes & Armead, 1996: 240) were noted, this

quantitative data collection method was used. Responses by students were kept anonymous. More qualitative methods such as interviews, structured individual questionnaires or focus groups will be required to investigate the topic in more depth.

The findings confirmed that student plagiarism is fairly common within the Department of Chemistry and the Department of Mathematical Technology. The study showed that 41% of undergraduate students thought that plagiarism is very serious, but students are still engaged in plagiarising. Most students (73%) admitted to always using the internet to find information for assignments. The internet has made plagiarism worse because students are able to easily copy and paste from the internet. Undergraduate students are not aware of the higher education institution's policies and guidelines about plagiarism.

Findings did not show a significant statistical difference regarding age, gender, level of study or language background. Contrary to expectation Davis *et al.* (1992: 17) there was no evidence that there is a correlation between plagiarism and student gender and age.

Plagiarism is misunderstood by most students. There is no simple solution to this problem. Academics should focus on ways to reduce plagiarism. To raise student awareness on plagiarism, students must be educated about it to ensure that they understand why it is not acceptable (Born, 2003: 224). According to Wilhoit (1994: 161) the academics need to spend more time in class helping students to learn to avoid it. Austin & Brown (1999: 23) suggested that it is the responsibility of the institution to prevent plagiarism on campus. Faculties can prevent or minimise plagiarism by setting unique instructions for assignments and creating assignments topics that are difficult to plagiarise from the internet.

Recommendation and guidelines can be very effective in reducing plagiarism (Born, 2003: 224). Coetzee & Breytenbach (2006: 49) suggested that there should be training on plagiarism and referencing at high school level, because the way plagiarism is handled in high school might affect students seriously at higher education institutions. The students need to be engaged in understanding what

plagiarism is, and why they should be penalised for it. If students are taught to understand the function and purpose of writing and the unreliability of especially internet information, they will become thoughtful, careful and critical writers (DeVoss & Rosati, 2002: 201).

### **7.1. Further research into student plagiarism**

This study reviewed some of the recent literature on student plagiarism. Most of the literature reviewed was international. Few references to student plagiarism in South Africa were found. Further research into the issue especially in the South African environment is needed. Such a study would enable higher education institutions in South Africa to gain a clear understanding of plagiarism and assist in developing more comprehensive measures to prevent and to deal with it. Academics must be made aware of plagiarism that exists in their departments and how the problem might affect the whole institution.

Further research investigating plagiarism among South African high school learners is also needed. Plagiarism should be dealt with on high school level (Coetzee & Breytenbach (2006: 49). Policies and guidelines on plagiarism in South African higher education institutions should also be investigated further so ensure that nationally a better understanding of plagiarism, how avoid it and how to deal with it exist. This should include investigating information and internet literacy education. Lastly it is suggested that the effectiveness of the plagiarism detection software, especially the advantages and disadvantages thereof, should be investigated further.

## 8. BIBLIOGRAPHY

- Angelil-Carter, Shelley. 1995. **Uncovering plagiarism in academic writing: developing authorial voice within multivoiced text.** Grahamstown: Rhodes University. MBibl. thesis.
- Angelil-Carter, Shelley. 2000. **Stolen language? Plagiarism in writing.** London: Longman.
- Armstrong, John D. 1993. Plagiarism: what is it, who does it offend, and how does one deal with it. **American Journal of Roentgenology**, 161: 479-484.
- Ashworth, Peter; Bannister, Philip & Thorne, Pauline. 1997. Guilty in whose eyes? University student's perceptions of cheating and plagiarism in academic work and assessment. **Studies in Higher Education**, 2 (2): 187-203.
- Austin, Jill M. & Brown, Linda D. 1999. Internet plagiarism: developing strategies to curb student academic dishonesty. **The Internet and Higher Education**, 2 (1): 21-33.
- Babbie, Earl R. 2001. **The practice of social research.** Belmont: Wadsworth Thomson Learning.
- Badke, William. 2007. Give plagiarism the weight it deserves. **Online**, 31(5): 58-60.
- Baruchson-Abbi, Shifra & Yaari, Eti. 2004. Printed versus internet plagiarism: a study of student perception. **International Journal of Information Ethics**, 1(6): 1-7.
- Beute, Nico; Van Aswegwen, Elizabeth & Windberg, Christine. 2008. Avoiding plagiarism in contexts of development. **IEEE Transaction on Education**, 51(2): 201-205.
- Born, D. Apiwan. 2003. How to reduce plagiarism. **Journal of Information Systems Education**, 14 (3): 223-224.

- Brown, Cary A.; Dickson, Rumona.; Humphreys, Anne; McQuillan, Vicky. & Smears, Elizabeth. 2008. Promoting academic writing/referencing skills : outcomes of an undergraduate e-learning pilot project. **British Journal of Educational Technology**, 39 (1): 140-156.
- Brown, Verity J. & Howell, Mark E. 2001. The efficacy of policy statements on plagiarism : do the change students views. **Research in Higher Education**, 42 (1): 103-118.
- Carroll, Jude. 2002. **A handbook for deterring plagiarism in higher education**. Oxford: Oxford Centre for Staff and Learning Development.
- Carroll, Jude & Appleton, Jon. 2009. **Towards consistent penalty decision for breaches of academic regulations in one UK University**. [Online] Available: <http://www.ojs.unisa.edu.au/index.php/IJEI/article/viewFile/15/5> [20 August 2009].
- Coetzee, Mercia & Breytenbach, H. J. 2006. Plagiarism at tertiary institutions: perceptions of lecturers at the UFS campuses. **Communitas**, 11: 37-51.
- Colin, Neville. 2007. **The complete guide to referencing and avoiding plagiarism**. New York: Open University Press.
- Cronin, Sherill Nones. 2003. The problem of plagiarism. **Dimensions of Critical Care Nursing**, 22 (6): 253-254.
- Davis, Stephen F.; Grover, Cathy A.; Becker, Angela H. & McGregor, Loretta N. 1992. Academic dishonesty: prevalence, determinants, techniques, and punishments. **Teaching of Psychology**, 19 (1): 16-20.
- Devlin, Marcia. 2003. The problem with plagiarism. **Campus Review**, 12: 4-5.
- Devlin, Marcia. 2006. Policy, preparation, and prevention: proactive minimization of student plagiarism. **Journal of Higher Education Policy and Management**, 28 (1): 45-58.

- Devlin, Marcia & Gray, Kathleen. 2007. In their words: a qualitative study of the reasons Australian university student plagiarise. **Higher Education Research and Development**, 26 (2): 181-198.
- DeVoss, Danielle & Rosati, Annette C. 2002. "It wasn't me, was it?" plagiarism and web. **Computers and Composition**, 19: 191-203.
- Dordoy, Alan. 2002. Cheating and plagiarism: student and staff perceptions at Northumbria. **Proceeding of Northumbria Conference July 2002. Educating the future**. [Online]. Available: <http://www.jiscpas.ac.uk/images/bin/AD.doc>. [29 January 2009].
- Eckstein, Max A. 2003. **Combating academic fraud**. Paris: International institute for Educational Planning.
- Ellery, Karen. 2008. Undergraduate plagiarism: a pedagogical perspective. **Assessment & Evaluation in Higher Education**, 33 (5): 507-516.
- Errey, Lynn. 2002. Plagiarism: something fishy? ... or just a fish out of the water? **Teaching Forum**, 50: 17-20.
- Fink, Arlene. **How to conduct surveys: a step by step guide**. 4<sup>th</sup> ed. London: Sage.
- Flint, Abbi; Clegg, Sue & Macdonald, Ronald. 2006. Exploring staff perception of student plagiarism. **Journal of Further and Higher Education**, 30 (2): 145-156.
- Franklyn-Strokes, Arlene & Newstead, Stephen E. 1995. Undergraduate cheating: who does what and why? **Studies in Higher Education**, 20 (2): 159-173.
- Gibaldi, Joseph. 2003. **MLA handbook for writers of research papers**. 6<sup>th</sup> ed. New York: MLA.

- Gillard, Erica. 2004. **Considerations on the designation and nomenclature of higher education institutions**. Pretoria: The Council on Higher Education.
- Groves, Robert M.; Fowler, Floyd J.; & Couper, Mick P.; Lepkowski, James M.; Singer Eleanor & Tourangeau, Roger. 2009. **Survey methodology**. Hoboken, New Jersey: John Wiley.
- Hannabuss, Stuart. 2001. Contested texts: issues of plagiarism. **Library Management**, 26 (6): 311–318.
- Harris, Robert A. 2001. **The plagiarism handbook: strategies for preventing, detecting and dealing with plagiarism**. Los Angeles: Pyrczak.
- Harris, Robert A. 2005. **Using sources effectively: strengthening your writing and avoiding plagiarism**, 2<sup>nd</sup> ed. Glendale: Pyrczak.
- Hart, Mike & Friesner, Tim. 2004. Plagiarism and poor academic practice – a threat to the extension of e-learning in higher education? **Electronic Journal on e-learning**, 2 (1): 89-96.
- Hayes, Niall & Introna, Lucas D. 2005. Cultural values, plagiarism and fairness: when plagiarism get in the way of leaning. **Ethics and Behaviour**, 15(3): 213-231.
- Hoad, Tinothy C. & Zobel, Justin. 2003. Methods for identifying versioned and plagiarised documents. **Journal of the American Society for Information Science and Technology**, 54 (3): 203-215.
- Howard, Rebecca Moore. 1993. A plagiarism pentimento. **Journal of Teaching and Writing**, 11(3): 233-246.
- Howard, Rebecca Moore. 1995. Plagiarism, authorship and the academic death penalty. **College English**, 57 (7): 788-806.



- Howard, Rebecca Moore. 2002. Don't police plagiarism: just teach them. **The Education Digest**, 67 (5): 46-49.
- Jameson, Daphne A. 1993. The ethics of plagiarism: how genre affects writers use of source materials. **The Bulletin**, June: 18-28.
- Johnson, Bill & Webber, Sheila. 2004. The role of LIS faculty in the information literate university: taking over the academy. **New Library World**, 105 (1/2), 12-20.
- Kenny, Deborah. 2006. Student plagiarism and professional practice. **Nurse Education Today**, 27: 14-18.
- Keuskamp, Dominic & Sliuzas, Regina. 2007. Plagiarism prevention or detection? The contribution of text matching software to education about academic integrity. **Journal of Academic Language & Learning**, 1 (1): A91-A99.
- King, Lizette. 2007. **Information literacy of incoming undergraduate Art students at the University of the Western Cape: assessment of competencies and proficiencies**. Bellville: UWC.
- Lathrop, Ann & Foss, Kathleen. 2000. **Student cheating and plagiarism in the internet era: a wakeup call**. Englewood: Libraries Unlimited.
- Leask, Betty. 2006. Plagiarism, cultural diversity and metaphor-implications for academic staff development. **Assessment & Evaluation in Higher Education**, 31(2): 183-199.
- Ledwith, Ann & Risquez, Angelica. 2008. Using anti-plagiarism software to promote academic honesty in the context of peer reviewed assignments. **Studies in Higher Education**, 33 (4): 371-384.

- Leedy, Paul D. & Ormrod, Jean Ellis. 2001. **Practical research: planning and design**. 7<sup>th</sup> ed. Upper Saddle River: Prentice-Hall.
- Lloyd, Marjorie. 2007. Developing academic writing skills: the process framework. **Nursing Standard**, 21 (40): 50-56.
- Logue, Roger. 2004. Plagiarism: the internet makes it easy. **Nursing Standard**, 18 (51): 40-43.
- Macdonald, Ronald & Carroll, Jude. 2006. Plagiarism: a complex issue requiring a holistic institutional approach. **Assessment & Evaluation in Higher Education**, 31 (2): 233-245.
- Madray, Amrita. 2007. Developing student awareness in plagiarism: crisis in plagiarism. **Library Philosophy and Practice**. [Online]. Available: <http://www.webpages.uidaho.edu/~mbolin/mandray.htm>. [03 September 2008].
- Maree, Kobus & Pietersen, Jacques. 2007a. Surveys and the use of questionnaires. In Maree, Kobus (ed.). **First steps in research**. Pretoria : Van Schaik. p. 155-170.
- Maree, Kobus & Pietersen, Jacques. 2007b. Sampling. In Maree, Kobus (ed.). **First steps in research**. Pretoria : Van Schaik. p. 172-181.
- Marsh, Richard L. & Bower, Gordon H. 1993. Eliciting cryptomnesia: unconscious plagiarism in a puzzle task. **Journal of Experimental Psychology**, 19 (3): 673-688.
- Newstead, Stephen E.; Franklyn-Stokes, Arlene & Armead, Penny. 1996. Individual differences in student cheating. **Journal of Educational Psychology**, 88 (2): 229-241.

- Norris, Robert W. 2007. Dealing with plagiarism at the Japanese Universities: a foreign teacher's perspective. **The East Asian Learner**, 3 (1): 1-19.
- Park, Chris. 2003. In the other (people's) words: plagiarism by students literature and lessons. **Assessment and Evaluation in Higher Education**, 28 (5): 471-488.
- Park, Chris. 2004. Rebels without a clause: towards an institutional framework for dealing with plagiarism with students. **Journal of Further and Higher Education**, 28 (3): 291-306.
- Pears, Richard & Shields, Graham. 2008. **Cite them right: the essential referencing guide**. Newcastle: Pear Tree Books.
- Pecorari, Diane. 2003. Good and original: Plagiarism and patch writing in academic second-language writing. **Journal of Second Language Writing**, 12 (4): 317-345.
- Pennycook, Alastair. 1996. Borrowing others words: text, ownership, memory and plagiarism. **Tesol Quarterly**, 30 (2): 201-230.
- Pickard, Jill. 2006. Staff and student attitudes to plagiarism at University of College Northampton. **Assessment and Evaluation of Higher Education**, 31(2): 215-232.
- Piper, Heather & Simons, Helen. 2005. Ethical responsibility in social research. In: Somekh, Bridget & Lewin, Cathy. **Research methods in the social sciences**. London : Sage. p. 56-64.
- Punch, Keith. 2005. **Introduction to social research: quantitative and qualitative approaches**. London : Sage.
- Rinnert, Carol & Kobayashi, Hiroe. 2005. Borrowing words and ideas: insight from Japanese L1 writers. **Journal of Asian Pacific Communication**, 15(1): 31-56.

Russel, Brenda & Purcel, John. 2009. **Online research essentials :implementing and designing research studies**. San Francisco: Jossey-Bass.

Scanlon, Patrick M. 2003. Student online plagiarism: how do we respond? **College Teaching**, 51(4): 161-165.

Scanlon, Patrick M. & Neuman, David R. 2002. Internet plagiarism among college students. **Journal of College Student Development**, 43 (3): 374-385.

Sharma, Bal Kristina. 2007. Plagiarism among university students : intentional and unintentional. **Journal of NELTA**, 12 (1 & 2): 134-141.

Sisti, Dominic A. 2007. How do high school students justify their internet plagiarism. **Ethics & Behaviour**, 17 (3): 215-231.

Stefani, Lorraine & Carroll, Jude. 2009. **A briefing on plagiarism**. [Online] Available:  
[http://webcache.googleusercontent.com/search?q=cache:eGFJvGaLqNkJ:www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id10\\_Briefing\\_on\\_Plagiarism.rtf+www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id10\\_Briefing\\_on\\_Plagiarism.rtf+A+briefing+on+plagiarism&cd=1&hl=en&ct=clnk&gl=za](http://webcache.googleusercontent.com/search?q=cache:eGFJvGaLqNkJ:www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id10_Briefing_on_Plagiarism.rtf+www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id10_Briefing_on_Plagiarism.rtf+A+briefing+on+plagiarism&cd=1&hl=en&ct=clnk&gl=za) [29 March 2010].

Stanger, Keith. 2009. Implementing information literacy in higher education: a perspective on the roles of librarians and disciplinary faculty, **Library and Information Science Research Electronic**, 19(1). [Online]. Available:  
[http://libres.curtin.edu.au/libres19n1/Stanger\\_EssOp.pdf](http://libres.curtin.edu.au/libres19n1/Stanger_EssOp.pdf). [29 March 2010].

Sterngold, Arthur. 2004. Confronting plagiarism. **Change**, 36 (3), 16-21.

- Straw, Deborah. 2002. The plagiarism of generation 'why not? **Community College Week**, 14 (24): 4-7. [Online]. Available: <http://web.ebscohost.com/ehost/detail?vid=6&hid=6&sid=f6c2a894-e4ba-459f-b484-85829f4de3e4%40sessionmgr13&bdata=JnNpdGU9ZWlhvc3QtbGl2ZQ%3d%3d#db=aph&AN=699329>. [05 May 2010].
- Strayer University iCampus. 2010a. **Plagiarism and the internet**. [Online]. Available: <https://icampus.strayer.edu/lrc/plagiarism/internet>. [05 May 2010].
- Strayer University iCampus. 2010b. **Plagiarism defined**. [Online]. Available: [https://icampus.strayer.edu/lrc/plagiarism/definition?page\\_view=types](https://icampus.strayer.edu/lrc/plagiarism/definition?page_view=types) [05 May 2010].
- Sutherland, Tracey. 2004. Defining and avoiding plagiarism: the council of writing program administrators' statement on best practices. **Accounting Education News**, 32(1/2): 5-8.
- Thaiss, Chris & Zawacki, Terry. 2006. **Engaged writers and dynamic disciplines: research on the academic writing life**. Portsmouth, NH : Boynton/Cook.
- Townley, Cynthia & Parsell, Mitch. 2004. Technology and academic virtue: student plagiarism through the looking in the glass, **Ethics and Information Technology**, 6: 271-277.
- University of Ottawa. 2006. **Integrity in writing: avoiding plagiarism**. [Online]. Available: <http://www.sass.uottawa.ca/writing/kit/plagiarism.pdf>. [28 September 2009].
- Walker, John. 1998. Student plagiarism in universities: what are we doing about it? **Higher Education Research Development**, 17 (1): 89-106.

- Wang, Yu-Mei. 2008. University student online plagiarism. **International Journal of E-Learning**, 7 (4): 743-757.
- Wheeler, Greg. 2009. Plagiarism in the Japanese universities: truly a cultural matter? **Journal of Second Language Writing**, 18 (1): 17-29.
- White, Edward M. 1993. Too many campuses to sweep student plagiarism under the rug. **The Chronicle of Higher Education**, 39 (25): A44.
- Wilhoit, Stephen, 1994. Helping students avoid plagiarism. **College Teaching**, 42 (4): 161-164.
- Wood, Gail. 2004. Academic original sin: plagiarism, the internet and librarians. **The Journal of Academic Librarianship**, 30 (3): 237-242.
- Youmans, Madeleine. 2000. Perceptions of plagiarism in ESL writing: student perspectives. **Journal for Language Teaching**, 34 (2): 113-125.
- Zimitat, Craig. 2008. A student perspective of plagiarism. In: Roberts, Tim S. (ed.). **Student plagiarism in an online world: problems and solutions**. Hersey, PA: Information Science Reference. p. 10-22.

## APPENDIX A: Questionnaire

### QUESTIONNAIRE ON STUDENT PLAGIARISM

All the information will be held in the strictest confidence

#### GENERAL INSTRUCTION

Please respond to each question by marking an X in the appropriate box and return the complete form.

#### SECTION A: DEMOGRAPHICS

##### Q1 Gender

1. Male		2. Female	
---------	--	-----------	--

##### Q2 Age

1. 17-20		2. 21-25		3. 26-30		4. 31-35		5. 36+	
----------	--	----------	--	----------	--	----------	--	--------	--

##### Q3 Level of study

1. First year	
2. Second year	
3. Third year	

##### Q4 Marital status

1. Single	
2. Married	

3. Living together, but not legally married	
4. Divorced	
5. Others (Specify .....)	

**Q5 Course**

1. Analytical Chemistry	
2. Chemistry	
3. Food Technology	
4. Horticulture	
5. Mathematical Technology	

**Q6 Home language**

1. English		7. Sepedi	
2. Afrikaans		8. Swati	
3. Xhosa		9. Tsonga	
4. Northern Sotho		10. Ndebele	
5. Southern Sotho		11. Zulu	
6. Venda		12. Others (Specify) .....	



**Q7 Country of Origin**

1. South Africa	
2. Others (specify) .....	

**SECTION B: STUDENT AWARENESS OF PLAGIARISM**

**Q8 How do you rate the seriousness of plagiarism?**

1. Very serious	2. Serious	3. Not serious at all	4. Don't know
-----------------	------------	-----------------------	---------------

**Plagiarism is the attempt to represent other persons ideas, expression, artefacts, or work as ones own, cutting and pasting electronic sources into ones own document, copying one students work, overuse of sources.**

**Q9 Do you agree with this definition?**

1. Yes		2. No		3. Not sure	
--------	--	-------	--	-------------	--

**Q9.1. If No, please give your definition of plagiarism**

---

---

**Q10 When working with assignments, which of the following have you used at anytime whilst studying?**

Student activities	Always	Frequently	Sometimes	Rarely	Never
1. Paraphrased work without acknowledging the original author					
2. Summarizing a text without acknowledgement					
3. Copy text word by word without acknowledgement					
4. Submitted someone else's work without their permission					
5. Invented or altered data					
6. Written an assignment for your friend					
7. Using quotation marks without proper acknowledgement					
8. Invented references or bibliography					
9. Submitted work as an individual while written with other students					
10. Copy a work from internet & submit it as your own					

**Q11 Please indicate which type of information sources you have used for assignment writing and as a possible source of plagiarism**

Information sources	Always	Frequently	Sometimes	Rarely	Never
1. Journal articles					
2. Books					
3. Internet					
4. Newspapers					
5. Others (specify)					

**Q12 How frequently do you use the internet to complete your assignment?**

Frequency of use	
1. Several times per day	
2. Once per day	
3. Once per week	
4. Once per month	
5. Never	

**Q13 From where do you access the internet?**

1. Library	
2. Lab	
3. Home	
4. Work	
5. Others (Specify).....	

**SECTION C: CAUSES OF PLAGIARISM**

**Q14** If you knowingly committed plagiarism, or seriously considered it, why did you want to do it?

Reasons for plagiarising	Strongly Agree	Agree	Disagree	Strong Disagree	Don't know
1. Poor research, writing and referencing skills					
2. Lack of ideas					
3. Teaching and learning methods					
4. Laziness or bad time management					
5. Do not understand the assignment					
6. Education costs					
7. Pressure from family and friends					
8. To better marks					
9. Poor understanding of plagiarism					
10. Everybody is doing it					

**Q15** What are the major difficulties that you face when writing your assignment?

Difficulties when writing	Major difficulty	Medium difficulty	Low difficulty	Not a difficulty	Don't know
1. Assignment requirement					
2. Type of assignments					

3. Referencing skills					
4. Teaching and learning methods					
5. Training					

**Q16 What are your reasons for you not referencing properly?**

Reasons for not referencing	Strongly Agree	Agree	Disagree	Strong Disagree	Don't know
1. Never taught how to reference properly					
2. Lost track of where the information came from					
3. Referencing internet sources is to difficult					
4. Too much effort					
5. Time it takes is not worth the marks received					

**SECTION D: PLAGIARISM POLICIES**

**Q17 Are you aware of your institution policies against plagiarism?**

4. Yes		5. No		6. Not sure	
--------	--	-------	--	-------------	--

**Q18 Is there procedure in your faculty that guides you on how to avoid plagiarism?**

1. Yes		2. No		3. Not sure	
--------	--	-------	--	-------------	--

**Q19 If Yes, select where is this procedure documented?**

1. Institutions website	
2. Handbook	
3. General circular	
4. Others (Specify) .....	

**Q20 Have you work ever been plagiarised?**

1. Yes		2. No		3. Not sure	
--------	--	-------	--	-------------	--

**Q21 What do you think are the fair penalties for those who plagiarise in your faculty?**

Penalties	Very strict	Strict	Fair	Lenient	Very weak
1. Given a warning					
2. Suspension					
3. Expulsion /dismissal					
4. No action taken					
5. Referred to disciplinary board					
6. Others (specify) .....					

**Any Other Comments:**

---

---

Thank you for completing this survey!

## **APPENDIX B: Consent form**

### **CONSENT FORM**

Topic: Plagiarism among undergraduate students in the Faculty of Applied Science at a South African higher education institution.

Name: Mapule Patricia Sentleng

E-mail: [msentlengp@gmail.com](mailto:msentlengp@gmail.com)

Thank you for agreeing to participate in this study which will take place from March 2010. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

The objectives of this study were to;

- Investigate the awareness for plagiarism among higher education institution undergraduate students.
- Investigate the causes and trends of plagiarism in academic work among undergraduate students at the higher education institution in South Africa.
- Examine if the higher education institutions have policies and guidelines regarding plagiarism by undergraduate students.
- Make recommendations as to how higher education institution can improve student's awareness of plagiarism.

You are encouraged to ask any questions at any time about the nature of the study and the methods that I am using. Your suggestions and concerns are important to me; please contact me at any time at the address/phone number listed above.

I guarantee that the above conditions will be met:

- 1) Your name will not be used at any point of information collection.



2) Your participation in this research is voluntary; you have the right to withdraw at any point of the study, for any reason, and without any prejudice.

Do you grant permission to be quoted directly?

Yes \_\_\_\_\_ No \_\_\_\_\_

I agree to the terms

Respondent \_\_\_\_\_ Date \_\_\_\_\_

I agree to the terms:

Researcher \_\_\_\_\_ Date \_\_\_\_\_