MANAGERIAL ACCOUNTING AND FINANCIAL MANAGEMENT STUDENTS' EXPERIENCES OF LEARNING IN A WRITING INTENSIVE TUTORIAL PROGRAMME

A thesis submitted in fulfilment of the requirements for the degree

DOCTOR OF PHILOSOPHY

BY

KAREN BARGATE

University of KwaZulu-Natal

School of Education

December 2012

Declaration

I, Karen Bargate declare that:

a. The research reported in this thesis, except where otherwise indicated, and is my original work.

b. This thesis has not been submitted for any degree or examination at any other university.

c. This thesis does not contain person's data, pictures, graphs or other information unless specifically acknowledged as being sourced from other persons.

d. This thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

   i. their words have been re-written but the general information attributed to them has been referenced;

   ii. where their exact words have been used, their writing has been placed inside quotation marks and referenced.

e. Where I have reproduced a publication of which I am author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.

f. This thesis does not contain text, graphics or tables copied and pasted from the internet, unless specifically acknowledged, and the source being detailed in the thesis and in the Reference section.

Signed: _____

Date: _____

Abstract

Managerial and Financial Management (MAF) has traditionally been perceived by students as a difficult subject. Students do not fully grasp the underlying disciplinary concepts and struggle to transfer knowledge from one context to another. There is a dearth of research, particularly in South Africa, into how students learn in accounting programmes. This study sought to explore MAF students' experiences of learning in a Writing Intensive Tutorial (WIT) programme at the University of KwaZulu-Natal. The WIT programme is based on the principle of using informal exploratory writing, *writing-to-learn,* to support students' learning of MAF. Informal writing is low stakes, ungraded, and encourages critical thinking and the learning of concepts, rather than focusing on grammatical correctness.

The study was informed by the tenets of social constructivism and was conducted within a qualitative interpretative framework. Principles of case study research were applied in the data generation process. Purposive sampling was applied that reflected the MAF population in regard to race and gender demographics and academic ability. The participants were 15 MAF students who voluntarily participated in an 18-week WIT programme. Interactive Qualitative Analysis (IQA) (Northcutt & McCoy, 2004) was used for the research design and as a data analysis tool. Following IQA protocol, focus groups were used to generate affinities (themes) of students' experiences of learning in the WIT programme. From the affinities generated a system diagram was constructed. In-depth semi-structured individual interviews were conducted at the end of the programme to further probe participants' learning experiences.

The primary affinity driving the system was the *programme structure.* which drove the other affinities – *understanding* of concepts, *challenging* the participants, the *written tasks* undertaken (secondary drivers), making learning *fun*, improved *study techniques and test preparation*, *criticism* of the programme (secondary outcomes), increased *personal confidence* and the *interactive* nature of the programme (primary outcomes).

The thesis concludes with a proposal of an inductively theorised model. The model derives from the major findings in the study regarding students' experiences of learning in the WIT programme. The model offers insights for higher education programme designs that utilise writing-to-learn pedagogies and can provide opportunities for students' to develop deep, conceptual learning in higher education.

Acknowledgements

Many people have helped me to make this study possible. My sincere thanks to:

Abbreviations

AECC – Accounting Education Change Commission

AICPA – American Institute of Certified Public Accountants

AIS – Accounting Information Systems

ART – Affinity Relationship Table

B. Comm. – Bachelor of Commerce

CA – Chartered Accountant

CA(SA) – Chartered Accountant (South Africa)

CIMA – Chartered Institute of Management Accountants

CPA – Certified Public Accountant (American)

CTA – Certificate in the Theory of Accounting

DP – Duly Performed certificate

GMAT – General Management Admission Test

IFAC – International Federation of Accountants

IFRS – International Financial Reporting Standards

IRD – Interrelationship Diagram

IQA – Interactive Qualitative Analysis

IT – Information Technology

MAF – Managerial Accounting and Finance III

NQF – National Qualifications Framework

QE I – Qualifying Examination Part I

QE II – Qualifying Examination Part II

SA GAAP – South African Generally Accepted Accounting Practice

SAICA – South African Institute of Chartered Accountants

SAJAR –South African Journal of Accounting Research

SID – Systems Influence Diagram

UK – United Kingdom

UKZN – University of KwaZulu-Natal

US – United States of America

WAC – writing across the curriculum

WID – writing in the discipline

WIT – Writing Intensive Tutorial

ZPD – Zone of Proximal Development

Table of Contents

List of Figures

List of Tables

List of Annexures

CHAPTER ONE

Introduction

It was the best place to be on a Tuesday afternoon (Travis, WIT programme, 2011)

1.1   Introduction

A major impetus in accounting research over the past three decades has been the reform of traditional teaching practices in accounting education (May & Arevalo, 1983; Gouws & Terblanche, 1998; Howieson, 2003; Lundblad & Wilson, 2007). Accounting faculty worldwide are under pressure to develop critical thinking skills and improved communication skills in their students to meet the demands of accreditation criteria and for the profession to remain relevant (de Villiers, 2010; Ahlawat, Miller, & Shahid, 2012). Writing practices are part of the overarching term 'communication skills' incorporating reading, writing, listening and speaking (Kranacher, 2007). Writing practices are important to accountants in their professional careers. Hence it is essential that written practices form an integral part of the education of accounting students so as to prepare them for the profession (Corman, 1986; Hirsch Jr. & Collins, 1988; McIsaac & Sepe, 1996; Matherly & Burney, 2009). Research has shown that often writing practices developed in English courses are eroded as students are unable to transfer the practice learnt in the English classroom to an accounting context hence the importance of incorporating writing into the accounting curriculum (Stout, Sumutka, & Wygal, 1991; Lundblad & Wilson, 2007). Bringing writing practices into the accounting classroom further legitimises the use of writing and its importance in the accounting profession (Wygal & Stout, 1989).

The purpose of this case study was to explore Managerial Accounting and Finance III (MAF) students' experiences of learning in a Writing Intensive Tutorial (WIT) programme at the University of KwaZulu-Natal (UKZN). The purpose of MAF is to equip students with the basic managerial accounting and financial management tools required to meet the objectives and responsibilities of a financial manager within a business. This study set out to obtain an understanding of how a different pedagogical approach, writing-to-learn, impacts on MAF students' experiences of learning in an accounting course. A writing-to-learn approach is aimed at helping "student understanding of subject matter" (O'Connor & Ruchala, 1998, p. 94). With writing-to-learn, the emphasis is on the development of the writer rather than the final text itself. As a MAF lecturer of some years standing I have noticed that students do not

fully grasp fundamental MAF concepts and are unable to apply their knowledge to different contexts. This observation is confirmed by Koch and Kriel (2005, p. 633) who state that accounting students have "a less-than-complete knowledge and understanding of the concept, including a lack of understanding of what the concept means, and what the concept implies in terms of the Accounting procedure". This lack of understanding and application of concepts results in an inclination by students to rote learn questions and solutions for assessment as they do not grasp the 'big picture' (Hall & Tiggeman, 1995). Rote learning is not conducive to quality learning which involves learning and understanding the underlying concepts and principles of MAF. This rote learning approach is characterised by memorisation and reproduction of knowledge (Gow, Kember, & Cooper, 1994; Lucas, 2001; Flood & Wilson, 2008). Consequently, the students' academic performances are adversely affected when studying at postgraduate level, as basic concepts and principles which were taught at undergraduate level have not been fully comprehended (Mashishi & Rabin, 2000).

The preceding discussion justifies the legitimacy of the reform task in accounting education, which is to incorporate writing practices explicitly within the professional accounting curriculum. On a theoretical basis this implementation has been addressed via the Competency Framework, as reported by South African Institute of Chartered Accountants (SAICA) (SAICA, 2012b) (see later in this Chapter). This implementation is relevant to my research because of the importance of implementing practical writing application in accounting curriculums. To date, there is an evident lack of accounting education literature in South African when informal or formal writing assignments are introduced into an accounting classroom.

In this chapter I start by discussing the traditional misperception that accounting is predominately numerical. Thereafter I will provide a short description of the shifts in accounting which have impacted on the need to incorporate these changes in accounting education. I will also discuss the motivation and rationale for my study and the research design used. I then conclude the chapter by outlining the structure of the chapters to follow.

1.2 The myth of accounting as numbers

Many students embark on a career studying accounting under the fallacy that accounting means being good with numbers and having strong technical skills. The assumption is that they do not have to be good with words (Duff & Zidulka, 2008). The evolution of accounting

has resulted in a shift to a discipline with a pronounced emphasis on written communication skills. The ability to write with clarity is an extremely important skill (Gabriel & Hirsch, 1992; Catanach & Golen, 1997; Faris, Golen, & Lynch, 1999; Lillis & Turner, 2001; Ashbaugh, Johnstone, & Warfield, 2002; Firch, Campbell, Filling, & Lindsay, 2011; Ahlawat et al., 2012). Gouws and Terblanche (1998, p. 92) assert that "communication stands out as being crucial to the fulfilment of accounting responsibility". The traditional role of the accountant, as 'bean counter' or 'number cruncher' is no longer applicable (Saudagaran, 1996; Chiurri & Varaksina, 2006; Firch et al., 2011). There is a misperception among some sections of the public and students that the study of accounting is primarily about numbers, mathematics and techniques to be learnt (Lucas, 2001). These misperceptions about accounting cause "many students with so-called 'left brain' communication skills to shy away from the field" (Kranacher, 2007, p. 80). It is essential to dispel the stereotypical view that accounting and bookkeeping are synonymous.

The above misperception is evident in answers provided by students when asked for the reasons why they chose the Chartered Accountant (CA) option (Myburgh, 2005). On average 89% of respondents stated that their reason for choosing the CA route was because of their strong quantitative skills. Lack of mathematical or quantitative aptitude was a reason cited by a number of students as to why they may end up **not** qualifying as a CA. If students are selecting accounting as a career because they believe they will work primarily with numbers (Hirsch Jr. & Collins, 1988; McIsaac & Sepe, 1996; Bolt-Lee & Foster, 2000; De Lange, Jackling, & Gut, 2006; Kavanagh & Drennan, 2008; Firch et al., 2011) then "we [academics] must help students understand the importance of writing" (Faris et al., 1999, p. 16). Writing is a critical element of the accounting curriculum. Professional bodies may be able to help dispel the stereotypical view of an accountant during visits to secondary schools by drawing learners' attention to the fact that accounting is not just computational – bookkeeping/numbers (Howieson, 2003; Kavanagh & Drennan, 2008).

The international extant literature on accountants and communication is comprehensive (Hirsch Jr. & Collins, 1988; Wygal & Stout, 1989; Stout et al., 1991; Stout & Ruble, 1991; Scofield & Combes, 1993; Scofield, 1994; Baird, Zelin II, & Ruggle, 1998; Stout & DaCrema, 2004; Firch, Campbell, Lindsay, & Garner, 2010). The general consensus of the studies is that accounting students tend to exhibit fear of writing and fail to appreciate the importance of writing practices in the accounting profession (Scofield, 1994). When students

are completing an assessment, they "skip theory and go directly to the 'canned' formula or table needed to solve the problems" (Hall & Tiggeman, 1995, p. 13). Accountants generally have good technical skills but progress in their careers can be impeded because of an underestimation of the importance of communication skills (Gabriel & Hirsch, 1992; Stocks, Stoddard, & Waters, 1992; Gouws & Terblanche, 1998; Stowers & White, 1999). The role of the accountant has shifted from that limited to stewardship to one of providing information to a heterogeneous audience (Gouws, 1997) and they need to be effective writers and communicators presenting work in a professional manner.

In the United States (US) during the mid-80s there was debate regarding the importance of communication skills required by accounting professionals. Researchers were expressing concern regarding accountants' lack of communication skills and that undergraduate accounting programmes offered little to improve the writing practices of these future accountants (May & Arevalo, 1983). Rebele (1985, p. 48) observed that accounting students did not perceive written communication "as important to their future job as an accountant" and considered it of minor importance to their success in a career as an accountant. However, as stated by Harris (2010, p. 1), in the workplace accountants require "a far wider set of skills than the traditional bean counter". They also require higher-order skills such as critical thinking, problem-solving and analytical skills (Kavanagh & Drennan, 2008).

The perceived lack of communication skills of accounting graduates provided the impetus for major changes to the education of accounting students. An outcome of the discontent with accounting education in the US was the establishment of the Bedford Committee in 1986. The committee concluded that "accounting programs were not preparing students adequately for professional accounting careers in industry, government, or public practice" (Sundem, Williams, & Chironna, 1990, p. 49). The report contained two primary recommendations. The first recommendation was that, as accounting provides information for decision making, communication skills must form part of accounting education programmes, since a shortcoming traditionally attributed to accountants is "their inability to take accounting information further than financial and other statements" (Gouws & Terblanche, 1998, p. 92). The second recommendation was that greater emphasis needed to be placed on accounting students learning how to learn.

The Bedford Commission was followed up in early 1989 with the Big 8 White Paper (White Paper) which endorsed many of the Bedford Commission's findings. The White Paper further highlighted the skills and knowledge required for a successful accounting career. The skills identified were communication skills, intellectual skills and interpersonal skills (Sundem et al., 1990). The Bedford Commission and the White Paper culminated in the formation in August 1989 of the Accounting Education Change Commission (AECC). The challenge of the AECC was to reform the traditional approaches to teaching accounting. The recommendations were in some measure a response to the "exponential advances in information technology revolutionizing (and threatening) traditional accounting practices" (Sundem, 1999, p. 1).

By the beginning of the 1980s due to the rate of change in business and business regulation it was becoming physically impossible for accounting students to learn the complete body of accounting knowledge (Howieson, 2003). As Lundblad and Wilson (2007, p. 23) aptly observed "Once it was sufficient for accounting majors to memorize a limited number of standards and learn how to 'crunch the numbers'. Alas, this halcyon era ended decades ago". The reality is that the technically knowledgeable accountant will be unsuccessful in the workplace if he or she is unable to communicate relevant information to others (Bolt-Lee & Foster, 2000). Communication and analytical skills and technical knowledge are intertwined and are critical elements for success in the accounting profession (Corman, 1986; Hirsch Jr. & Collins, 1988; McIsaac & Sepe, 1996).

Incorporating the recommendations of the AECC signalled a shift from teaching a body of knowledge to teaching a process. Now, accounting students need to develop a strong conceptual base to prepare them for the rapidly changing landscape of statutory regulations and international harmonisation of accounting standards. They also need to become active learners, developing critical thinking skills and a willingness to undertake life-long learning. These are the attributes, based on a sound conceptual foundation, which will prepare professional accountants for the rapidly changing regulatory environment and the increased importance of international accounting standards (Firch et al., 2011; Wilson, 2011).

1.3   Contemporary thinking about accounting

A further impetus for change to the core function of an accountant was the advent of the digital age with rapid developments in information technology (IT) which reduced the cost

and constraints of providing information (Kavanagh & Drennan, 2008). The traditional accounting/bookkeeping tasks are easily automated relieving the accountant of performing mechanical tasks as a computer is able to perform these task more accurately and quickly (Reinstein & Trebby, 1997). The reduced cost and speed of providing information in conjunction with increased competition due to globalisation has changed the stereotype of an accountant from a number-cruncher to that of "administrator, supervisor, consultant, and advisor" (Bolt-Lee & Foster, 2000, p. 41). These roles require good communication skills essential for survival in the business environment. Accounting graduates need to be equipped with skills to work in this dynamic environment (Mohamed & Lashine, 2003). However they still need to understand the underlying concepts and how to perform the accounting functions.

An additional motivation for change emanates from the implementation of the King Report on Corporate Governance in South Africa (King Committee on Corporate Goverance, 2009) (Sarbanes-Oxley Act of 2002 (2002) – US; Committee on the Financial Aspects of Corporate Governance (1992) (Cadbury Report) – United Kingdom (UK)) and adherence to International Financial Reporting Standards (IFRS). IFRS now constitutes South African Statements of Generally Accepted Accounting Practice (SA GAAP). This keeps South Africa on par with international developments (Stainbank, Oakes, & Razak, 2010). The effect of these developments is a shift towards evaluating and documenting compliance which is more text preparation and review orientated than computation orientated, which was the role traditionally associated with accountants (Firch et al., 2011).

To address the challenges presented by the rapidly changing global environment which demands a broader set of skills than that traditionally associated with accountants – technical accounting expertise – it is imperative that accounting education incorporate the required skills, knowledge and attributes for the profession to remain relevant (de Villiers, 2010; Ahlawat et al., 2012). Accounting programmes need to prepare students for their professional careers. In the early 2000's SAICA (SAICA, 2011) formulated a strategy to develop a competency framework for entry-level Chartered Accountants (SA) (CA(SA)). A competency framework is defined as "a high-level description of the competencies that an accounting professional should possess on entering the profession … enabling him or her to perform a work role to a defined standard" (Barac, 2009, p. 20). The final product is the "Competency Framework Detailed Guidance for Academic Programmes Competencies of a CA(SA) at the point of the Part I examination (assessment of core technical knowledge)"

(South African Institute of Chartered Accountants, 2011). The competency framework informs the knowledge, skills and attributes required by a CA(SA). The competency framework will be implemented from the 2013 Qualifying Examination Part I (QE I). Hence the required competencies should already have been integrated into universities accounting teaching programmes[1]. The framework is in compliance with the requirements of the International Federation of Accountants' (IFAC) *International Education Standards for Professional Accountants* (IFAC, 2005) and is "closely aligned with the graduate attributes that other professional bodies and employers require internationally" (Hesketh, 2011, p. 3). The international bodies include among others the Australian Society of Certified Public Accountants, the New Zealand Society of Chartered Accountants (Competency-based standards for professional accountants in Australia and New Zealand), the Canadian Institute of Chartered Accountants (The Canadian competency map), the American Institute of Certified Public Accountants (Academic preparation to become a certified public accountant) and the Association of Chartered Certified Accountants (ACCA functional map: competency frameworks and membership competencies – UK) (Prinsloo, 2004; Barac, 2009).

Among the required professional skills is competence in communicating effectively and efficiently. The latest revision of the competency framework states the following with regard to communication skills:

> Communication skills are critically important and much emphasis is placed on the assessment of these communication skills in the QE I. It is important therefore, for providers of the academic programme to appropriately develop and assess these communication skills throughout the academic programme. South African Institute of Chartered Accountants (2012b, p. 28).

The ability to communicate information in an effective and coherent manner has been recognised by professional accounting bodies worldwide. The International Federation of Accountants (2005, p. 62) highlights the need to "present, discuss, report and defend views effectively through formal, informal, written and spoken communication."

---

[1] If the students from this study are successful in their studies in 2012, they will be part of the first cohort to write the 'new' QE I in 2013.

1.4 'New' assessment requirements

In South Africa, notwithstanding the importance of writing practices for accountants and the requirements of the competency framework, education literature on the development of writing practices for accounting students is sparse. This is despite the fact that a major portion of the SAICA QE I requires discursive answers. A perusal of the QE I examination papers for the past five years reveals that more than half of the examination paper consists of discussion-based questions (as opposed to calculations). This was introduced because even though SAICA considered students to be technically adequately trained to prepare financial statements, the students were not equipped with the language and communication skills necessary to produce professional reports and written documentation (Bezuidenhout, 2008). Examiners' comments from the 2012 QE I emphasise this point:

> It is important that candidates bear in mind that written answers are a large component of the Qualifying Examination, because written communication is a key competency required in the workplace. Candidates should learn to answer discursive questions properly;
> Candidates did not perform as well as expected in Paper 3 Question 2, as they showed a lack of ability to answer discursive questions; and
> Candidates fared better in questions requiring calculations than in discursive questions (SAICA, 2012d).

Concurring with the comments articulated by SAICA, Andrews and Sigband (1984, p. 20) remarked that "these 'new' accountants have excellent technical preparation. However, they are unable to communicate the results of their technical procedures in a clear and concise manner".

This discursive type of questioning is not unique to the South African qualifying examination. The American Certified Public Accountant (CPA) examination also includes assessment of written communication skills in accordance with the AECC pronouncements (Ahlawat et al., 2012). The CPA examination explicitly tests students' writing practices (Firch et al., 2011; Krom & Williams, 2012) and "written communication skills [are] significant components of the new CPA exam, accounting students must practice those skills to pass" (Firch et al., 2010, p. 63). The fact that communication skills are important to

accounting students is beyond doubt. The important issue is how instruction in these skills can be most efficiently and effectively integrated into accounting programmes.

1.5   Establish the motivation for writing

A challenge to faculty is how to move students from thinking about accounting as a collection of facts to be memorised towards a deeper understanding of accounting concepts. One approach to achieving this in accounting disciplines is writing-to-learn – "using writing to improve student understanding of content, concepts and … method" (Reynolds, Thaiss, Katkin, & Thompson Jr, 2012, p. 17). Despite research showing that informal student writing or writing-to-learn is an effective pedagogy to improve both technical accounting and communication skills of accounting students (Wygal & Stout, 1989; Stout et al., 1991; Scofield & Combes, 1993; Almer, Jones, & Moeckel, 1998; Baird et al., 1998; English, Bonanno, Ihnatko, Webb, & Jones, 1999; Woods McElroy & Coman, 2002), the praxis of writing-to-learn is not widely implemented in accounting education. Informal writing could be used as a precursor to formal writing and the implementation of informal writing assignments may well have synergies in improving formal writing (Scofield, 1994). With writing-to-learn the student is generally writing for him- or herself (Stout et al., 1991).

The typical accounting curriculum does not provide students with opportunities to engage in informal writing (Scofield, 1994) as the focus is usually on formal writing for an external audience. Furthermore faculty are often unwilling to introduce writing into the curriculum despite the importance of written communication to accountants because teaching it is difficult and time consuming (Wygal & Stout, 1989; Baird et al., 1998; Lundblad & Wilson, 2007). This is the case even though informal writing "neither requires expertise on their [faculty] part nor commandeers excessive time from accounting instruction" (Stout & DaCrema, 2004, p. 291). Notwithstanding the importance of incorporating writing into accounting programmes, many accounting faculty are disinclined to incorporate writing practices into the accounting curriculum.

1.6   Qualifying as a Chartered Accountant

Currently, there are 15 SAICA accredited universities in South Africa, of which the University of KwaZulu-Natal (UKZN) is one (SAICA, 2012c). In order for universities to train students as prospective chartered accountants, it is mandatory for universities to obtain accreditation from SAICA for their undergraduate and graduate programmes. The syllabi of

the accounting programmes are by implication also accredited by SAICA (van der Schyf, 2008).

To qualify as a CA(SA), students are required to complete an undergraduate degree and then a Certificate in the Theory of Accounting (CTA) at a SAICA accredited university. The major subjects are Accounting, Auditing, Taxation and Financial Management. On completion of the CTA, the students must enter into a 3-year learnership with a Registered Training Office for the audit specialisation of an Approved Training Organisation to specialise in Financial Management. During the learnership students are required to complete Part I Qualifying Examination (QE I) and Part II Qualifying Examination (QE II) with either an Audit (Professional Practice examination) or Financial Management specialisation. Once all of these requirements have been met, only then are candidates able to use the designation CA(SA) (SAICA, 2012a).

1.7   Shortage of accounting professionals

In order to develop and sustain economic growth, it is imperative to increase the number of accounting professionals. The current shortage of 22 030 qualified accountants (5 400 CAs and 16 630 accounting technicians) needs to be filled (Mulder, 2010). Khuzwayo (2010, p. 1) reported that "severe shortages exist among financial management, accounting and auditing skills, with 77 percent of companies reporting difficulty recruiting chartered accountants (CAs) and 80 percent of companies reporting problems retaining financial skills". The Landelahani Recruitment Group's Financial Services Survey (2010), reported that "between 1999 and 2009 the total number of university enrolments in accounting was 504 068, against 60 114 degreed graduates over the same period – an 11.9% pass rate" (Landelahni Recruitment Group, 2010, p. 8).

1.8   Status of accounting education research – locally and internationally

Research in the field of accounting education internationally does not enjoy the same status as research into technical accounting issues. Accounting education tends to be considered by many in the academy and publishers of accounting journals as being of lesser importance than research in the discipline of accounting. According to Ravenscroft, Rebele, St Pierre, and Wilson (2008, p. 180), "Research (and publications) in the field of accounting education does not earn the same recognition as research (and publications) which focus on say, accounting regulation or other technical matters".

10

In South Africa, there are only two accounting research journals, the *South African Journal of Accounting Research (SAJAR)*, formerly known as *de Ratione,* and *Meditari Accountancy Research* (van der Schyf, 2008). These journals were launched in the recent past – *SAJAR/de Ratione* in 1987 and *Meditari* in 1993 (van der Schyf, 2008). The journals are primarily concerned with technical issues. A review of the articles published from 2005 to the beginning of 2012 confirms this point. For *SAJAR*, 47 articles have been published. By far the majority of these relate to technical matters in accounting. Of the articles published, only ten have an educational perspective. These articles cover topics such as what should be included/is lacking in accounting programmes and factors affecting success in accounting programmes.

An analysis of the articles published in *Meditari Accountancy Research*, exhibits a similar pattern. Since 2005, 112 articles have been published. Again the focus is almost exclusively on technical issues, with articles with an educational perspective being the exception. There are a limited number of articles related to accounting education and these articles investigate what topics should be taught in a CA programme – research into the content of the tax topics [see Joubert, Coetzee, and Oberholzer (2009)] and factors contributing to success/failure of accounting students [see Sadler and Erasmus (2005)]. Articles in the past five years with an educational perspective were: *Teaching styles versus learning styles in the Accounting Sciences in the United Kingdom and South Africa: a comparative analysis* (Visser, McChlery, & Vreken, 2006), *The incorporation of soft skills into accounting curricula: preparing graduates for their uncertain futures* (de Villiers, 2010) and *The readability of Managerial Accounting and Financial Management textbooks* (Bargate, 2012).

The above analysis illustrates the paucity of accounting education literature in South Africa in general and the absence of research into written communication in particular. It also reflects the lack of status accorded to research in accounting education. In accordance with the emphasis on communication skills in the competency framework and the lack of research in the area of writing-to-learn in South African accounting education research, in depth empirical research in this area is critical.

Accounting education researchers face a number of challenges. There is no reason why accounting education research should not be afforded a status equal to that of mainstream research. The rigour required in education research is comparable to that required in

mainstream research. Accounting education research may even be more difficult than mainstream research as it is "undertaken without the benefit of a dominant paradigm" (Ravenscroft et al., 2008, p. 183). Drawing on education literature in other professional disciplines does not suffice for the lack of accounting education research. The pedagogies and epistemologies of each discipline are specific to that discipline and not necessarily pertinent to other disciplines hence the importance of education research which is "within the disciplinary context of accounting" (Ravenscroft et al., 2008, p. 183). Engaging in accounting education research facilitates accounting faculty becoming reflective practitioners.

1.9   Rationale and motivation for the study

The study described here was undertaken in MAF, a third-year annual subject for Bachelor of Commerce (B. Comm.). The term 'subject' is used to indicate the individual annual or semester units making up an undergraduate degree (Cope & Staehr, 2005, p. 182). This is the students' first course in MAF and it is important in developing students' understanding and discipline specific knowledge of the subject. For students majoring in accounting, MAF is a compulsory subject for the chartered accountancy route and is also part of a general accounting degree.

Having many years of lecturing experience and in the past seven years specifically as an MAF lecturer at UKZN, I have noticed there is a mismatch between how we are teaching and what students are learning. This disparity is evidenced by the low pass rates in MAF (2010: 43%; 2009: 62%; 2008: 53%) (Summary of Results, 2010). These below par pass rates indicated to me that the intended learning outcomes for MAF were not occurring at an appropriate level and provided the impetus for this study. In this event I initiated a Writing Intensive Tutorial (WIT) Programme intervention. In writing intensive courses, a variety of writing assignments are designed to deepen student understanding of subject concepts (Ahlawat et al., 2012). In the WIT programme, specifically constructed writing interventions were used to scaffold MAF learning and to actively involve students in the learning process. This case study sets out to obtain an understanding of how students experienced learning using writing-to-learn pedagogies in MAF. The study was informed by a writing-to-learn approach, which is informal writing or writing for self.

I have noticed that many students experience difficulty with MAF questions that require discursive answers. Students enrol in accounting programmes under the misguided

assumption that accounting courses are predominately calculation based. This leads to discomfort with written discourse which impacts upon their studies, as they do not fully grasp the underlying disciplinary concepts. According to Nakonechny (2007, p. 10) "With only surface structure disciplinary knowledge available, students are often prevented from entering into the discipline's discourse and engaging in conceptual learning". Associated with this Sharma (1997, p. 128) states that "in terms of competencies needed to become a successful professional accountant, fostering a deep approach to learning is critical". Students often do not hold a coherent picture of the subject hence there is a tendency to decontextualise learning. There is an inclination to rote learn as "knowledge [is] associated with isolated aspects of the content for reproduction in assessment situations" (Cope & Staehr, 2005, p. 182) rather than with an understanding of the underlying concepts. The opinions of the above authors are indeed pertinent to the current study. I have observed that students tend to rote learn from past test and examination questions under the misapprehension that current assessment will mirror past assessment practices.

Students' prior learning experiences may have an influence on their approach to learning (Cope & Staehr, 2005). Learning by revising past test and examination papers may have been reinforced by their teachers during their secondary education. This predominately surface approach to learning is at the expense of understanding the underlying principles and concepts of the course material. A surface approach to learning is characterised by memorisation and reproduction of knowledge which is not conducive to quality learning. Prior research indicates that accounting students tend to adopt a surface approach to learning (Gow et al., 1994; Lucas, 2001; Byrne, Flood, & Willis, 2002). Consequently, students' academic performance is often adversely affected when they study at postgraduate/honours level because basic concepts and principles which were taught at undergraduate level have not been fully comprehended (Mashishi & Rabin, 2000; Adler, Whiting, & Wynn-Williams, 2004).

A problem which is not necessarily insurmountable for both faculty and students is how to incorporate even more essential material into an already content-filled course. There is a large body of technical knowledge, prescribed by an external professional examining body, requiring faculty to stay on a rigid schedule to cover the prescribed curriculum. The content must be mastered by students from a myriad of diverse backgrounds and lived experiences.

Additionally there needs to be a balance between theoretical knowledge taught and the application of that knowledge to practical situations. As an accounting educator teaching a received curriculum there is no leeway for me to simply omit topics at the expense of incorporating a writing intervention. Consequently it is imperative that a writing intervention is incorporated into an accounting programme without adding unduly to faculty and students' already heavy burden (Koch & Kriel, 2005). The addition of carefully constructed writing assignments built into the accounting programme (Cunningham, 1991) can help students learn both course content and develop communication skills.

The extant literature on writing-to-learn pedagogy in South African accounting education literature is sparse. The motivation for this research stems from the paucity of qualitative accounting education literature (De Lange & Mavondo, 2004; Lucas & Mladenovic, 2004) and the need for a deeper understanding of using writing as a method of learning. Further, Lucas (2000, p. 482) points out that "missing from existing research is a sense of how students *experience* their learning of accounting" [italics in original]. The findings of this study will contribute to the body of accounting education research literature in South Africa, which it can be argued is scant. This study will also make a contribution to gaining insights into how MAF students experience learning in a WIT programme. The study utilised Interactive Qualitative Analysis (IQA), a research design not commonly used in writing intensive research in particular and accounting research in general therefore this will be the first study of this nature using this methodology. An awareness of the nature of students' experiences may provide a new way of viewing the curriculum and informing changes to it thus enhancing students' experiences of learning MAF and possibly other accounting subjects.

1.10 The nature of the Writing Intensive Tutorial Programme

The Writing Intensive Tutorial Programme (WIT Programme) as developed and implemented is based on the approach of using informal, exploratory writing known as *writing-to-learn* (O'Connor & Ruchala, 1998). In the past seven years as an MAF educator I have constantly developed and refined the tutorial programme that is offered to my students. Informal writing is "geared towards the learning of concepts, critical thinking, synthesis and reformulation of ideas, and problem solving rather than grammatical correctness" (Baird et al., 1998, p. 261). Informal writing is low stakes, ungraded or a small proportion of the overall mark and only a first or second draft. It can be used within an accounting setting to introduce writing in a

nonthreatening manner and overcome student inertia regarding writing (Stout & Ruble, 1991). Informal writing is a process used to foster both accounting and communication skills. By contrast, formal writing is high stakes, graded and subject to a number of revisions.

Writing-to-learn (Emig, 1977) articulates the principle that students use writing as a mode of learning as the act of writing is a cognitive activity which can facilitate knowledge acquisition. Writing-to-learn as a pedagogy incorporates different types of informal writing assignments *inter alia* in-class writing, nonstop freewrites, memos and letters to colleagues and learning journals (Wygal & Stout, 1989; Stout et al., 1991; Stocks et al., 1992; Catanach & Rhoades, 1997; O'Connor & Ruchala, 1998; Bean, 2001). Guided-journal tasks or freewrites can be used at the beginning of the tutorial to probe the students' understanding of concepts already taught, during the tutorial to ask a question and at the end of the tutorial to sum up work covered in the tutorial (Bean, 2001). Students can use freewrites to explore their understanding/misunderstanding of concepts in "writing without fear of being graded" (Wygal & Stout, 1989, p. 247). It also encourages students to become involved in the writing process without worrying about having the 'right' answer or polish and style. In addition, freewrites can assist faculty to discover and address specific problem areas.

Learning journals (Wygal & Stout, 1989; Scofield, 1994) is another informal writing technique that was used. Journal writing covers anything from open-ended journal writing, where students are "free to write about the course in a number of ways" (Bean, 2001, p. 106), to responding to focused questions. Focused questions require students to discuss, describe, define or explain concepts taught in class and encourage correct accounting discourse. Open-ended exploratory questions require students to consider what they have learnt during a lecture/tutorial and what questions they might still have regarding the material or their own strengths and weaknesses (Wygal & Stout, 1989). For the learning journals to be beneficial, it was important that I collected, read and responded to the students' entries.

The WIT programme ran for 18 tutorial weeks and incorporated topics from both the Management Accounting and Financial Management sections of MAF. It is not possible to expect a notable improvement in student writing and learning over a limited period of time, such as a term or a semester (Wygal & Stout, 1989; Stout et al., 1991; O'Connor & Ruchala, 1998). The reality is writing "skills need repetition in order to be internalized. Consistent practice is required" (Hirsch Jr. & Collins, 1988, p. 17) and "major skills development should

not be expected in a single course or over a semester" (Stout et al., 1991, p. 139). To overcome the limitations inherent in short-term intervention, Morgan (1997) suggested that students build up a personal portfolio of allocated assignments over the period of their university studies. These assignments would then be tailored to the level of study. In a study of science students, Rivard (1994) agreed that a brief intervention of writing-to-learn strategies may not produce the expected results, as students need time to adapt to these strategies. In addition, there is disagreement in the accounting literature on how to measure changes in the students' writing abilities over the duration of one semester (Mohrweis, 1991; Stout et al., 1991; Baird et al., 1998; Ng, Lloyd, Kober, & Robinson, 1999). However it is important that accounting faculty "share results of attempts (both successes and failures) to implement specific [writing] techniques and strategies" (Wygal & Stout, 1989, p. 127).

1.11   Statement of the research problem

This study investigated the following research questions:

1. What are MAF students' experiences of learning in a Writing Intensive Tutorial Programme?

2. Why do MAF students experience learning in the Writing Intensive Tutorial Programme in the way they do?

This research is located in the body of literature that investigates writing-to-learn as a method of learning. This study explored the ways in which students' experienced learning MAF in the context of the WIT programme. The intention was not to measure learning quantitatively (as represented by a pass in MAF) but rather to provide a rich contextualised description of students' experiences of learning, using writing-to-learn, in a programme such as MAF, and thereby contribute to a holistic understanding of students' learning.

1.12   Research design

1.12.1 Interactive Qualitative Analysis (IQA)

Interactive Qualitative Analysis (Northcutt & McCoy, 2004) is a method of conducting qualitative research grounded in systems theory. The IQA process is consistent with the social constructivist approach to data collection and analysis. In this approach, participants are actively engaged in collecting and analysing the data. IQA seeks to minimise the power relations and biases traditionally associated with qualitative research. The outcome of the IQA process is a Systems Influence Diagram (SID) which is "a visual representation of a

phenomenon prepared according to rigorous and replicable rules for the purpose of achieving complexity, simplicity, comprehensiveness, and interpretability" (Northcutt & McCoy, 2004, p. 41). In this study I created a visual representation of MAF students' experiences of learning in a WIT programme. The SID is validated with additional data sources such as reflective journals, observations and in-depth individual interviews. In Chapter Four a detailed description of IQA is presented.

1.12.2 Research paradigm

The research paradigm which informs this study is social constructivism as it coheres with the principles of IQA. Consistent with IQA, the goal of social constructivism research is to rely on the views expressed by the participants in a natural setting. The participants construct their own meaning of reality from their experiences of engaging with the phenomenon in context. This variety of meanings provides the researcher with a complexity of views. As Creswell (2009, p. 9) states "The basic generation of meaning is always social, arising in and out of interaction with a human community". Social constructivism resonates with my world view as I believe that collectively we can achieve more than individually.

1.12.3 Case study

The strategy of inquiry used was a case study. I selected a case study strategy as case studies are a suitable vehicle for an in-depth exploration of the phenomenon under investigation in a real-life context over a limited period of time. I investigated and sought to understand MAF students' experiences of learning in an 18 week writing intensive tutorial programme. The focus of my study, the WIT programme, was one unit of analysis, it being suitably "singular and distinct" (Rule & John, 2011, p. 3).

1.12.4 Participants

All students registered for MAF in 2011 were invited to participate in this study. From the students who expressed an interest in participating in the study, I selected a purposive sample of 18 participants. Purposive sampling does not "represent the wider population; it is deliberately and unashamedly selective and biased" (Cohen, Manion, & Morrison, 2007, p. 115). I selected the sample which in my opinion was characteristic of the population of MAF students in terms of gender, race and academic ability. The number of participants selected was in accordance with the group size recommended by Brenner and Nichols (2009) who suggest a maximum of 20 participants per group for writing intensive programmes.

1.12.5 Ethical considerations

Participation in this research study was voluntary. The participants were free to withdraw at any stage of the study without adverse consequences or violation of their rights. In accordance with the University's ethics policies, the required permission was obtained prior to conducting the research. The ethical issues are considered and discussed in more detail in Chapter Four. In order to ensure confidentiality and anonymity, pseudonyms were used for the participants.

1.13   Organisation of the study

This chapter covers the background to the study, rationale, aims and the research questions in relation to the research methodology. The remainder of the study is organised as follows. Chapter Two discusses the literature on writing-to-learn in accounting programmes, approaches to learning of accounting students and learning journals. Chapter Three creates the foundation for the development of the conceptual framework for this case study. Chapter Four focuses on the research methodology and a situated description of the WIT programme. Chapter Five contains a description of IQA and the development of affinities and a mindmap of the system. Chapter Six contains a situated description of the affinities and the relationships between the affinities pertaining to students' experiences of learning in the WIT programme. Chapter Seven links the findings of the study to the literature. Chapter Eight, the final chapter, discusses the implications of the findings for pedagogical development, limitations of the study and future directions for research using writing-to-learn in accounting education.

CHAPTER TWO

Literature Review

Being part of the WIT programme has been a great blessing in my life as it has taught me to work extra hard and extra smart (Duncan, WIT Programme, 2011)

2.1   Introduction

The previous chapter provided an introduction to this study on MAF students' experience of writing as a method of supporting learning. The purpose of this literature review is to create a context for the research in terms of writing-to-learn, approaches to learning and the use of reflective journals with specific reference to accounting students.

2.2   Review of accounting education literature about writing-to-learn

The literature on writing-to-learn programmes is extensive, so this review is of necessity, limited to the accounting domain. Although a rigorous effort was made to cover the literature on writing-to-learn from as wide a range as possible, due to the absence of accounting writing-to-learn research in South Africa, the literature for this study was informed by international studies. The majority of the research on writing-to-learn in accounting education has been undertaken in the United States and has covered a range of accounting subjects and years of study. A far smaller number of studies have been reported from Australasia. One needs to be cognisant of the fact that student attributes may differ between those in South Africa and in other countries.

The current study revives the writing-to-learn debate and places it in a South African context where there is a dearth of accounting education research into writing as a method of learning. Accounting education research into writing has declined because writing programmes are "comprehensive, integrative, and resource intensive" and accordingly "not enjoying wide-spread use" (Stout & DaCrema, 2004, p. 313). Writing-to-learn as a pedagogy gained prominence in the international accounting education literature from the late 1980's onwards (Wygal & Stout, 1989; Stout et al., 1991; Catanach & Rhoades, 1997; Almer et al., 1998; Baird et al., 1998) and from then to the present will delineate the research reviewed in this study.

2.3   What is writing-to-learn?

Writing as a mode of learning is grounded in the seminal work of Emig (1977). With writing-to-learn the knowledge domain is the primary focus of learning (English et al., 1999). When students engage with writing, it helps their understanding of concepts at a deeper cognitive level and can improve writing practices (McIsaac & Sepe, 1996; Riordan, Riordan, & Sullivan, 2000). The resurgence of the writing-to-learn research in the early 1990's was partially in response to the AECC and the American Institute of Certified Public Accountants (AICPA) call "for students to be more active participants in the learning process and for instructors to utilize methods which increase student interaction" (Almer et al., 1998, p. 458). One way of engaging students as active learners is the incorporation of writing practices into the accounting curriculum. Using writing-to-learn pedagogies, writing can be incorporated within the course structure with minimal loss of valuable teaching time (Kalman & Kalman, 1998). Writing helps students grasp difficult concepts and a concomitant benefit of writing is an improvement in writing practices essential in the their professional careers (Reinstein & Houston, 2004). There are many different writing-to-learn pedagogies however, the main three are freewrites, one-minute papers and journal writing and each will be explored in further detail.

Freewrites, are a writing-to-learn strategy to stimulate creative thought (Bonk & Smith, 1998). Freewrites are thinking aloud on paper without being concerned about spelling, organisation or grammar (Bean, 2001, p. 102). Students write everything they know about a topic for a limited period of time, usually three to five minutes, on a faculty directed question. During the allotted time, students cannot lift their pens from the paper or pause to reflect – they write the first ideas that come into their head on the given topic (Bonk & Smith, 1998). Freewrites can be used to overcome the initial inertia in student writing and provide faculty with a means of assessing students' understanding of concepts. They have been used extensively in accounting studies (Wygal & Stout, 1989; Stout et al., 1991; Baird et al., 1998; Woods McElroy & Coman, 2002; Braun & Simpson, 2004).

A further writing-to-learn pedagogy is one-minute papers (Almer et al., 1998; Lucas, 2010) that is, informal but written communication (Bean, 2001, p. 47). As an instructional strategy they promote critical thought (Bonk & Smith, 1998), active involvement by students in learning and enhanced metacognition of subject matter (Matas, Ng, & Muurlink, 2011). At the end of class, students write brief, one-minute answers to questions such as "what is the

most significant point you learned in class today?" and/or "What is the main, unanswered question you leave class with today?" (Almer et al., 1998, p. 485) or variations of these questions (Bean, 2001; Divoll & Browning, 2010; Lucas, 2010; Stowe, 2010). The answers are then submitted to faculty for review. One minute papers provide faculty with information on areas in which students are confused, and can help faculty improve teaching (Divoll & Browning, 2010; Matas et al., 2011).

Journal writing as writing-to-learn pedagogy has been used in accounting to foster conceptual understanding (Hoff & Stout, 1989; Wygal & Stout, 1989; Cunningham, 1991; Day, Kaidonis, & Perrin, 2003; Howieson, 2004; Ballantine & McCourt Larres, 2007; Samkin & Francis, 2008). In the literature a number of terms are used synonymously to describe journals – learning journals, logs or diaries, reflective writing and dialectical notebook among others (Ballantine & McCourt Larres, 2007). In this study the term journal is used to encompass all forms of informal reflective writing. Journals are broadly defined as "a means of recording and reflecting on learning, thus improving the learning process" (Barclay, 1996, p. 30). Journal writing contributes to fostering a deeper approach to learning and learning to write in the discipline (Scofield, 1994; Kalman, Aullis, Shelley, & Godley, 2008).

Despite the benefits and necessity of incorporating writing into accounting programmes, the accounting faculty could possibly be reluctant to incorporate writing practices into what is perceived as an already full programme. This reluctance then begs the question: who should be responsible for teaching writing in accounting programmes?

2.4 Accounting and writing – who is responsible for teaching writing?

Often accounting faculty create a false dichotomy between teaching writing and teaching technical content. Some accounting faculty believe that teaching writing practices is the domain of language specialists as they feel they are not sufficiently qualified to teach writing (Gammill, 2006). They also contend that accounting courses are too full to include teaching writing (Corman, 1986; Stocks et al., 1992; Scofield & Combes, 1993; de Villiers, 2010). Some authors are of the view that accounting has its own discourse and methods of constructing and communicating knowledge and accounting faculty are immersed in the discipline and therefore should be equipped to teach writing. They suggest that, in order to overcome the problem of adding to an already full curriculum, a solution is that the teaching

and learning of writing can be incorporated into the learning of core content (Cunningham, 1991; Sin, Jones, & Petocz, 2007).

The view that faculty are not qualified to teach writing is disputed by a number of authors who recommend a team teaching approach between accounting and English/communications faculty (May & Arevalo, 1983; Riordan et al., 2000). Collaboration is taken further by McIsaac and Sepe (1996) who included accounting practitioners in the intervention. The practitioners emphasise the fact that in practice, accountants will do a sizeable amount of writing and discipline appropriate writing conventions are highlighted. There is disagreement with this approach as it is believed to perpetuate the misconception that accounting and communication are separate disciplines (Hirsch Jr. & Collins, 1988; Hoff & Stout, 1989).

The benefits of collaboration between accounting and English faculty are "that the accounting instructor [learns] to design varied assignments … to improve communication skills" and "the writing consultant [learns] about discourse conventions" (Hoff & Stout, 1989, p. 93). This type of partnership would overcome the concerns expressed by accounting faculty that they lack the skills required to grade composition, however it requires substantial resources and is costly (Hoff & Stout, 1989; Firch et al., 2010). Accounting faculty could learn the required skills from communications faculty and ultimately become self-sufficient.

To overcome the initial hurdle of accounting faculty teaching writing, it has been suggested that accounting faculty receive training from the English/communication department until they are self-sufficient in teaching writing practices (Hoff & Stout, 1989; Gabriel & Hirsch, 1992; Stocks et al., 1992). Accounting faculty must accept responsibility for making writing an integral part of accounting programmes. Having accounting faculty trained in communication methods is also more cost effective and provides validation for writing. Accounting faculty need to need learn these skills and integrate them into their programmes as they would with any new statutory regulations.

Written communication skills should be built into all levels of accounting programmes and not as stand-alone modules (de Villiers, 2010). Stand-alone modules are seen by students as taking time away from learning accounting and they would be less resistant to learning writing practices if they are integrated into the accounting programme (Sin et al., 2007). Having writing as a separate course implies that writing practices are not important in the

accounting profession, and writing done in a general business communication course, for example, cannot provide the appropriate depth of writing required within the accounting discipline (Hirsch Jr. & Collins, 1988; Morgan, 1997; Matherly & Burney, 2009; Firch et al., 2011). Writing should be taught as an integral part of accounting programmes because courses in business communications "are noncontent-orientated in many cases" (Hirsch Jr. & Collins, 1988, p. 28). Research has found that despite students obtaining high marks in writing practices courses developed by the English department, students are unable to transfer the skills learnt in those courses to their accounting courses (Stout et al., 1991; Lundblad & Wilson, 2007).

The magnitude of the core material in accounting programmes which must be covered necessitates an integrative approach to implementing writing initiatives into the core curriculum (May & Arevalo, 1983; Hirsch Jr. & Collins, 1988; Wygal & Stout, 1989; Mohrweis, 1991; Gabriel & Hirsch, 1992; O'Connor & Ruchala, 1998; Koch & Kriel, 2005). The heavy workload provides little time for the development of students' conceptual understanding – "even the better students … [have] little time to integrate their knowledge and improve their conceptual understanding" (Koch & Kriel, 2005, p. 633). As Wygal and Stout (1989, p. 246) argue, informal writing techniques can be used "by accounting faculty who do not have extensive formal training or experience using writing techniques … [and] without sacrifice to coverage of technical material". A further suggestion to overcome time and syllabus constraints is that topics are prioritised making students responsible for learning the 'less important' topics on their own. This frees up time for incorporating written assignments into the curriculum (Gabriel & Hirsch, 1992; Riordan et al., 2000).

2.5   The grading/assessment debate

A further reason provided by accounting faculty for not incorporating writing assignments is that the assignments create an additional grading burden. Faculty believe they are not qualified to grade writing (May & Arevalo, 1983; Stocks et al., 1992; Scofield & Combes, 1993; Catanach & Rhoades, 1997; Ng et al., 1999). Typically they do not have training in grading and providing constructive feedback on writing assignments.

Several studies have used two markers, one from the English/communication department to assess composition and one from accounting to assess technical content (Hirsch Jr. & Collins, 1988; Riordan et al., 2000; Ashbaugh et al., 2002; Lundblad & Wilson, 2007). A benefit of an

English/accounting faculty collaboration is "the English instructor's increased ability in the technical aspects …[and] the accounting instructor's increased abilities to evaluate English-related skills" (Hirsch Jr. & Collins, 1988, p. 23). This type of partnership would overcome the concerns expressed by accounting faculty that they lack the skills required to grade composition. They could learn the required skills from communications faculty and eventually become self-sufficient. Hoff and Stout (1989, p. 85) disagree with the previous authors as they argue that using two markers "suggests to students that the accounting instructor needs help in reviewing student writing". The perception is that accounting faculty either lack the requisite writing practice to grade written work and/or they do not perceive the importance of writing practice for practitioners.

Several studies have reported that grading writing, in addition to normal grading, has the possibility of adding considerably to faculty's already heavy grading burden (Gabriel & Hirsch, 1992; Riordan et al., 2000; Lundblad & Wilson, 2007; Chu & Libby, 2010). To overcome the additional grading burden, it has been suggested that writing is not graded (Hoff & Stout, 1989; Cunningham, 1991; Stout et al., 1991; Scofield, 1994; Hall & Tiggeman, 1995; Almer et al., 1998; Baird et al., 1998) or not all assignments need to be graded (Stocks et al., 1992). However, research suggests that accounting students are strategic learners (Flood & Wilson, 2008; Samkin & Francis, 2008) and grading the work provides an incentive for students to complete the assignments. If the work is ungraded students may expend less effort and complex cognition. If the writing is not graded "students tend to infer the importance placed on writing from its weight in the course grade" (Scofield & Combes, 1993, p. 73) consequently students perceive that writing is not important. Matherly and Burney (2009, p. 407) concur that "credit needs to be sufficient to entice student effort … [but] not so great that we as faculty need to devote significant attention to grading details". Work must be graded to signify the importance of writer-based prose and to provide motivation for students to complete the assignments (Scofield & Combes, 1993; Riordan et al., 2000).

To make grading more manageable, some authors suggest specifying parameters for assessments such as limiting the length of student essays (Corman, 1986; Catanach & Rhoades, 1997; Ng et al., 1999; Lundblad & Wilson, 2007; Krom & Williams, 2012). A limit on the length also trains students to write in a concise manner, a skill in its own right and important in business writing (Wygal & Stout, 1989; Matherly & Burney, 2009). Despite

limiting the length of the essay to 500 words, Ng et al. (1999, p. 55) commented that the "initiative was both costly and time-consuming due to the large class size [approximately 500 students]". A criterion-referenced checklist was used by English et al. (1999) as a means of reducing the subjectivity inherent in marking. After four years this was discontinued because markers needed extensive training in using the checklists and resource constraints did not permit the required training. Using a checklist against which to grade written reports was recommended by Scofield and Combes (1993). Similarly Ahlawat et al. (2012) and Matherly and Burney (2009) used a grading rubric which reduces subjectivity and achieves consistency. In agreement with English et al. (1999), Scofield and Combes (1993) noted that checklists standardised and streamlined grading. The limitation of using checklists to grade was that a new checklist needs to be developed heuristically for each assignment as students' problems may differ from assignment to assignment.

Some studies did not grade students' papers (Cunningham, 1991; Almer et al., 1998; Baird et al., 1998; Woods McElroy & Coman, 2002). Despite the papers not being graded, or even returned to the students (Woods McElroy & Coman, 2002) there was evidence to suggest that students benefitted from writing interventions. This finding reinforces the effectiveness of writing interventions although papers are not graded because "students will benefit from all the writing we make them do, no matter what" (Bean, 2001, p. vxii).

2.6   Evaluating the effectiveness of writing interventions

The writing-to-learn literature reveals that there is disagreement on whether and how to measure the effectiveness of writing interventions (Stout et al., 1991; Baird et al., 1998; Ng et al., 1999; Ashbaugh et al., 2002; Stout & DaCrema, 2004; Sin et al., 2007). The problem articulated is how to measure the effectiveness of writing initiatives over a period of time, for example a semester (Stout et al., 1991; Chu & Libby, 2010; de Villiers, 2010). Habits and behavioural change need to be developed over a period longer than a semester and faculty should not expect a dramatic improvement in students' writing and learning over a single semester as result of a writing intervention (Wygal & Stout, 1989).

The reason for not attempting to measure change is "because we believe the amount of improvement in communication skills that we are able to observe in a single semester is likely to be minimal" and "because measurements of communication skills improvements are very coarse" (O'Connor & Ruchala, 1998, p. 107). A sustained intervention which is an

integral part of the accounting curriculum is required to realise meaningful results. Consistent and continuous practice of writing is required for reinforcement of the skill to be internalised (Hirsch Jr. & Collins, 1988; Reinstein & Trebby, 1997; O'Connor & Ruchala, 1998; Ashbaugh et al., 2002; Woods McElroy & Coman, 2002; Lundblad & Wilson, 2007; Matherly & Burney, 2009; Firch et al., 2010). Because of the large amount of technical knowledge that has to be taught in accounting courses, no one course should be burdened with teaching writing practices. If each course has a small amount of writing this spreads the load and has the advantage of constant reinforcement (McIsaac & Sepe, 1996).

Writing assignments can improve students' writing practices and it is possible to empirically measure such improvements. Mohrweis (1991) adopted a pre-test/post-test design to measure improvements in writing in two studies. The first study used 25 multiple choice questions from the writing ability section of the General Management Admission Test (GMAT). He concluded that the GMAT scores provide an objective, external measurement but the scores failed to effectively measure the qualities of good business writing. In the second study he used a holistic scoring approach on a scale of 1 (poor quality) to 7 (excellent quality). With this measure, evaluators could assess written responses rather than multiple choice scores. However, this approach was still not ideal as "the score itself gives no meaningful diagnostic information beyond the comparative ranking it represents" (Mohrweis, 1991, p. 322). A pre-test/post-test design has also been utilised by other researchers (Ng et al., 1999; Riordan et al., 2000; Matherly & Burney, 2009).

In some studies, although empirical measures of change in students' writing were not used, faculty noted a steady improvement in student writing which added positively to the learning environment (May & Arevalo, 1983; Hirsch Jr. & Collins, 1988; Wygal & Stout, 1989). The writing assignments helped faculty identify areas where students were in need of assistance before commencing with final assessments and contributed positively to the learning environment. Generally it has been observed that writing assignments are most effective when they are fully integrated with learning in the discipline as they legitimise the use of writing in accounting and support the construction of discipline knowledge (Gottschalk & Hjortshoj, 2004; Cate & Dynan, 2010). In their study, Woods McElroy and Coman (2002), after a period of making one-minute papers compulsory, decided to make them optional. By far the majority of the students continued with the exercises despite the fact that they were optional. This contradicts the above assumptions that accounting students apply limited effort

if the writing is not graded and also overcomes concerns expressed by faculty regarding the marking burden. Woods McElroy and Coman (2002, p. 7) acknowledge that the students may have recognised the benefit of the one-minute papers or the students continued with them because they did not want the instructor to think poorly of them.

2.7   Evaluating the effectiveness of writing interventions on examination scores

Studies of the effect of writing-to-learn interventions on student grades have reported varied results. One-minute papers were used by Almer et al. (1998) where the results of students who had participated in the intervention were compared with those who did not participate in the intervention. Students' grades improved only on essay type (subjective) questions and with multiple-choice (objective) questions there was no difference between the two groups. They also compared the performance of students whose papers had been graded with those whose papers had not been graded. Interestingly, the ungraded group achieved better results than the graded group. This contradicts the assumption that accounting students are strategic learners and that all work must count for assessment. This also overcomes concerns expressed by faculty regarded the additional grading burden when using writing-to-learn assignments. The Almer et al. (1998) results suggest that papers should not be graded for maximum effect. Furthermore, the one-minute papers were beneficial to all students irrespective of academic ability, contradicting the results of Baird et al. (1998) and Sin et al. (2007). Baird et al. (1998) compared the test scores of students in three accounting courses who did complete one-minute papers with those who did not. For the students in the managerial accounting class there was a difference in performance and the top students performed 'poorly' after completing the written assignments. The authors questioned whether the overuse of papers could lead to student burnout but did not test this contention.

Stout et al. (1991) compared the examination scores of auditing and taxation students who completed freewrites with those who did not complete freewrites. For the auditing class there was no statistical effect between the mean examination scores of the two groups. For the taxation course, the difference was statistically significant for the midterm examination only. Consistent with the results of Almer et al. (1998) there was some positive benefit to students from the writing intervention. Braun and Simpson (2004) concurred and noted further that when students participate in a writing-to-learn activity that appeals to them, they will benefit. The learning style preferences of students need to be considered when designing writing assignments to ensure a variety of learning styles are catered for.

In contrast Cunningham (1991) used an alternative approach by comparing the examination scores of a writing group with a non-writing group. On average, the writing group outperformed the non-writing group especially in questions which covered more difficult material. The writing group "exhibited a more in-depth understanding of the material … than students in the more traditional classes" (1991, p. 322). The non-writing group tended to be "memorizers" and more interested in the "mechanics" and process of questions (1991, p. 322). The writing group focused on theory and implications when interpreting questions.

A novel way of incorporating written communication skills into the curriculum was used by Crumbley and Smith (2000) (taxation) and Krom and Williams (2012) (introductory financial and management accounting). Short stories, fables and fairy tales or poetry were used to help students understand concepts. In the stories, the accountants are the key characters or heroes and the stories "can provide students with a better understanding of the relationships among taxation, business and society" (Crumbley & Smith, 2000, p. 293). A notable conclusion of the Krom and Williams (2012, p. 8) study is that the "exercises seem to engage the students who may be only marginally interested in the subject matter, and are fun for most of the students".

The studies reviewed indicate mixed results and suggest that writing assignments should be content and context specific. The majority of the writing interventions described in the accounting education literature are developed within the context of a single course, for a limited period of time and in isolation from the accounting curriculum as a whole. For writing to be valued it must be integrated across the accounting curriculum and done on a regular basis as the benefits of writing-to-learn accrue with repetition (Woods McElroy & Coman, 2002). The caveat to integrating any writing initiative into an accounting programme is that "Class size dictates both assignment design and feedback" (Gabriel & Hirsch, 1992, p. 262). Despite the constraints it is imperative that faculty integrate writing practices into accounting programmes with a model of 'best fit' for the goals and resources available.

2.8   Learning journals

A deep approach to learning, developing accounting discourse and acquiring good communication skills is essential in accounting. A particular strategy that can be employed to encourage a deep approach to learning is getting students to write learning journals (Samkin & Francis, 2008) thereby developing an accounting discourse (Hoff & Stout, 1989) along

with crucial communication skills (Scofield, 1994). Journals have been used in many disciplines, ranging from geography (Haigh, 2001) to nursing (Hodges, 1996). In the discipline of accounting, literature on the use of learning journals is limited (Howieson, 2004; Samkin & Francis, 2008). Journal writing contributes to developing writing practices, promoting a deep approach to learning and providing a channel of communication between faculty and students enabling faculty to get to know their students better. For journals to be effective, writing should be done on a regular basis as a part of each class session and faculty should read and respond to them several times during a semester (Wygal & Stout, 1989). The use of journals also advances the view of students taking responsibility for their own learning (Ballantine & McCourt Larres, 2007; Matas et al., 2011). The accounting subjects where learning journals have been used cover a range of levels and subjects from a postgraduate theoretical financial accounting course (Howieson, 2004), to teaching critical accounting (Day et al., 2003) and undergraduate financial, management and cost accounting (Wygal & Stout, 1989).

It has been argued that grades do need to be assigned to all writing assignments in order for them to be accepted by students as an important path to learning, (Scofield, 1994; Haigh, 2001; Day et al., 2003; Howieson, 2004; Samkin & Francis, 2008). This would mean that faculty must regularly evaluate students' journals to authenticate the value of journal writing to students and to ensure compliance (Scofield, 1994). From the students' perspective for something to have merit it has to have a quantitative value and without assessment students are unlikely to complete the exercise, no matter how highly recommended (Howieson, 2004; Ballantine & McCourt Larres, 2007). Similarly in Matas et al. (2011) study accounting students were required to write reports, reflecting on their learning, which did not count towards assessment. A number of students never completed a single report and they complained that the reports were time-consuming and it was "'time wasted' as it does not contribute to their final marks" (2011, p. 33).

Learning journals are time-consuming from the perspective of both faculty and students. For the students the average time required to write in their journals varied between 90 minutes (Samkin & Francis, 2008) and 23 minutes per week per entry (Scofield, 1994). Many students questioned how it is possible to assess journals when much of what is written is subjective and is the student's own thoughts and feelings. They were disconcerted by the fact that there was no correct answer (Howieson, 2004) and this left them feeling confused and

concerned. Students need to be assured that there is no 'right' or 'wrong' answer but rather that the journal writing reflects their current understanding of a topic (Scofield, 1994). The benefits of reflective journals must be explained to students at the commencement of the exercise, as this contributes towards alleviating their negative perceptions of journals (Ballantine & McCourt Larres, 2007; Samkin & Francis, 2008).

From faculty's perspective, setting the exercises, marking the journals and providing on-going support to the students requires a substantial amount of time. Journals should be assessed on a regular basis to provide credibility to the writing otherwise students do not place sufficient value on the completion of the learning journal (Langer & Applebee, 1987; Cunningham, 1991; Kalliath & Coghlan, 2001; Ballantine & McCourt Larres, 2007). The marking of the journals can be a lengthy process – "reading 15 Gaia journals was quite simulating, reading 25 – 30 became a chore, and reading more than 40 close to purgatory" (Haigh, 2001, p. 173) and time consuming, it "took about half an hour on average per student per set of two or three weeks' worth of journals" (Howieson, 2004, p. 14).

In accordance with related prior discussion, several solutions to the marking burden have been suggested, one of which is to not grade the journals (Hoff & Stout, 1989; Wygal & Stout, 1989; Cunningham, 1991; Ballantine & McCourt Larres, 2007). By not assigning grades to journal writing "a useful communication channel is opened (between lecturer and student)" (Wygal & Stout, 1989, p. 248) and journals provide a non-threatening way to communicate (Hoff & Stout, 1989). When the written work is graded it tends to introduce bias and students perceive it as threatening and will "provide information they think the professor wants to hear" (Harwood & Cohen, 1999, p. 697). As strategic learners they correlate the marks on offer with the amount of effort that needs to be expended in order to achieve the best marks possible. If the journals are not assessed "then the reality is that students are highly unlikely to keep a journal" (Howieson, 2004, p. 32). This view is supported by Ballantine and McCourt Larres (2007, p. 175) who found that very little effort went into completing the journals and they "were completed very much as an 'after-thought'" primarily because grades were not allocated to them. Another alternative to alleviating the marking burden was to have a word limit; however, it was felt that this would constrain the students and inhibit free writing (Howieson, 2004).

Despite the aforementioned drawbacks it was found that overall, journal writing "can stimulate thinking, raise grades, lower the attrition rate, and get the material covered" (Cunningham, 1991, p. 325). Journals facilitated a deeper approach to learning concepts (Cunningham, 1991; Kalliath & Coghlan, 2001; Kalman et al., 2008; Samkin & Francis, 2008) and helped with revision (Howieson, 2004). Journal writing encourage critical reflection (Kalliath & Coghlan, 2001; Loo & Thorpe, 2002) and a by-product is improvement in students' formal writing (Cunningham, 1991; Scofield, 1994). From a writing perspective a journal "legitimizes the use of writing in accounting" and "overcomes [accounting] student misconceptions [about writing]" (Wygal & Stout, 1989, p. 251). Writing will then viewed by students as an integral part of the work of an accountant. This will contribute to overcoming the negative perceptions of accounting students towards writing and the concerns expressed by the profession regarding accounting students lack of communication skills (Andrews & Sigband, 1984; Corman, 1986; Scofield, 1994; Simons, Higgins, & Lowe, 1995; Bezuidenhout, 2008).

2.9   Approaches to learning

2.9.1   Deep, surface and strategic approaches to learning

Professional accounting courses offered by universities nationally and internationally are frequently aimed at preparing students for professional body examinations, South Africa being no exception. The desired objectives of the professional bodies are that students develop knowledge, skills and competencies to perform effectively in their professional careers (Byrne & Flood, 2004; Hall, Ramsay, & Raven, 2004; Leveson, 2004; SAICA, 2012b). This is consistent with a deep approach to learning. The concepts of deep and surface approaches to learning were first proposed by Marton and Säljö (1976) and have since become established concepts in educational research literature. Approaches to learning represent the way a student relates to a learning situation and is a combination of student-related variables such as prior learning experiences and interest, and lecturer-related variables such as teaching and assessment strategies (Byrne et al., 2002). As the approach is relational, students in the same class may perceive the learning situation differently and the same student may adopt a different approach for different subjects (Eley, 1992). Students' approaches to learning are characterised by three constructs: deep, surface and strategic approaches and these have now become criteria against which approaches to learning are measured. Deep approaches to learning are associated with understanding of material, surface

approaches to learning with memorisation and the strategic approach to learning with the intention to maximise academic performance.

Previous research has reported that accounting students tend to adopt a surface approach to learning (Booth, Luckett, & Mladenovic, 1999; Hall et al., 2004; Ballantine, Duff, & McCourt Larres, 2008) while other studies suggest the students' adoption of a strategic approach to learning (Flood & Wilson, 2008; Samkin & Francis, 2008). Differences in learning approaches between gender have also been investigated with no conclusive results (Auyeung & Sands, 1994; Elias, 2005; Lucas & Meyer, 2005), neither have interventions designed to foster a deep approach to learning produced consistent results (English, Luckett, & Mladenovic, 2004; Hall et al., 2004). Research has covered the spectrum of accounting students from first year (Byrne et al., 2002; Davidson, 2002) to fourth year (Mashishi & Rabin, 2000; Samkin & Francis, 2008) and comparisons between accounting students and students studying in other disciplines (Booth et al., 1999). The literature on accounting students approaches to learning offers insights into enhancing understanding of factors supporting quality teaching and achieving quality learning.

2.9.2   South African context

There are very few studies on approaches to learning by South African accounting students. Bezuidenhout (2008) notes that in order to encourage a deep approach to learning changes were made to assessment and teaching practices in Financial Accounting I. The author was of the opinion that prior to the changes being implemented the students were adopting a surface approach to learning. The approaches to learning were never measured qualitatively or quantitatively either before or after the changes. As a result of the changes to assessment and teaching practice, a perceptible shift in students approaches to learning from a surface approach to a deep approach was realised (2008, p. 33). In the only other South African study, Mashishi and Rabin (2000) concluded that the predominant approach to learning evidenced by Financial Accounting IV students was a surface approach. The authors noted that by their fourth year of study they would have expected the students to engage in independent enquiry and not rely on the lecturer to introduce important principles and concepts. Students cited a lack of time as one of the reasons for not preparing for lectures and consequently the adoption of a surface approach to learning. From these two studies it is not possible to arrive at a conception of learning approaches of South African accounting students. However the Mashishi and Rabin (2000) study does provide limited empirical

evidence of anecdotal concerns expressed by accounting lecturers that students primarily embrace a surface approach to learning accounting. It is evident that the South African literature on accounting students' approaches to learning is sparse and this is an area which warrants further research.

2.9.3   International studies

One of the earlier studies of approaches to learning by accounting students was conducted by Gow et al. (1994) at a university in Hong Kong. They reported a change in orientation over the course of the degree. From the first year through to the second year mean deep scores declined, and then rose slowly from second year to third year. However, the average deep scores at the end of the third year were below those attained at the beginning of first year. A similar trend was noted in a study by Cooper (2004) of Chinese students where deep scores declined in the first year then stabilised rather than recovered. Gow et al. (1994) attribute some of the shift in learning approaches to surface assessment demands (Lucas, 2001), high staff/student ratios (Leveson, 2004) and students studying in a second language. The learning approaches of accounting and finance students at an Australian university who had completed their second year of study was investigated by Sharma (1997). The conclusion reached was that the students' "learning approaches were not distinctively surface or deep … more in the grey area" (1997, p. 142). The surface approach to learning adopted by accounting students is in part attributable to the methods of assessment used in accounting (Lucas, 2001). Lucas proposes that assessment methods be revised "to address issues of preconceptions and relevance much more explicitly" (2001, p. 181).

A comparative study of the approaches to learning of Irish and US accounting students in an introductory accounting course was conducted by Byrne, Flood, and Willis (2009). Interestingly, students from both countries scored highest on the strategic scale. The course was intended to develop students' understanding of, and interest in accounting, however the results revealed that the students were not adopting a deep approach to study. For the US students their score was significantly different on the strategic scale compared to the deep and surface scales. With the Irish students no significant differences were found between deep and surface scores. When comparing the two cohorts, the US students had significantly higher scores for the strategic and deep approaches to learning whereas there was no significant difference between surface scores. A review of approaches to learning by

accounting students in various countries indicates that students are not adopting a deep approach to learning.

2.9.4   Professional examinations

The approaches to learning of students preparing for the qualifying examination of a professional accountancy body in Ireland were investigated by Flood and Wilson (2008). Results showed that a strategic approach to learning was favoured over the deep and surface approaches to learning. A New Zealand study by Samkin and Francis (2008) also reported that students studying for professional accounting examinations adopted a strategic approach to learning. One reason why accounting students adopt a surface strategy may be because the large volume of work prescribed by the professional bodies results in "syllabus boundness" (Flood & Wilson, 2008, p. 236). Syllabus boundness means that students are unlikely to read beyond what is assigned by their lecturers (Byrne et al., 2009). A criticism of accounting education is that the examination syllabus is extensive, technically orientated and students are disinclined to go beyond its boundaries. The importance placed on passing the external final qualifying written examination results in the students demanding to be 'coached' on topics required in the final examination, and lecturers 'teaching to the test/exam' at the expense of developing critical and reflective thinking (Botha, 2001).

The approaches to learning of students studying for the Chartered Institute of Management Accountants (CIMA) professional body examinations were investigated by Hassall and Joyce (2001). The CIMA examinations consist of four stages and the vast majority of students are studying on a part-time basis. In contrast to the Flood and Wilson (2008) and the Samkin and Francis (2008) studies, Hassall and Joyce (2001) found that the scores for the deep approach were higher than the surface approach to learning. Over the four stages of the examination there is a statistically significant decrease in surface scores. There was a reduction in deep scores at Stage 3 but this increased again at Stage 4. The authors attributed the decrease at Stage 3 to increasing work commitments due to the students having more responsibility at work thus impacting on the amount of time they were able to devote to their studies.

2.9.5   Gender

A further factor influencing approaches to learning is gender. Studies of gender have reported mixed results. Males presented with higher scores for adopting deep strategies to learning and females scored higher on surface strategies (Hassall & Joyce, 2001; Lucas & Meyer, 2004).

The strategic approach to learning was preferred by both male and female students (Flood & Wilson, 2008). The females however exhibited statistically higher surface scores than their male peers. Davidson (2002) found that there were no significant differences between genders. McChlery and Visser (2009), in their comparative study of accounting students in South Africa and the United Kingdom, found no significant difference in the learning styles of males and females across all years of study from first year to fourth year. Byrne et al. (2002) observed that females scored higher on deep scales and males higher on the strategic scale but the differences were not significant. These authors contradict Elias (2005) who found that females "used more deep strategies and fewer surface strategies, compared with men". In a study of open learning (distance learning) accounting students, De Lange and Mavondo (2004) noted that male students presented with higher surface scores than female students. Due to the method of instruction, the majority of the students are older than normal full-time students. The difference between male and female students was partially attributed to the fact that motivation was external to the male students as there was pressure to enrol to improve promotional opportunities, among others.

Overall, difference in approaches to learning between genders is inconclusive. Researchers have suggested that the inconclusive results may be partially attributable to the fact that students may not be accurately completing questionnaires designed to measure learning approaches and inherent bias in the measuring instrument (De Lange & Mavondo, 2004). Students maybe providing responses which they think are desired or expected by the researcher rather than reporting their actual learning approach (Byrne et al., 2002; Flood & Wilson, 2008).

2.9.6 Accounting students compared to non-accounting students

Research into the different approaches to learning between accounting students and non-accounting students (Eley, 1992; Booth et al., 1999; Lucas & Meyer, 2005) has shown that accounting students have higher surface approaches and lower deep approaches to learning. When compared to English, chemistry and biochemistry students "the accounting sub-group had the highest surface approach and the lowest deep approach means" (Eley, 1992, p. 247). Approaches to learning used by Australian accounting students were compared with reported norms of arts, education and science students, revealing that accounting students had relatively higher surface and lower deep approaches to learning (Booth et al., 1999). The differences in conceptions of learning accounting of 1 211 students at five United Kingdom

universities studying introductory accounting was researched by Lucas and Meyer (2005). As introductory accounting is a compulsory subject in the first year of a business degree, the cohort included students intending to major in accounting and other business majors. Accounting students reported higher scores on enjoyment but overall students considered accounting to be dull and boring and taught in a technicist manner. These findings are in accordance with the contention by Beattie, Collins, and McInnes (1997) that accounting as a discipline appeals to students who are inclined to adopt a predominately surface approach to learning.

2.9.7 Intervention studies

Despite the need for changes in the learning context aimed at fostering a deep approach to learning by accounting students, there are limited published empirical studies in this area. The outcome of introducing group learning activities designed to promote a deep approach to learning was reported by Hall et al. (2004). The intervention was conducted over a semester in a first-year accounting class. Findings revealed a small but statistically significant increase in the use of deep strategies and a small but statistically significant decrease in surface strategies. A learning intervention in a first-year accounting class aimed at encouraging students to adopt a deep approach to learning was conducted by English et al. (2004). In their study they compared pre-test and post-test scores of the students who participated in the intervention (experimental group) to scores of a control group of students who did not participate. For the students in the experimental group there was a small decrease in deep approaches (44.73 to 43.51) and a small increase in the surface approach (48.84 to 48.98) to learning, however neither difference was statistically significant. For the control group there was also a decrease in deep approaches (44.57 to 41.87) and an increase in the surface approach (49.27 to 50.38) to learning. On comparing the two cohorts, there was a greater movement in scores for the control group to the experimental cohort, indicating that for the experimental cohort "there was a significantly lower tendency to adopt this [surface] approach given the intervention" (English et al., 2004, p. 475). The decrease in deep approaches and increase in surface approaches to learning as a result of the intervention accords with the results of Gow et al. (1994) and Ballantine et al. (2008).

An intervention in a Level 2 management accounting class resulted in only 18% of the students adopting a deep approach to learning (Jayasinghe, 2009). For students to respond positively to interventions in the learning environment, Beattie et al. (1997, p. 10) argue that

firstly educators require "a sound understanding of the complex and contingent nature of learning approaches" and students must be both motivated and capable (Lucas & Mladenovic, 2004). Interventions designed to promote a deep approach to learning have not always been successful, as research has shown that encouraging a deep approach to learning can be challenging (Marton & Säljö, 1976; Baeten, Kyndt, Struyven, & Dochey, 2010).

2.9.8   Approaches to learning and examination success

Typically one would expect that students who exhibit higher deep scores are more likely to be academically successful compared to those with higher surface scores. However, Jackling (2005) and Flood and Wilson (2008) both reported that students with deep scores failed the examination and students with high surface scores passed. Flood and Wilson (2008, p. 235) observed that there was "no significant differences between the passing and failing students on the desired deep approach". In accordance with previous research (Eley, 1992; Booth et al., 1999; Davidson, 2002; Byrne, Flood, & Willis, 2004) it was noted that "aggregate assessment grades were not very sensitive to the level of deep and surface approach scores" (English et al., 2004, p. 476). Other factors unrelated to the learning approach such as poor time management or misinterpreting a question may impact upon examination results. On the contrary, Duff (2004) inferred that students' deep or surface approaches to learning do have predictive validity. From his study, students with a surface approach to learning had only an 11.7% rate of progression while those with a deep approach to learning had a 75% rate of progression. In a review of literature on approaches to learning, Baeten et al. (2010, p. 246) reached a similar conclusion that there are "mixed findings" with regard to "influencing students' approaches towards deep learning". A number of factors may encourage or discourage students from adopting a deep approach to learning.

2.9.9   Influences on approaches to learning

Students' learning approaches are influenced by many factors, such as faculty's teaching style, method of assessment (multiple choice, essay), feedback or the discipline being taught (Baeten et al., 2010). Much has been written on the relationship between accounting faculty's method of delivery and their students' learning and the impact thereof on students' performance (Adler & Milne, 1997b; Sharma, 1997; Adler, Milne, & Stringer, 2000; Leveson, 2004; Visser et al., 2006). Teaching styles are broadly defined as either a teacher-centred/content approach or a student-centred/learning orientation. These orientations are suggestive of surface and deep approaches to learning by students. A teacher-centred/content

approach is viewed primarily as transmitting facts and procedures (Leveson, 2004) and can lead to dependent learners. However as Visser et al. (2006) declare a teacher-centred approach:

> is not good for professional development, but it is very useful and appropriate in the early phases of learning when the learning skills are limited, because the lecturers then have an opportunity to facilitate changes in students' learning skills (2006, p. 103).

A student-centred/learning orientation is associated with manageable workloads and class size, institutional support for teaching and control over what is taught and how (Leveson, 2004). The discipline of accounting is factual and technical, and this leads to a teaching preference for structure, rules and procedural explanations. Students perceive the workload to be high and the relationship between high workload and surface approaches to learning is unequivocal (Mashishi & Rabin, 2000; Flood & Wilson, 2008). This raises a question: who decides whether a workload is too high, the students or the lecturers? For accounting qualifications leading to accreditation with professional bodies, there is a received curriculum in which faculty have little freedom in deciding on course content for subjects (Bezuidenhout, 2008). Due to the nature of the CA(SA) qualification, considerable focus is placed on passing the final professional written examinations. This emphasis, concludes Botha (2001, p. 52), "detract[s] from a learner-centred education process" and "on the efforts of lecturers and what lecturers can do to improve candidates' chances of success".

It has been suggested by Leveson (2004), Adler et al. (2000), Adler and Milne (1997a) and Sharma (1997) that accounting educators have not adopted a learner-centred approach to teaching. Visser et al. (2006) agree and note that accounting faculty in their study exhibited a minor preference for teaching higher learning skills – skills required by the accounting profession. Factors identified as impediments to adopting a learner-centred approach include student, lecturer and institutional factors. These comprise among others: student expectations of the student-teacher relationship, i.e. students are not prepared to take responsibility for their own learning (Lord & Robertson, 2006) and preferring teaching which focuses on transmittal of information (Byrne et al., 2004); high student-staff ratios (Howieson, 2003); cultural/language divides; non-reflective teacher practices; and, students' approaches to learning prior to entering higher education.

The literature with regard to deep and surface approaches to learning remains inconclusive as both deep and surface approaches to learning and the strategic approach to learning have been reported in accounting students. This could be as a consequence of the procedural nature of the accounting discipline as students' approach their learning based on their perception of the context, and determine how to go about the task on the basis of the outcome between them and their environment.

2.10   Critique of approaches to learning

The original work by Marton and Säljö (1976) was emphatically about *approaches* to learning. It suggested that students at different times, and in response to different learning contexts, undertake a deeper approach to their learning or a more superficial surface approach. Approaches to learning have been misunderstood or over-simplified to become 'deep and surface learning' or 'deep and surface learners'. Deep and surface approaches are not learning styles or personality traits – they are not fixed but arise out of students' perceptions (based on prior experience) of the particular learning context (Webb, 1997; Haggis, 2003, 2009b). It is possible for two students within the same teaching and learning environment to perceive the context differently depending upon the individual student's approach to learning. Changes to the learning context aimed at fostering a deep approach to learning do not necessarily induce all students experiencing that environment to adopt a deep approach to learning. If a student does not already have an inherently deep approach to learning, changes to the learning context may not elicit a shift in the student's approach to learning (Haggis, 2003, 2009b). Furthermore, as there are a myriad of approaches to learning within a group of students, making adjustments to the learning and teaching context will affect all students differently. This could prove problematic as it is not possible for faculty to provide a suitable context beneficial to each individual student.

A number of different survey instruments have been developed to measure students' approaches to learning – Biggs's Learning/Study Process Questionnaire (Biggs, Kember, & Leung, 2001) and various versions of Approaches to Study Inventory. These survey instruments do not necessarily measure conceptions of learning but rather "what students say in response to questionnaire items" (Haggis, 2003, p. 94).

One of the key criticisms of the deep and surface approach to learning theory has been that it is simplistic and assumes a fairly superficial notion of learning. This is partially attributable to the misunderstanding that the theory is talking about learners as being deep and surface, or learning as being deep and surface, whereas the original theory was explicitly about approaches to learning. The theory fails to engage with the structure, value and norms of the knowledge itself. The nature of the discipline has great bearing on the appropriateness of specific approaches to learning.

2.11   Conclusion

Writing-to-learn as a pedagogical approach is aimed at promoting students' learning and critical thinking skills. Writing-to-learn has the added benefit of improving students' writing. The results of studies using writing-to-learn have been mixed. It has been found that accounting students tend to be strategic learners and if writing-to-learn assignments count little or not at all towards their final grade, the tendency is for students to do them as an after-thought (Ballantine & McCourt Larres, 2007). A problem in much of the writing-to-learn research is that it was conducted over a limited time period such as a semester and it is not possible to determine whether students have inculcated the benefits of the pedagogy as habits take time to form. Students generally displayed a positive attitude towards learning after participating in a writing-to-learn intervention which indicates that the long-term effects may be beneficial. Nevertheless, from the point of view of faculty, the issue of who should teach and grade writing remains unresolved. However clear findings from the literature is that writing to learn aided accounting students in their learning and understanding of concepts.

CHAPTER THREE

Conceptual framing

I enjoyed the group work – it's always great to get new ideas and learn from other people while getting to know them at the same time (Sean, WIT programme, 2011)

3.1   Introduction

In the previous chapter the literature on writing-to-learn and deep, surface and strategic approaches to learning in accounting was reviewed. This chapter presents a discussion of the concepts and research paradigm that frame the study. The theoretical approach of social constructivism is used in this study for conceptual framing and pedagogy in a collaborative learning classroom. The concepts of collaborative learning, writing-to-learn and deep, surface and strategic approaches to learning are discussed.

3.2   Towards a conceptual framework

In the literature, there is no clear distinction between the terms conceptual framework and theoretical framework. According to Henning (2010, p. 26) and Leshem and Trafford (2007) the term conceptual framework is interpreted differently by different authors and the terms are used interchangeably. Likewise de Vos, Strydom, Fouche, and Delport (2009) concur that the term *conceptual framework* is used in methodology textbooks, but its exact meaning is not clarified. A conceptual framework provides the framework which holds the study together and positions the researcher in relation to the research. It consists of a set of key concepts, the presumed relationships among those concepts that support the study, and explains those relationships (Creswell, 1994; Denzin & Lincoln, 1998a). A broader description of a conceptual framework is provided by Wisker (2005, p. 82) and encompasses "the framework of ideas, questions and theories *and methodologies* that help them [the researchers]" [italics in original]. Reynolds et al. (2012, p. 17) state that one of the reasons why writing-to-learn pedagogical approaches are lacking in science education is because of "the absence of a conceptual framework to systematically guide study designs and integrate findings". The concepts framing this research were drawn from those concepts that contribute to students' experiences of using 'writing-to-learn' in an enriched MAF tutorial programme.

Given the discussion above and the focus of this study on students' experiences of learning in a WIT programme, social constructivism and the concepts of collaborative learning, writing-

to-learn and deep and surface approaches learning will be discussed. There is a tendency among accounting students to de-contextualise knowledge and treat parts of the subject as separate entities (Lucas, 2001) i.e. to learn in 'silos'. As they may have "a less-than-complete knowledge and understanding of the concept" (Koch & Kriel, 2005), it is sometimes difficult for them to integrate concepts to form a coherent whole. Writing is an active process which shifts the emphasis from rote learning (surface strategy) to long-lasting more meaningful learning and a deeper understanding of discipline specific material (deep strategy). Writing allows students to mediate their knowledge of the discourse of the discipline and initiates them into the discourse community (Wygal & Stout, 1989; Scofield & Combes, 1993; Woods McElroy & Coman, 2002).

3.3 Social constructivism

With the social constructivist perspective of learning, the construction of knowledge and skills take place in a social context (Lucas, 2000). Epistemologically we construct knowledge, thought, facts and meaning from experience through interactions with communities of like-minded peers (Bruffee, 1986). Learning is not context-free but learning is seen as knowledge construction building upon students' unique circumstances. It needs to be situated in a real-life context so learners think as experts in the discipline (Stacey, 2005). Social constructivism as a pedagogy sees knowledge as socially constructed and learning happens in this social context (Lord & Robertson, 2006). It requires the learner to actively and personally construct meaning rather than having it simply passed on (Micheal, 2006). Collaboration and social negotiation of meaning are fundamental principles of **social constructivism** and underpin this study as small group interactive tutorials are vital for shared construction of knowledge. The perspective of social constructivism is that an individual's or groups' knowledge is constructed, not given, and the understanding of concepts results from negotiation of meaning through the discourse of the community that creates it. Creswell (2009, p. 8) argues that "meanings are negotiated socially or historically. They are not simply imprinted on individuals but formed through interaction with others". Constructivists favour relativism as reality is perceived as being created through processes of social exchange – knowledge is a human construction (Au, 1998).

Social constructivism encourages students to be actively involved in the learning process, to create knowledge, reflect on it and how their understanding is changing as a result of it (Borthick, Jones, & Wakai, 2003). It focuses on how individuals learn from their interactions

in a group. This suggests the importance of effective tutorials[2] as they provide a safe space which enables participants to interact to construct knowledge and adopt deep learning approaches. It is primarily through interaction with peers that "knowledge is understood to be perspectival, socially constructed rather than simply passed on or personally processed and applied" (Lord & Robertson, 2006, p. 56). Lord and Robertson note that the "shared construction of knowledge through exposure to other perspectives appears to be essential for the development of critical thinking" (2006, p. 56). Stacey (2005, p. 142) is of the view that "if knowledge is tentative and socially constructed, it cannot be taught but only learned (or constructed)". Learning is a collaborative process and students learn not only from experts, that is lecturers, but also from one another. The students who are less adept are likely to learn from working with students who are more adept. The more adept students are likely to improve their understanding of principles when asked to explain them to less adept students. Where the group is presented with a novel situation that none of the group can solve, it is likely that it could be solved jointly by them talking their way through it (Barnes, Britton, & Rosen, 1971, p. 87).

The social constructivist view of learning is consistent with the work of Vygotsky (1978) (Kim, 2006). Students are supported or 'scaffolded' in a supportive learning environment (Hesketh, 2011). They work in groups and discuss ideas with one another, pool knowledge and integrate new information to reach a mutual understanding of discipline specific concepts. This sharing of ideas leads to the building of elaborate and refined knowledge structures. They also learn different learning strategies from one another. This affords them the opportunity to reflect on different approaches to learning which could be more effective than those they are currently employing. Social constructivism as a pedagogy emphasises the importance of the learner being actively involved in the learning process.

3.4   Collaborative learning

There are many definitions of collaborative learning and cooperative learning and the distinction between them is often blurred. Both of these can also be categorised as group-based learning which foregrounds the affective interpersonal skills developed in a group milieu (Ravenscroft, Buckless, & Hassall, 1999, p. 163). All approaches share the theoretical premise that students become actively involved in knowledge construction through peer

---

[2] A tutorial is supplemental to a large lecture and provides participants with the opportunity to discuss work face-to-face in smaller groups. Tutorials can be conducted by faculty or senior students.

interaction. Students are more likely to engage with the learning process if they are actively involved in knowledge construction, which promotes deeper learning approaches (Ravenscroft et al., 1999). The collaborative nature of small group learning allows for "shared construction of knowledge through exposure to other perspectives" (Lord & Robertson, 2006, p. 56).

For the purpose of this study, the term collaborative learning will be used to describe an approach to learning which is characterised by group discussion and cooperative efforts between lecturer and students (Tempone & Martin, 1999; Prosser & Trigwell, 2001, p. 104). Collaborative learning, first formulated and popularised by Bruffee (1999), challenged the traditional cognitive theory of knowledge. It is premised on a social constructivist approach to learning where knowledge is constructed in a social context and facilitated by social interaction in a group environment. The social context provides for a particular type of conversation as the students' status is equal in a group of peers. This facilitates peer interaction and students are actively involved in the co-construction of knowledge. The social context in which normal discourse occurs is one of the main goals of collaborative learning, namely: "to provide a context in which students can practice and master the normal discourse exercised in established knowledge communities" (Bruffee, 1984, p. 644).

Collaborative learning reflects a non-foundational, constructivist view of knowledge. Learning occurs among persons instead of between a person and things. Bruffee (1999, p. 9) describes it as follows: "we construct and maintain knowledge not by examining the world but by negotiating with one another in communities of knowledgeable peers". Students' work may improve from the help they receive from peers, helping peers and from the activity of helping itself (Bruffee, 1984, p. 638). In a collaborative learning environment, students work in heterogeneous groups in communities of knowledgeable peers as illustrated in Figure 1.
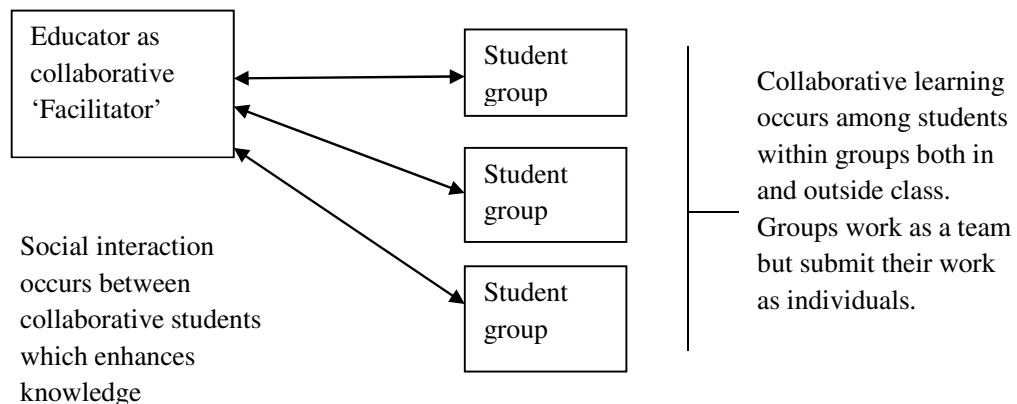
Figure 1: Collaborative learning   (McInnerney & Roberts, 2004, p. 203)

The collaborative view of learning is in contrast to a traditional classroom (see Figure 2). The traditional classroom is characterised by the foundational view of knowledge, where students are passive learners – the purpose being transmission of knowledge from the brain of the lecturer to the brain of the student. The lecturer could be called the 'sage on the stage'. McInnerney and Roberts (2004) point out that lecturing is good for transmission of information but does not create independent critical thinkers. The traditional perspective of teaching is incompatible with social constructivism, as the traditional perspective of learning views it as an individual process.

```
┌──────────────┐        ┌──────────────┐
│ Educator as  │──────▶ │ Individual   │        Learning with little
│ traditional 'sage     │ student      │        or no directed
│ on the stage'│        └──────────────┘        collaborative
│              │───┐                             learning; all
└──────────────┘   │    ┌──────────────┐        students operate as
                   └──▶ │ Individual   │        individuals
                        │ student      │
Students are not all    └──────────────┘
equally
empowered to contribute to   ┌──────────────┐
the interchange of ideas and │ Individual   │
concepts, with the           │ student      │
facilitator as equal         └──────────────┘
participants
```
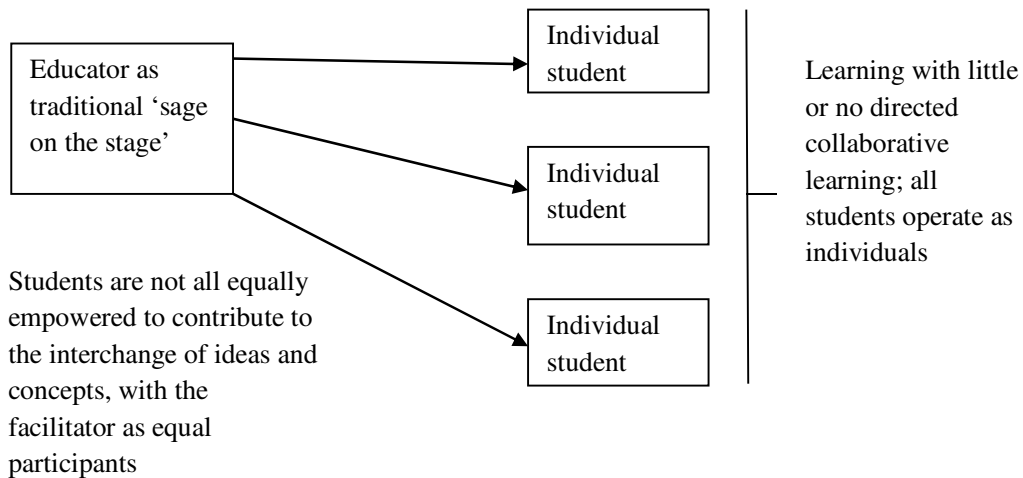
Figure 2: Traditional classroom learning   (McInnerney & Roberts, 2004, p. 203)

Formulating ideas into words and negotiating meaning in group discussion with more knowledgeable peers leads to co-construction of knowledge. Bruffee (1999) recommends, that tasks should be set at an appropriate level, not too hard or too easy. Collaborative learning reduces the Zone of Proximal Development (ZPD) as theorised by Vygotsky in Ravenscroft et al. (1999). The ZPD is the distance between "actual development as determined by independent problem solving and the potential development as determined through problem solving in a collective or collaborative context" (Ravenscroft et al., 1999, p.

165). As a member of a heterogeneous group with diverse abilities, students can learn more, and are able to solve problems beyond their actual developmental level to a level of potential development, under adult guidance or in collaboration with more knowledgeable peers (Borthick et al., 2003). Dialogue is important in a collaborative learning environment as it is seldom that we perceive the world in the same way which implies we have diverse ways of arriving at a solution to a problem. Greater tolerance of the views of others is encouraged.

Students are actively involved in collaborative (group) learning compared to passive approaches to learning where students learn independently of others. The structure of a traditional classroom is a one-way transmission of knowledge from lecturer, the source of knowledge, to students, who are simply consumers of the knowledge (Dirkx & Smith, 2004). In the collaborative classroom, faculty are mediators or facilitators who encourage students to learn how to learn. Students learn disciplinary and critical thinking and problem solving skills (Bruffee, 1999; Bean, 2001; Dirkx & Smith, 2004). Within a collaborative group setting no group or person has power as power is generated by the interaction among the groups and individuals (Au, 1998). The purpose of a group is to advance individual and collective knowledge (Tempone & Martin, 1999). There is a shift in pedagogy from teacher-centred to learner-centred mode. In a collaborative classroom, students do the work and they may learn more compared to traditional methodologies.

Studies suggest the optimum group size is five students (Bruffee, 1999; Ballantine & McCourt Larres, 2007). Small heterogeneous groups allow for a diversity of opinions and students learn to respect contributions made by others irrespective of the content. The members of the group can be rotated on a regular basis. Changing group members helps students make new acquaintances, acquire new interests and learn to work with a variety of student peers (Bruffee, 1999, p. 35). When students select groups for themselves there is no guarantee of heterogeneity and diversity of perspectives in the group (in the real-world, after all we have little say in selecting the people with whom we work).

Bruffee (1999, p. 52) contends that "writing lies at the centre of collaborative learning" and is fundamental to teaching with collaborative learning. The underlying premise of writing is thinking (Bean, 2001). If students struggle with thinking about concepts they will struggle with writing about them. In a collaborative learning environment, students can articulate their

thoughts to a group who will help refine their thinking using socially constructed knowledge to construct the text being written.

3.5   Writing-to-learn

Effective writing practices and critical thinking skills are desirable outcomes of university study. Writing and thinking skills are inextricably interwoven as effective writing focuses on content/critical thinking which must precede effective writing (Reinstein & Trebby, 1997). As a learning pedagogy, writing can serve a number of purposes. Writing confronts students with the opportunity to reflect on what they know and do not know about an issue (Cunningham, 1991). Faculty are able to assess how students' knowledge is developing and misconceptions are detected before they become problematic (Locke & Brazelton, 1997). Learning to write as an accountant means learning how to compose questions, develop argument as a member of the accounting discourse community and communicate financial information to other parties (Llewellyn & Milne, 2007). When students begin writing in new discourse communities they possess the cognitive ability but are unaccustomed to the thought processes of the discipline. They begin by copying knowledgeable members of the discipline (Carter, Ferzli, & Wiebe, 2007). The consequence of the social interaction is that students are able to construct meaning and become increasingly skilled users of the discourse.

Three categories of prose were identified by Britton, Burgess, Martin, McLeod, and Rosen (1975, p. 88): the "transactional", the "expressive" and the "poetic". Transactional writing is purposeful – intended to produce a specific result – and may include academic discourse and, business English. It should be accurate and specific. Poetic writing is creative writing in the form of poetry or drama and is an expression of the writer's feelings. Expressive writing (writer-based prose) is intended for the writer's own use and referred to as "thinking aloud on paper" (Britton et al., 1975, p. 89). It is writing to assist the writer assimilate and personalise new knowledge by linking it to what the writer knows or has experienced. Expressive writing allows for the free flow of ideas and prioritises the inclusion and exploration of meaning over grammatical exactness.

The act of writing is a unique mode of learning (Emig, 1977). Writing makes thoughts visible and creates a permanent record which can be referred to and later modified. Zinsser (1988) states that writing and learning are connected:

Writing organizes and clarifies our thoughts. Writing is how we think our way into a subject and make it our own. Writing enables us to find out what we know – and what we don't know – about whatever we are trying to learn (1988, p. 16).

Because the product of writing is immediately available and visible, it provides a unique form of reinforcing feedback (Hylton & Allen, 1993, p. 69). Writing prompts active learning as it focuses the students' attention on "what they know and don't know about an issue" (Locke & Brazelton, 1997, p. 46). Students can mediate their knowledge with new knowledge to arrive at a deeper awareness of concepts underlying the discipline. They become reflexive participants in the learning process (English et al., 1999). Attention is shifted away from rote learning to actively grappling with concepts and a deeper understanding of the subject knowledge is encouraged. This improves students' critical thinking skills and ability "to integrate and coordinate diverse concepts to generate meaning" (Garner, 1994, p. 212).

The concept, **'writing-to-learn'** needs to be distinguished from '**learning-to-write**'. Writing-to-learn, which was used in this study, is based on the premise of "the knowledge domain being the primary focus of learning" (English et al., 1999, p. 224). Zinsser (1988) recommends that writing assignments be incorporated into all academic programmes to help students learn the material. The primary educational objective of writing-to-learn is "student understanding of subject matter". The focus is on "the writer's learning process" (O'Connor & Ruchala, 1998, p. 94) and an understanding of underlying concepts. Writing-to-learn "discourages the viewing of material as a agglomeration of disembodied facts and formulae to be learnt" (Kalman & Kalman, 1998, p. 15). Learning-to-write is formal writing (reader-based prose), the focus is on improving writing practices and it is largely the domain of the English/communication department (Stocks et al., 1992). The objective is the "student understanding of writing processes" and the focus on "writing processes, text production and/or rhetorical strategy" (O'Connor & Ruchala, 1998, p. 94). There is a synergy between the two concepts as Baird et al. (1998, p. 260) point out "While improved writing skills can be a side benefit … learning a topic is the primary goal [of writing-to-learn]".

The types of writing assignments used with writing-to-learn and learning-to-write differ as each form of writing has a different pedagogical emphasis. With writing-to-learn, the emphasis is on low-stakes *informal* writing assignments whereas high-stakes *formal* writing

assignments are emphasised with learning-to-write (Wygal & Stout, 1989; Baird et al., 1998; O'Connor & Ruchala, 1998; Carter et al., 2007). Informal, exploratory writing assignments incorporate among others in-class writing, journal writing, writing dialogues and one-page summaries (Baird et al., 1998; Bean, 2001; Kavanagh & Drennan, 2008). The intention of informal writing is to allow students to write freely, organise their thoughts and draw conclusions about information (Gammill, 2006, p. 756). Free thought rather than formal structure is accentuated. In writing-to-learn assignments students express in their own words what they know or do not know about a given subject. Typically informal writing is ungraded (Wygal & Stout, 1989; Stout & Ruble, 1991) thus creating a place where students can feel comfortable writing without the stress of their work being assessed. The emphasis is on critical thinking and learning processes involved in learning concepts and problem solving rather than memorising facts. Grammatical correctness is not the focus of the writing. Learning-to-write, on the other hand, is formal academic writing which usually requires multiple drafts and is typically graded. Examples include students' laboratory reports, essays and term/research papers (Bean, 2001). The emphasis is on the finished form, polish, style and grammatical correctness. Wygal and Stout (1989, p. 247) contend that in practice because of time constraints accountants do not have the luxury of multiple drafts and the classroom emphasis on "formal techniques alone may be misdirected and inappropriate to many of the needs for writing by accountants".

With faculty reviewing writing-to-learn assignments, students receive personalised feedback with regard to their specific level of knowledge and this assists the students in identifying gaps in their knowledge. According to Gabriel and Hirsch (1992) it is important to provide positive feedback which should be affirming and building. Writing-to-learn assignments can provide an 'early warning' to faculty to identifying students' level of comprehension and thought processes timeously and correct the misconceptions before the problem escalates (Emig, 1977; Zinsser, 1988; Wygal & Stout, 1989). Use of writing-to-learn assignments can add positively to the learning environment (Wygal & Stout, 1989) and an outcome could be increased interest in the subject by the students and correspondingly improved approaches to learning.

3.6   Language and learning

Meaning making occurs through language.   The language deemed appropriate for the discipline is therefore determined by the values and norms of that discipline and not simply

from the rules of grammar and writing. When faculty teach in a manner which views teaching as 'telling' students what they, faculty, know about the discipline, "this approach severely limits the kinds of language and learning skills students develop and use in a course" (Gottschalk & Hjortshoj, 2004, p. 21). Students' learning benefits from active engagement with the language and norms of the discipline. When students learn in a more active way rather than passive acceptance of the content, they learn the semiotic domain shared by the social practices of the discipline. This provides them with resources to gain entry to the social practices of the discipline and it prepares them for learning the discourse of the discipline (Gee, 2003).

Learning can take on many forms, from learning to speak to learning the professional discourse necessary to engage in the socially situated discourse practices of the discipline. Within a participatory system, individuals "*experience participative practices differently* … are *differently engaged* … and produce *differential results*" [italics in original] (Haggis, 2009a, p. 3). Each participant's differing prior experiences of learning and language conventions contribute towards their experience of the social practices of the discipline differently. The consequence is the multiplicity of abilities within the social grouping, as some participants are working from deficit discourses (Lillis & Scott, 2007). Faculty need to be aware of the external interests and influences of students which impact upon their grasp of the authoritative discourses of the discipline which impose particular meanings (Lillis, 2003).

3.7   Deep and surface approaches to learning

The learning process is multifaceted in nature and hence it is not possible for any single study to explore all aspects of learning. In this study, the concepts of deep and surface approaches to learning in higher education as theorised in the seminal work of Marton and Säljö (1976) will be constructed. Application of the concepts of deep and surface approaches to learning has been extended to accounting education and research. Professional accounting courses offered by universities nationally and internationally are frequently aimed at preparing students for external professional body examinations. The desired objectives of the professional bodies are that students develop knowledge, skills and competencies to perform effectively in their professional careers (Mohamed & Lashine, 2003; Byrne & Flood, 2004; Hall et al., 2004; Leveson, 2004; SAICA, 2011). The intent of these attributes is to foster a deep approach to learning.

The distinction between deep and surface approaches to learning should not be regarded as discreet but rather as a continuum. Students may fall anywhere on the continuum between deep and surface approaches to learning and adopt different learning approaches for different subjects. Consequently learning approaches are relational in nature and are not a characteristic of the student, but rather how the student perceives the context in which learning and teaching take place (Eley, 1992; Hogan, 1995; Trigwell, Prosser, & Waterhouse, 1999; Lucas, 2001; Haggis, 2003). The approaches to learning are influenced by a range of factors – high student/staff ratios, prohibitive workload, student goals, assessment that rewards reproducing information, elective choice and didactic teaching methods (Eley, 1992; Gow et al., 1994; Duff, 2004; Jackling, 2005). Some of these variables are a product of the student and others a product of the learning environment.

The **deep approach** to learning is an active approach to learning characterised by students interacting and engaging with the content of the topic being studied including a search for personal meaning. Motivation is intrinsic and students derive enjoyment from studying. Students adopt strategies that allow them to relate knowledge from different courses, knowledge structures and experiences. This is then organised into a coherent whole, thus cementing the knowledge in long-term memory. Students have a personal interest in the subject with the intention to understand, and high grades are usually a consequence of this deep approach to learning (Sharma, 1997; Haggis, 2003; Ramburuth & Mladenovic, 2004). Assessment aimed at encouraging a deep approach to learning requires higher order thinking skills and includes verbs such as evaluating, arguing and analysing. A deep approach to learning does not signify that a student will pass a course and achieve high grades. This was illustrated in a study by Jackling (2005) where a student who presented a predominately deep approach to learning failed the course while students with surface approaches passed. It was suggested that "deep approaches to learning may be more strongly identified with qualitative measures of learning outcomes rather than quantitative measures of learning outcomes" (Jackling, 2005, p. 286) such as written examination performance. Students may achieve learning outcomes via other methods such as work-based tasks.

The **surface approach** to learning is a passive approach characterised by quantitative, rote learning and memorisation of unconnected facts through repetition and rehearsal for short-term recall (Lucas, 2001; Prosser & Trigwell, 2001; Haggis, 2003). The students' intention is to complete the task requirements, not to engage with the material or integrate key concepts

to reach a new level of understanding (Laird & Garver, 2010). Assessment procedures which require definitions, lists and reproduction of factual information (lower order thinking skills) encourage students to adopt a surface approach to learning (Hand, Sanderson, & O'Neil, 1996). Motivation and the responsibility for learning are extrinsic to students and associated with formal summative assessments (Lord & Robertson, 2006). The reason to be at university is to obtain a paper qualification (Gow et al., 1994). With the surface approach to learning, information is memorised to satisfy assessment requirements to avoid failure, which requires accurate reproduction of memorised knowledge, and study strategies are syllabus-bound (Flood & Wilson, 2008). The task is seen as an external imposition and cut off from everyday reality. The components of studied material are maintained as discrete unrelated units (Eley, 1992). The learnt material is very soon forgotten, culminating in a "swot, pass, and forget" syndrome (Gow et al., 1994, p. 125). Students look to the lecturer and tutor for "coverage of examinable content, and clear explanation and interpretation of that content" (Lord & Robertson, 2006, p. 54).

A third approach to learning, the strategic or achievement approach, was later identified (Eley, 1992; Duff, 2004). The strategic approach to learning is a combination of deep and surface approaches to learning and is characterised by the intention to maximise academic performance regardless of personal interest in the subject. Study time and effort are allocated in systematic manner to achieve this goal. Students do this by analysing the content and structure of prior assessment to predict questions (Ballantine et al., 2008). They also focus on areas of the question which carry high marks (Flood & Wilson, 2008; Samkin & Francis, 2008). Some research studies observed that the strategic approach to learning was the predominant approach to study of accounting students (Flood & Wilson, 2008; Samkin & Francis, 2008). Student learning was driven by "examination requirements rather than intrinsic interest in the subject matter" (Flood & Wilson, 2008, p. 233).

The deep approach to learning is not necessarily superior to the surface approach to learning. One of the essential differences between deep and surface learning approaches is rote learning. Rote learning however, needs to be divided into two categories: meaningless (rote) memorising and meaningful (deep) memorising (Lucas, 2001; Prosser & Trigwell, 2001). Meaningless memorisation with a surface approach to learning is recall of information for assessment purposes. This is generally accepted as superficial learning without understanding (Haggis, 2003). On the other hand, meaningful memorisation as a strategy involves "the

linking of the memorized material to other components of the study area, with the overall intention to achieve understanding" (Prosser & Trigwell, 2001, p. 93). Meaningful memorisation can be part of both deep and surface approaches to learning. The misunderstanding of the importance of memorisation in learning has meant this key skill has been undermined and demonised. This misunderstanding also means that students who consistently draw on memorisation and yet demonstrate profoundly sophisticated understandings of the content confound researchers.

Jackling (2005) in her study also observes that students perceived memorisation as an important strategy in learning financial accounting. This she attributes to the nature of the course content and that accounting "was perceived by students to have a procedural orientation, together with sequential processing of data" (2005, p. 283). Chinese accounting students adopt surface approaches to learning but still outperformed Australian accounting students (Cooper, 2004). This is because there is a difference in understanding between Western and Chinese conceptions of rote learning. The Chinese students used memorisation through repetition "to deepen and develop understanding and therefore enhance academic performance" (Cooper, 2004, p. 305). High achieving Chinese students used memorisation in a way which lead to understanding associated with the deep approach to learning and resulted in the term 'Chinese paradox' (Haggis, 2003). Meaningful memorisation is particularly pertinent in certain areas of accounting as the students are required to commit formulae to memory and then apply those formulae to practical situations.

3.8   Conclusion

This chapter began with an explanation of the term conceptual framework as adopted by this study. The concepts which frame the study were then presented. The following chapter discusses the research design and methodology.

CHAPTER FOUR

Research Methodology

> *I really enjoyed the structure of the programme it was different every week* (Sean, WIT programme, 2011)

4.1   Introduction

In the previous chapter the conceptual framing of the study was discussed. In this chapter I provide an overview of the research design, Interactive Qualitative Analysis (IQA) as well as a comprehensive description of the process of data collection and analysis. The rigour and ethical considerations adhered to in the study are also discussed.

4.2   Qualitative Research

This is a qualitative study informed by the tenets of social constructivism – knowledge is socially constructed. The aim of qualitative research is to gain an in-depth understanding of human behaviour in natural settings and the reasons for the behaviour. Qualitative researchers attempt always to study human action from the insider's perspective. Qualitative research is a "means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2009, p. 4). The researcher is able to obtain a deep critical understanding of the phenomenon being studied. The strategy of enquiry used was a case study as it supports the principles of qualitative research and social constructivism. Social constructivism views the construction of knowledge and skills as a social process (Lucas, 2000). Knowledge may develop internally and it also develops from interaction between members of a social group. Members of the group are able to learn from more knowledgeable members. Social constructivism is suited to methods that require learning with others and collaborative group work is one such example. Interactive Qualitative Analysis (IQA), a novel approach to qualitative research in the domain of accounting education will be used for data-gathering and analysis. IQA as a research design falls within the ambit of social constructivism. The data resulting from qualitative research contains, thick rich descriptions acquired in a real context. The data is used to develop a critical understanding of the phenomenon. The data collection methods used in the study will be focus groups, semi-structured open-ended individual interviews and participants' reflective journals.

In this study, I wish to create space for the participants to empower themselves to take an active role in learning and in life, in forming new understandings and being responsible for their own learning. This requires they reposition from being passive recipients of knowledge espoused by the lecturer to being actively involved in negotiating their own meanings in a social context (Borthick et al., 2003, p. 126).

4.3   Case study as research design

In this study I sought to gain an in-depth understanding of students' experiences of learning in a WIT programme and I considered a case study to be an appropriate research design. Case studies provide for an in-depth analysis of detailed data from a limited number of participants in a specific, unique, bounded system using a variety of data collection procedures. A case study is bounded by a period of time and the intention is to portray reality (Cohen et al., 2007). Rule and John (2011, p. 4) describe a case study "a systematic and in-depth investigation of a *particular instance in its context* in order to generate knowledge". Case study data are strong in reality and are purposive. They are dependent upon the context of the phenomenon being studied. Case studies are typically carried out in close interaction between the researcher and participants. This close interaction is ideally suited to creating relevant knowledge. The small number of the participants in this study allowed for a strong bond to develop between myself and them and between each other.

The design of a case study is such that it "optimize[s] understanding of the case rather than generalization beyond" (Stake, 1998, p. 86). Case study as a methodology has been criticised as it lacks generalisability or transferability to other settings (de Vos et al., 2009). Hesketh (2004) argues that there are possibilities for generalising case study research. Through theorising the specific case, replication is possible. It is simplistic to argue that this case study lack replicability, under similar circumstances with enthusiastic students and dedicated faculty similar outcomes may be achieved. The purpose of case study however, is not to make claims beyond the case and methodology choice is guided by the *fit for purpose* principle (Rule & John, 2011, p. 105).

Stake (1998) distinguishes between three broad types of case study – intrinsic, instrumental and a collective case study. This study resonates with the *intrinsic case study* approach, where "the study is undertaken because one wants better understanding of this particular case" (1998c, p. 88). I am undertaking the study as a lecturer because of my intrinsic interest in students learning MAF. My intention is not theory generalisation to the population of MAF students.

4.4   Research site and context

My study was conducted at the University of KwaZulu-Natal (Westville campus), a large university situated on the eastern seaboard of South Africa. The university was formed on 1

January 2004 as a result of a merger between the former University of Natal and the former University of Durban-Westville. The university has five campuses with a diverse student and staff population offering qualifications in a wide range of academic disciplines.

Managerial Accounting and Finance III (MAF) is a third-year Bachelor of Commerce (B. Comm.) subject. The B. Comm. Accounting degree was situated in the School of Accounting within the Faculty of Management Studies. MAF is an annual course which comprises Management Accounting in the first semester and Financial Management in the second semester. Management Accounting is concerned with the processes and techniques to support management in the efficient and effective use of the organisation's resources to enhance customer and shareholder value (Correia, Langfield-Smith, Thorne, & Hilton, 2008). Financial Management is mainly concerned with investment decisions – investment, financing, dividend policy and working capital management – to maximise shareholder value (Eun & Resnick, 2007). As this was the students' first course in Management Accounting and Financial Management and they were exposed to new concepts and specialised conceptual vocabulary.

MAF together with Financial Accounting, Taxation and Auditing form the core subjects of the final year of undergraduate study for the chartered accountant option. These four subjects are colloquially referred to as the 'big 4'. The topics and learning levels for these four subjects are prescribed by SAICA (SAICA, 2012b), the professional accreditation body for chartered accountants in South Africa (SAICA, 2011). The prescribed SAICA syllabus is followed and it also coheres with the requirements of the National Qualifying Framework (NQF) (Coetzee & Oberholzer, 2009; Hesketh, 2011). A prescribed syllabus is not unique to South African accounting education. Internationally many professional accounting institutes prescribe the body of required knowledge (Flood & Wilson, 2008; Samkin & Francis, 2008). Completion of the degree with MAF and Financial Accounting III enables students to register with other professional accounting bodies such as the Chartered Institute of Management Accountants (CIMA), and further their studies with that body to qualify as a professional accountant.

The annual enrolment for MAF is typically around 650 students. Approximately 90% of them are between the ages of 20 – 22. The total enrolment is divided up into two lecture streams of approximately 300 students each and 15 tutorial groups of 40 to 45 students. The classes are

taught in three 45 minute lectures and one double period (90 minute) tutorial per week throughout an academic year of about 25 weeks. In the lectures students are first exposed to the course material. The purpose of the weekly tutorials is to consolidate material presented in the lectures and stimulate interactive discussion. I shared the lecture load with a colleague and we lecture the same topic to each stream. I have over 20 years of lecturing experience in MAF and my colleague was a new academic in his first year of lecturing. In 2011 a senior tutor assisted and lectured two or three 'minor' topics. For the tutorials the academics are assisted by post graduate students who are enrolled for the Post Graduate Diploma in Accounting (PGDA).

As a first course in MAF, students are required to learn MAF terminology, basic concepts and formulae some of which require rote learning and this is evidenced in some of the written questions set in examinations. Hall et al. (2004, p. 502) note that "In accounting, students first must learn terminology, basic concepts and procedures before being able apply knowledge to novel problems and reflect/evaluate on the appropriateness of various treatments and methods". This is particularly apposite in financial statement analysis where they have to learn the formulae before they are able to apply them to an analysis of the financial position of an organisation.

At this point in their tertiary studies, students would have been exposed to two years of Financial Accounting and many of them would have studied Accounting at school. Financial Accounting is regulated by external reporting requirements such as the International Financial Reporting Standards (IFRS) which constitute South African Statements of Generally Accepted Accounting Practice (SA GAAP). It is mandatory in term of the Companies Act for companies to compile Annual Financial Statements which comply with IFRS and SA GAAP as these are used for external reporting purposes. With MAF there are no regulatory external reporting standards and it is not mandatory for companies to produce management accounts. At third year level students are steeped in IFRS and SA GAAP and often find it difficult to accept that in MAF, the management accounts could be compiled in myriad ways depending upon what format suits the company. The nature of management accounting and financial management are such that the information produced is for internal consumption only.

4.5   Selection of participants

All students who were registered for MAF in 2011 were approached during a MAF lecture early in the first term and invited to attend an information session where the purpose of the research was explained. Fifty-two students attended the session where the essence of the WIT programme was conveyed to them. I explained that as one of their lecturers I would be intimately involved in the study. In order for me to select a sample for the study, I asked them to complete a questionnaire providing me with information such as name, student number and to write two short paragraphs: why they should be considered for the WIT programme and explaining to a prospective student what the study of MAF entails. As MAF is a third year major subject, it was anticipated that students would be motivated in their studies and eager to participate.

From the questionnaire responses a purposive sample of 18 participants was selected to participate in the WIT programme; participation was strictly voluntary. The selection of participants was based entirely on the judgement of the researcher and does not necessarily represent the wider population. With purposive sampling "researchers handpick the cases to be included in the sample" (Cohen et al., 2007, p. 114). In purposive sampling, the participants selected are those closest to the phenomenon under study and hence they are in the best position to negotiate meaning of their experiences of learning in the WIT programme. There are limitations to purposive sampling, namely that the sample may not be representative of the wider population and thus the results are not generalisable to the population. In this study the sample size was small – 18 participants out of a possible 675. Cohen et al. (2007, p. 115) also comment on purposive sampling that "it is deliberately and unashamedly selective and biased".

Research suggests a maximum student-to-staff ratio of 20:1 as the optimum ratio for writing intensive courses to facilitate small group teaching (English et al., 1999; Brenner & Nichols, 2009; Ahlawat et al., 2012). The size of the tutorial group is confirmed by Hesketh (2011, p. 24) who suggests that accounting tutorials "limit student numbers to 20 – 25" for them to obtain optimum benefit. Steenkamp, Baard, and Frick (2012) concur that small groups were beneficial to student learning and for students to form a bond with their tutor. The participants selected were representative (Steenkamp, Baard, & Frick, 2009) of the population of MAF students in terms of gender, ethnicity and academic record (O'Connor & Ruchala, 1998). They comprised nine females and nine males. The ethnic composition was

nine Africans, six Indians and three Whites. Of the participants, eight were enrolled in MAF for the first time and ten were repeating. Prior to the focus group session two participants withdrew from the programme as they were selected to tutor Financial Accounting I and these tutorials were scheduled in the same periods as the MAF tutorials. Another participant withdrew as he felt it required too much extra work. As a result of the withdrawals 16 participants participated in the focus group and 15 participants in the semi-structured individual interviews.

During the course of the WIT programme I had a number of students approach me and ask if they could join the programme if anyone withdrew from the programme. The participants' accepted for the WIT programme perceived themselves as privileged and developed a very close knit bond between them. I decided against accepting new participants onto the programme after inception as I felt it would upset the group dynamics.

4.6   The Writing Intensive Tutorial (WIT) programme

In the WIT programme the tutorial sessions were aimed at creating a relaxed, non-threatening environment where participants could interact with peers to discuss and share conceptions of MAF and engage in active learning. In the tutorial they worked in groups of four or five (Edmond & Tiggeman, 2009) depending upon the number of participants present at the tutorial. My position in the tutorial was that of facilitator. Small group collaborative learning leads to empowerment of participants since they are less dependent on the tutor as is the case in a traditional tutorial. Small group learning coheres with the principles of social constructivism. I ensured a heterogeneous group membership by allocating participants to a different group every week. The allocation was based on gender, ethnicity and academic achievement (as measured by their marks in MAF tests) and provided the group with different perspectives on the material they were dealing with each tutorial. According to Kinchin and Hay (2005, p. 182) when groups are composed of individuals with very different knowledge structures there is a greater improvement in student results than when groups are composed of individuals with similar knowledge structures. Another reason I ensured heterogeneous group what that I felt if left to themselves participants would have sat with their friends every week and this would have inhibited social cohesion and group identity.

The WIT programme reported on in this study was introduced at the beginning of the second term of 2011. The duration was for 18 MAF tutorial weeks until the end of the academic

year. My initial intention was to conduct the programme in Terms 2 and 3 as this covered both the Managerial Accounting (Term 2 – seven weeks) and Financial Management (Term 3 – eight weeks) disciplines of MAF. At the request of the participants I extended the programme to Term 4 for a further three weeks. This extension allowed me to generate deeper, richer data and as researcher, remain in the field longer and gather greater understanding of the phenomenon. Studies have shown that it is not possible to expect a notable improvement in student writing and learning over a limited period of time, such as a term of a semester as they need time to adapt to these strategies (Wygal & Stout, 1989; Stout et al., 1991; O'Connor & Ruchala, 1998).

The participants were expected to complete written assignments each week, excluding test weeks, for the duration of the programme. The writing assignments were designed to reinforce MAF knowledge without sacrificing course coverage or being too onerous. The intention was to create an enhanced, active learning environment aimed at fostering a deep approach to learning and providing a positive learning experience. The completion of regular written assignments encouraged them to work on a consistent basis rather than last minute 'cramming' for tests and examinations. The assignments were completed either in the tutorial period or as a homework task. A mix of learning methodologies was designed to stimulate different learning areas and provided variety. The tasks assigned are presented in Annexure VI. As a different task was assigned each week, it is not possible to comment on the efficacy of any individual intervention therefore the WIT programme needs to be considered in its entirety. To provide an enriched learning environment and motivate students, Adler, Milne, and Stablien (2001, p. 104) suggest tasks should "exhibit variety, and [be] perceived as significant".

I provided the participants with books in which to do the written assignments and maintain reflective journals. It was expected that the books be submitted to me each week along with their tutorial work on the day prior to the tutorial. This afforded me the opportunity to provide feedback on their journals and to review their tutorial work to determine if there were areas of common misunderstanding which could be addressed during the tutorial period. Frequent and effective feedback on written work is a key component to improving learning (Corman, 1986; Cohen & Spencer, 1993; Adler et al., 2001). Feedback that is vague or difficult to interpret has limited value to learning (Byrne et al., 2009). The disadvantage of frequent feedback is the increased workload from having to mark assignments more

frequently (Corman, 1986; Cohen & Spencer, 1993; Davidson & Gumnior, 1993). The aforementioned authors recommend that short papers be prepared as this goes some way towards alleviating the marking burden and that:

> …lengthy research papers that are the staple fare in academe may not be the most appropriate writing format to prepare [accounting] students for the kind of writing they will do on the job. Short communications under pressure appear to be the work place standard (Corman, 1986, p. 86).

Consistent with informal writing, the work was not evaluated for grammatical correctness but rather for synthesis and application of concepts (Almer et al., 1998; Baird et al., 1998; Bean, 2001; Reynolds et al., 2012). The emphasis was on the process of writing and not the product (Langer & Applebee, 1987).

It was not possible to make the completion of the WIT tasks compulsory however attendance at the tutorials was a DP requirement (although seldom enforced). As a consequence I had to rely on the goodwill and motivation of the participants to complete the tasks. Research has shown that accounting students tend to be strategic learners (Flood & Wilson, 2008; Samkin & Francis, 2008). Some participants in this study were clearly strategic learners as evidenced by their inadequate, or no attempt, to complete the prescribed tutorial work or the additional WIT tasks. Similarly, Matas et al. (2011) noted that a number of students in their study never attempted the written tasks which also did not count for assessment. According to Bezuidenhout (2008, p. 9) when tutorial work and assignments in a first level accounting course did not count towards final marks, "very little attention was paid to these tasks and they were submitted with a minimum of thought and effort. Steenkamp et al. (2012, p. 76) comment that in their study of a Financial Accounting I peer-assisted tutorial intervention programme, "40 per cent of the participants in the study did not prepare well for the tutor sessions, an action which might have further improved the benefit of attendance". Adler et al. (2001, p. 10) noted that some students participating in an enriched learning environment "have been left largely unmoved by our efforts".

Despite not completing the assigned tasks the participants however wanted to remain in the WIT programme as the class size was small, between 15 and 18 students compared to the mainstream tutorial groups of approximately 40 students, and their tutor was one of their

lecturers and not a post-graduate student. I did stress that to gain maximum benefit from the programme they should attend tutorials regularly and complete all assigned tasks. As we were in a mutually beneficial relationship, I did not exclude any participants from the programme for any reason and the less committed participants added to the richness of the data. After each test I had a small 'prize-giving' where I gave a small token gift to the student in the programme who obtained the top mark for that test, the student who was closest to their predicted mark for the test and the student whose mark had improved the most from the prior test. This was well received by them. Byrne et al. (2009, p. 158) reported that "it is feasible that receiving grades during class-time motivates students to achieve good results".

4.6.1   Reflective journals

Reflective journals were used in this study and provided a dual purpose. The reflective journals were used by students to reflect on their own learning in the WIT programme. Their journal writing was also a data source as the entries were used in the description of and the relationships between the affinities (see Chapter Six). Students were requested to maintain informal reflective journals in order to enhance engagement with the course. Reflective journals enable students to take responsibility for their own learning and "allows them to see a cognitive change in their thought process" (McGuigan & Weil, 2010, p. 17). Samkin and Francis (2008, p. 241) distinguish between reflective journals which "require students to reflect on an experience" and learning journals that "are used to record the learning that occurs". My intention was that they would write a short reflective piece most weeks. Since the reflective journals did not count towards assessment and research indicates that accounting students tend to be strategic learners (Flood & Wilson, 2008; Samkin & Francis, 2008), some of them did not maintain a journal or made a very poor attempt at it. As Howieson (2004, p. 32) declares: "If some form of assessment is not undertaken, then the reality is that students are highly unlikely to keep a journal". No length restrictions were placed on the reflective writing entries which ranged from a short paragraph to two handwritten pages. Prior to each of the two tests that were written during the WIT programme, they were asked to write down what they thought was a realistic mark for the test and how they would go about achieving it. After the test they were required to reflect on whether they had achieved the intended mark, what had gone wrong/right and how they would proceed with MAF. These goals were of a personal nature and encouraged them to be accountable for their learning.

Participants were required to submit their journals to me by midday on the Monday of every tutorial week. I read them, responded to their writing and returned them on the Tuesday during the tutorial period. I did this to affirm to them that I valued their writing and encourage them to actively reflect on their studies. Due to the relatively small number of participants in the tutorial group, and the fact that some submitted their journals erratically or never, it was possible for me to read and comment on their journals every week. If the group had been larger this would have been extremely time consuming task to complete every week. The time required for marking journals is a limitation of using them (Hoff & Stout, 1989; Haigh, 2001; Howieson, 2004; Samkin & Francis, 2008).

The participants' reflective journals were a source of data triangulation to confirm the semi-structured interviews and my own observations of the students in the tutorial. Triangulation strengthens the study as it provides the researcher with more confidence in the findings when the same phenomenon is observed from more than one data source (Cohen et al., 2007; Rule & John, 2011). It reduces any bias inherent in using a single data source (Creswell, 2009). I was mindful of the perceived power imbalance between myself and the students and I was sensitive to the personal and private thoughts shared with me in their journal writing. I contend that as the journals were not assessed it was possible for them to write more openly as they did not have to worry about what was the 'right answer' in order to maximise marks.

4.7   Interactive Qualitative Analysis

Interactive Qualitative Analysis (IQA) (Northcutt & McCoy, 2004) is a structured approach to qualitative research design which uses focus groups to produce a systematic representation of a phenomenon from participants' experiences of the phenomenon being studied. IQA is based on the premise that those closest to the phenomenon being studied, the participants or constituents in IQA terminology, are best suited to construct a graphic representation of the systems' influences and outcomes. In the early stages of the analysis, the participants' voice is privileged over that of the researcher. Constituents are defined as "a group of people who have a shared understanding of the phenomenon" (Northcutt & McCoy, 2004, p. 44) who are selected on the basis of their power over and distance (closeness) to the phenomenon under investigation. In this study the term 'participants' will be used in place of the IQA term 'constituents'. One of the main differences between IQA and traditional qualitative research is that in IQA the participants, rather than the researcher are responsible for the open coding of the data and generating themes or affinities.

IQA was selected as the research design as it is consistent with the principles of the social constructivist paradigm because it "privileges the nature of socially constructed meaning" (Northcutt & McCoy, 2004, p. 4). It allows the group to construct categories of meaning, affinities, and the role of the researcher is that of facilitator, as "Researchers leave tracks" (Northcutt & McCoy, 2004, p. 44). The affinities provide the protocol for individual interviews where participants' experiences of the phenomenon can be further explored. An Interrelationship Diagram (IRD) is developed portraying the cause and effect, or influence between the elements. Northcutt and McCoy (2004, p. 41) state that "The product of an IQA study is a visual representation of a phenomenon prepared according to rigorous and replicable rules for the purpose of achieving complexity, simplicity, comprehensiveness and interpretability."

IQA is an innovative methodology (Mampana & Bouwer, 2011, p. 116) which to date has not enjoyed extensive usage in the broad discipline of accounting research. In the South African context, studies using IQA as a methodology have been undertaken in the field of educational psychology (Human-Vogel, 2006; Human-Vogel & Mahlangu, 2009; Tabane, 2010; Tabane & Human-Vogel, 2010; Mampana & Bouwer, 2011). The only published study in an accounting discipline is that of du Preez (2012) who investigated taxation students' perceptions of open-book assessment in Part I of the Chartered Accountant Qualifying Examination.

In the collection and analysis of the data, participants articulate their experiences of the phenomenon and develop categories of meaning, or affinities. This effectively reduces issues of trustworthiness, dependability and conformability (Tabane, 2010). The participants develop their own affinities in a focus group thus meaning is socially constructed. The researcher is merely a facilitator of the process. This minimises the researcher's power and influence over the participants during data analysis. "The researcher's role then moves from designer to facilitator, teaching the group members the process and guiding then to generate and analyze their own data with minimal external influence." (Northcutt & McCoy, 2004, p. 44). The researcher's biases and prejudices are minimised in the process.

4.7.1 The ideology of IQA

In the following section I interrogate the ontological and epistemological assumptions as they inform the research method and design (Cohen et al., 2007, pp. 8 - 20).

4.7.2 Ontological perspective

"IQA presumes that *knowledge and power* are largely *dependent*" (Northcutt & McCoy, 2004, p. 16). The participants are selected because they hold the power and knowledge (which are inextricably linked) of the phenomenon being studied through their membership of a particular group. In this study, the participants were selected due to their membership in the WIT programme which provided them with the authority to reflect on the experience of learning in that programme.

"IQA presumes that the *observer and the observed* are *dependent* or … interdependent" (Northcutt & McCoy, 2004, p. 16). IQA challenges the traditional assumptions of qualitative research which suggests that the role of participants is to generate data, which only the researcher is qualified to analyse the data. With IQA participants generate and interpret their own data while the researcher facilitates the process.

"The *object of research* in IQA is clearly *reality in consciousness*" (Northcutt & McCoy, 2004, p. 16). The selection of participants is made from among those closest to the phenomenon, in this study the students who participated in the WIT programme. The data collection is undertaken in focus groups thus reality is socially constructed by members of the group. Follow-up interviews are used to further probe individual meanings of the constructs. The central construct of this study was learning and the focus group format provided participants with the opportunity to chronicle the processes by which they learned MAF in the WIT programme.

4.7.3 Epistemological perspective

"IQA insists that *both deduction and induction* are necessary to the investigation of meaning (Northcutt & McCoy, 2004, p. 16). In IQA categories of meaning or affinities are socially constructed by the participants in focus groups through induction. The affinities are then defined and refined by the participants (induction and deduction). In the final step, the participants deductively explore the relationship between constructs. The IQA process of

coding corresponds with the traditional classes of analysis of coding – emergent, axial and theoretical (Northcutt & McCoy, 2004, p. 16).

"IQA contends that *decontextualized* descriptions are useful and possible as long as they are backed up or grounded … by highly contextualized ones" (Northcutt & McCoy, 2004, p. 17). The researcher aids the reader by providing the context within which the research was conducted. Northcutt and McCoy (2004) refer to the Denzin and Lincoln (1998a, p. 3) metaphor of the *bricoleur* or quilt maker. With IQA the group, create their own interpretive quilt of meaning or *bricolage*.

"IQA is clearly *favorable to theory*, both from the point of view of inducing theory and of testing it." (Northcutt & McCoy, 2004, p. 17). The outcome of IQA is a mindmap of a group or an individual's mental models of a particular phenomenon. The relationship between the constructs can then be theorised. The voices of those closest to the phenomenon, the participants on the WIT programme, are privileged over that of the researcher.

4.8 IQA protocol

4.8.1 Data collection

The data collection was negotiated in two phases during 2011. The first phase entails the selection of participants for focus groups, the focus group interviews and the generation of a composite group visual representation of the phenomenon. The focus group data was collected halfway through the programme, during the second week of the third term. The second phase of data collection was individual semi-structured interviews to further probe the participants' experiences of the affinities developed during the focus groups. Approximately half the interviews were conducted during the September vacation and the other half in the first week of the fourth term. This was arranged so as to be less taxing on participants' time and the fourth term is usually stressful for them as it is short and examinations are imminent. The focus group and individual interviews were taped and transcribed verbatim.

4.8.2 IQA Focus groups

Focus groups are a recognised useful qualitative method of data collection. Two separate focus groups – Monday group (9 participants) and Thursday group (7 participants) – were held with participants who attended the WIT programme. Two groups were scheduled for purely pragmatic reasons and no effort was made to ensure diverse representation. Due to

timetable constraints it was impossible to find a common time when the whole group was free, outside of the tutorial session. The (one-off) focus group sessions ran for approximately 45 minutes. The aim of interactive focus groups was to gather feedback about the participants experiences of learning in a WIT programme. Focus groups are comprised of "a group of people who share some common experience" (Northcutt & McCoy, 2004, p. 47) and are conducted in a focused, safe environment. The group interaction provides new understanding and meaning of the data which reflects the group's perceptions.

There is contestation regarding the size of a focus group. Northcutt and McCoy (2004, p. 87) suggest focus groups of 12 to 20 participants. The size of the IQA focus groups is larger than that suggested in traditional qualitative research where six to ten participants is recommended (Cohen et al., 2007; de Vos et al., 2009; Rule & John, 2011). Northcutt and McCoy (2004) argue against using focus groups of fewer than 12 participants. They feel that this could skew the data during the theoretical coding phase due to dominant personality/ties influencing a small group and a smaller pool of ideas and opinions. With IQA it is possible to have focus groups larger than the traditional focus groups as IQA proceeds according to set protocols which assure equal participation of participants. If the focus group however is too large, participants may feel their voice will not be heard and disengage from the group (Wyatt, 2010).

The role of the researcher in focus groups is to facilitate the process by providing the structure for the interviews. The intention is to allow the students to reflect on their experiences of the phenomenon. Following IQA protocol, the researcher brackets her "presuppositions about the nature of the phenomenon being investigated and avoid the explicit prior construction of interpretative categories" (Lucas, 2000, p. 484/485). The first step in preparing the participants for the focus group sessions is a warm up exercise using guided imagery to help relax and clear their minds of distractions (Northcutt & McCoy, 2004, p. 89). After the warm up exercise, they are provided with an issue statement/s. An issue statement is "used to deconstruct and operationalise the research question" (Mampana & Bouwer, 2011, p. 117). This is followed by a silent nominal stage during which participants engaged with the issue statement and silently brainstormed the phenomenon being investigated to generate ideas. Their individual uncensored thoughts, feelings and reflections are then written down on separate note cards, one reflection per card. There are advantages and disadvantages of silent brainstorming. The advantages include minimising the group

pressure of being intimidated or influenced by dominant participants' ideas and not become preoccupied with a conversation where a single train of thought is pursued or 'group think'. Participants can generate a large amount of data without being distracted by other participants. One of the drawbacks of silent brainstorming is that some participants may require conversation to trigger thoughts and ideas. The note cards are affixed to a wall for all participants to read.

4.8.3   Semi-structured open-ended individual interviews

The second qualitative method chosen for this research was semi-structured open-ended individual interviews designed to elicit responses to the students' experiences of learning in a WIT programme. These interviews are appropriate to gain a detailed, rich description of each affinity. Following IQA protocol, the questions for the individual interviews emerged from the affinities developed in the focus groups. Individual interviews add to the richness and depth of description of meaning to the affinities by probing the individual participant's experiences of each affinity. There are limitations to individual interviews as they are in a social setting and as a source of evidence "suffer from interpretational constraints" (Eley, 1992, p. 232). One such limitation is response bias due to the power relationship between the interviewer and the interviewee (Creswell, 1994). There is a possibility that the participants' responses reflect their perception of their role in relation to the interviewer and constitute what they consider to be socially acceptable answers. This is particularly pertinent in the current study as I interviewed them and I am in a position of power relative to them. I requested that they reply to the questions as objectively as possible. We had developed a rapport over the duration of the WIT programme and most participants were eager to please, consequently I assured them that honest answers were preferable to socially accepted answers.

From the nine affinities developed in the focus group sessions, a protocol was developed for individual semi-structured interviews to probe each participant's experience of the affinity. These interviews provide analytical and interpretative depth. I interviewed the 15 participants who persevered for the full duration of the WIT programme. Each interview lasted approximately 20 to 30 minutes and was audio and videotaped. The audiotapes were used for the purpose of transcribing the interviews and the videotapes as a backup system. The transcriptions remain confidential to me.

4.9   Data analysis

Data was analysed in accordance with a social constructivist framework. In an IQA type of research design, researcher bias is substantially reduced as the participants create and construct meaning of the phenomenon. The nature of the qualitative research process is such that I, as researcher, am an integral part of the research. In the research I was both researcher and participant. I was aware of myself in the worlds of both practice and research and conscious of preventing my biases and subjective experiences from influencing the participants. "Reflexivity suggests that researchers should acknowledge and disclose their own selves in the research, seeking to understand their part in, or influence on, research" (Cohen et al., 2007, p. 171). As researcher I was in a position of power relative to the participants in the study who were my students. I recognise that critical self-reflection is required by me to ensure that any biases I have are disclosed. Creswell (2009, p. 192) affirms that reflexivity is "a core characteristic of qualitative research". Some of the participants were known to me as they were repeating the course and I had established a lecturer/student relationship with them from the previous year. Participants selected were not obligated to remain in the WIT programme for its entire duration and were free to drop out any time they wished to. During the course of the programme I developed a rapport with the participants and they themselves formed a close knit bond between one another and to a certain extent saw themselves as privileged over the other MAF students. Their constructs could be coloured to the extent that they were eager to please as they were aware of the importance of the research to my academic career at UKZN.

The outcome of IQA is a visual representation of a system, Systems Influence Diagram (SID), in the form of a "*mindmap* of a group with respect to a phenomenon represented by the issue statement" (Northcutt & McCoy, 2004, p. 149). The data analysis is conducted in "three successive and recursive steps". The three steps are clarification, clustering and refining known collectively as affinity analysis (Northcutt & McCoy, 2004, p. 95). If there is uncertainty regarding a note card, the researcher would seek clarification of meaning from the group. The second step is the clustering stage where participants are required to review the note cards and to categorise them into common themes or affinities, a process called inductive coding. Refining, the third step in the IQA data analysis, is a deductive process which requires the participants to name the affinities from the meaning of the note cards in each grouping. Their role in the coding of the data is consistent with the premise that underlies the principles of social constructivism, namely, that knowledge is socially

constructed. They actively engage in processes of meaning-making from the data, by collectively generating affinities through discussion and mutual consent in a social group.

Once the affinities have been clearly defined the affinity write up commences. The affinity write-up consolidates the thoughts generated from the note cards and the focus group discussions (Northcutt & McCoy, 2004, p. 115). During the theoretical coding, participants justify the relationship between the affinities in terms of cause and effect. The relationship between affinity pairs is illustrated in an **Affinity Relationship Table** (ART). There are three possible relationships between affinity pairs: A influences B (A → B); B influences A (B ← A); or no relationship (A< >B) (Northcutt & McCoy, 2004, p. 47). The participants also write a short 'if-then' statement reflecting their conception of each affinity pairing. The ART can be completed either individually or in small groups. If completed individually, a large volume of data is generated. The responses are taken at face value as the true meaning of how the participants conceptualised the affinity relationships (Human-Vogel, 2006, p. 619).

The **Interrelationship Diagram** (IRD) "is a matrix containing all the perceived relationships in the system" (Tabane & Human-Vogel, 2010, p. 496) and is a summary of the affinity relationship pairing of the ART. Creating the IRD is the first step in **rationalising the system** (Northcutt & McCoy, 2004, p. 170). The IRD can be produced either for a group composite or on an individual basis. IQA uses the Pareto protocol to determine which affinity pairs to include in the IRD. The Pareto protocol is frequently cited in management and systems theory and states that *"something like 20% of the variables in a system will account for 80% of the total variation of outcomes"* [italics in original] (Northcutt & McCoy, 2004, p. 156). From the IRD, drivers and outcomes are identified. Drivers are more fundamental elements of influence on the system. The outcomes are those affinities affected or influenced by the drivers. Drivers and outcomes are classified as either primary or secondary. A primary driver is an affinity that has no 'ins' and has a positive delta value. Correspondingly, a primary outcome has no 'outs' and has a negative delta. A secondary driver (+ve) is a relative cause or influence on affinities and it has both 'outs' and 'ins' although the 'outs' exceed the 'ins'. Likewise a secondary outcome (-ve) has both 'outs' and 'ins' but there are more 'ins' than 'outs'. Delta is calculated by subtracting the number of 'ins' from the number of 'outs' and "is used as a marker for the relative position of an affinity within the system" (Northcutt & McCoy, 2004, p. 173).

The final phase is to produce a **Systems Influence Diagram** (SID) or mindmap which "is a visual representation of an entire system of influences and outcomes" (Northcutt & McCoy, 2004, p. 48). The first version of the SID is the cluttered SID. The visual representation is saturated with links (Northcutt & McCoy, 2004, p. 176) and is complex, consequently having limited efficacy in drawing conclusions pertaining to the model. From the cluttered SID, redundant relationships are identified and eliminated in a further rationalisation of the model. The elimination of links is conducted in a specific order starting with the link between the primary drivers (highest delta) and the primary outcome (lowest delta) then in ascending order of delta. A link is considered redundant if the link can be removed without losing the association between two constructs (Human-Vogel & Mahlangu, 2009, p. 320) The resultant uncluttered SID is a mindmap of the system with the minimum number of links but maintaining the quintessential constructs of the phenomenon. The affinities are used to develop a protocol for individual semi-structured interviews to further interrogate the participants' experience of the affinities.

4.10   Interpretation of results

The nature of IQA methodology is such that it attempts to incorporate conceptions from the three most important meanings of truth or theories of truth: Correspondence, Coherence and Constructive (Northcutt & McCoy, 2004, p. 340). These three theories and their relevance to my study are summarised in the following paragraphs.

The Correspondence Theory of Truth (CTT) – truth is empirical and is consistent with external realities as they are observed or experienced. Henning (2010, p. 147) elaborates on the meaning of truth within research: "research and its findings must "correspond" with what is "out there"". In this study, the reality of the participants' (students') experiences of learning was observed in focus groups, semi-structured individual interviews, their personal reflective journals and observations of the tutorial sessions.

The Coherence Theory of Truth (CoTT) – "a statement is true to the extent that it coheres, or is consistent with, other true statements" (Northcutt & McCoy, 2004, p. 340). There is a requirement of internal logic and consistency between statements (Henning, 2010). The IQA system has relationships which form a meaningful structure which in themselves form part of a larger system and the participants (in this study, the students) are recognisable. I was able to recognise and relate to their experiences.

The Constructivist Theory of Truth (CsTT) – truth has pragmatic utility and potential for solving a problem. In my study I identified the pragmatic problem of students' tendency for rote learning and lack of understanding of underlying disciplinary concepts. The research aimed to make a contribution towards understanding these issues.

The structure of IQA mindmap incorporates these elements of truth as it is:

> A coherent set of relationships, a systematic internally consistent picture of the theory in action that informs and guides a group's or an individual's understanding of the meaning of a particular phenomenon (Northcutt & McCoy, 2004, p. 342).

The individual semi-structured interview transcripts were coded by means of associating the data with the affinities. I examined the interviews for recurring themes within each affinity. This was used as evidence to support the affinities. Affinities are the building blocks of IQA systems and interpretation begins with a grounded description of each affinity. Each affinity and its relationship with other affinities are then illustrated with excerpts from the participants' interviews and reflective journals (axial coding). In the interpretation, separate discourse units have been combined to give a sense of one participant talking. The comments from the reflective journals and semi-structured interviews have been edited to limit distracting verbal tics, such as *like* and *you know*, and for grammatical correctness (Carter et al., 2007, p. 286). Some statements fall into more than one category but as this is not a quantitative study, this overlap is inconsequential. IQA as a design strategy privileges the voices of the participants over that of the researcher. However the qualitative nature of this study requires an analysis and interpretation of the findings by the researcher to be argued within the broader context of accounting education. This was achieved by interpreting participants' meanings and then relating them to the body of literature on writing-to-learn in accounting and accounting education research.

4.11   Rigour

There are various approaches to ensuring rigour in a study. In qualitative research criteria of rigour includes concepts such as validity, reliability, credibility and transferability (Creswell, 2009; Henning, 2010). Inherent in the IQA research design are the properties of rigour, as

Northcutt and McCoy (2004, p. 17) comment: "IQA certainly support constructs such as credibility, transferability, and dependability, while highlighting the concepts of validity and reliability". They further remark that in an IQA research design rigour is ensured through the procedures of both data collection and analysis as the research design is (1) public and nonidiosyncratic; (2) replicable within reasonable boundaries; and (3) does not depend (especially for analysis) on the nature of the elements themselves (2004, p. 38). An audit trail is created for every stage of the data collection and analysis process and provides a record of participants' experiences free from the researcher's biases and interpretation. From an audit trail "parties can reconstruct the processes by which the investigators reached their conclusion" (Morse, 1998, p. 77). The audit trail provides evidence of the basis of the claims made by the researcher in the study (Rule & John, 2011). Replicability refers to the fact that two different researchers with the same set of focus group data, adhering to the rules for rationalisation should produce the same end product of IQA, the Systems Influence Diagram or mindmap, a visual representation of the phenomenon irrespective of each individual researcher's biases and interpretations of the data. In IQA research design there is a transparent audit trail of the steps followed according to rigorous, reliable and replicable rules resulting in issues commonly associated with qualitative research such as researcher bias, reflexivity, or trustworthiness being eliminated.

4.12   Ethical considerations

When conducting research involving people, ethical considerations need to be foremost in the mind of the researcher. Research conducted in an ethically sound manner enhances the quality of the research and contributes to its trustworthiness (Rule & John, 2011). With the IQA method, participants are an integral part of the data collection and primary analysis as they conduct it themselves under guidance from a facilitator. This provides certainty that the legitimate voice of the group is portrayed and negates issues of power. My study involved students registered in the Faculty of Management Studies at UKZN so I first had to request permission from the Dean of the Faculty who is the gatekeeper at the site where the research was conducted (Creswell, 2009; Henning, 2010). A letter detailing the purpose of my study was sent to the Dean of Management Studies (Annexure I). Once I had gained permission from the Dean (Annexure II) I submitted an application to the university Ethics Committee and was granted ethical clearance to conduct the research (Annexure III).

Participation in the study was on a voluntary basis and participants had complete freedom of choice regarding whether they wanted to participate or not. The participants were selected on the basis of an interest questionnaire. At the start of the first tutorial, all participants completed an informed consent form (Annexure IV) to confirm that they would participate in my research. According to de Vos et al. (2009, p. 50) informed consent "ensures the full knowledge and cooperation of subjects" and may be important in resolving any areas of potential conflict. The participants were informed that they had the right to withdraw from the study at any time without any negative consequences and this ensured that there was no violation of rights. Further I assured participants that the data collected would be used solely for the purpose of this research.

It is essential that the privacy and identity of research subjects is protected (Denzin & Lincoln, 1998b). The issue of confidentially of participants was addressed in a number of ways. The integrity and confidentiality of data and participants was guaranteed during the tutorials, focus groups, individual interviews as well in the reflective journals, data analysis and the writing of the thesis. To preserve anonymity pseudonyms were used during all the stages of production of this thesis. I conducted the interviews and transcribed some of the interviews. The remainder of the interviews where transcribed by a research assistant who did not know the participants. I checked the accuracy of the transcriptions completed by the research assistant. The transcription of the interviews was verbatim. Member checking requires the "participants to verify the accuracy of what has been written about them" (Rule & John, 2011, p. 108) and to ensure credibility of the data. Copies of the transcripts were offered to the participants for validation (Denzin & Lincoln, 1998c; Creswell, 2009) however only two accepted the offer with the others saying they trusted me to produce an accurate transcript. While working on the thesis, all confidential documents were kept in a safe place. On completion of the thesis, the documents were handed to the School of Social Science Education for safe-keeping for five years as this mandatory under UKZN's ethical policy. At the end of the five year period, the data will be destroyed to prevent it from being used for unauthorised purposes.

To ensure that students who were not part of the programme did not feel the participants were receiving an unfair advantage from being on the WIT programme and tutored by one of the MAF lecturers', any additional tutorial questions completed in the programme were uploaded

to Moodle[3] for any MAF student to access. Even though all additional work was uploaded to Moodle, providing the WIT students many more different questions that the mainstream student were not exposed to a tutorial environment may have opened up an avenue for complaints from mainstream students that they were prejudiced when compared with the WIT students. The WIT students were provided with a few additional questions over and above those received by the whole MAF class. I did not mark the tests or examinations of any of the participants' on the WIT programme to preclude any notion of preferential treatment. As lecturer/researcher I did not compromise my professional relationship with the students.

Creswell (2009, p. 88) and Cohen et al. (2007) concur that the research being conducted should be beneficial to both the participants (students) and the researcher (myself). The WIT programme was introduced based on the expectation that it would benefit both participants and me. From the students' perspective, it was anticipated that the programme would contribute towards developing their reflective thinking skills, taking responsibility for and actively participating in their own learning. A casual consequence was a reported increase in self-confidence and personal development of several of the participants. These non-academic outcomes such as self-concept and positive change in attitude were also reported in a peer learning study by Dobbie and Joyce (2008). The benefit to me would be to develop my pedagogy in teaching MAF and to develop the learning strategies of students as critical thinkers of MAF and in the wider discipline of accounting.

4.13   Concluding remarks

In this chapter I have discussed the research design and methodology that supports this qualitative study. I have also discussed the ethical considerations and rigour which were adhered to. In the following chapter I provide a detailed description of the IQA process and a Systems Influence Diagram is created.

---

[3] Moddle is an online learning support platform at UKZN which focuses on interaction and collaborative construction of content.

CHAPTER FIVE

Interactive Qualitative Analysis

I have attended a number of interviews and group dynamic sessions but this [IQA] indeed was a first (Sam, WIT programme, 2011)

5.1   Introduction

In Chapter Four, the research paradigm, design and data analysis methodologies used in this research were discussed and explained. In this chapter the IQA process is explained and it culminates with the telephoto view of the Systems Influence Diagram.

5.2   The IQA process

The strategy of inquiry used in this study is Interactive Qualitative Analysis. IQA is essentially a qualitative method in which quantitative data is utilised in combination with qualitative data in a systematic process. The purpose of the IQA approach is to draw a systems diagram or mindmap that represents a group view of the phenomenon being studied – in this case, MAF students' experiences of learning in a Writing Intensive Tutorial programme. The basic premise of IQA is that those closest to the phenomenon are best situated to construct meaning from the data. The voices of the participants are privileged over the voice of the researcher consequently the analysis is not biased by the researcher's preconceptions or meanings. Typically during focus group sessions, the participants generate and analyse data developing categories of meaning, affinities, and interpreting the cause and effect relationships between the affinities. The role of the researcher is to facilitate the process. The IQA systems diagram emanates from following a set of "rigorous and replicable rules for the purpose of achieving complexity, simplicity, comprehensiveness, and interpretability" (Northcutt & McCoy, 2004, p. 41).

5.2.1   Identifying constituents and affinities

In IQA terminology, the participants are referred to as constituents, however as previously noted they will be referred to as participants in this study in keeping with qualitative research terminology. Participants were selected according to the criteria of "distance and power" (Northcutt & McCoy, 2004, p. 69) in relation to the phenomenon being studied, MAF students' experiences of writing in a WIT programme. The participants for the current study were the students participating in the WIT programme as they shared a direct and common

experience of the phenomenon. In the focus groups, participants silently brainstormed their experiences of the phenomenon and wrote one idea per card/Post-it. Through a process of inductive and axial coding, the cards were organised into groups or themes of meaning and each theme (affinity) was named.

5.2.2 Focus group sessions

During this phase of the IQA process, participants' experiences of the WIT programme were probed in focus groups using silent brainstorming for data generation. The participants shared common perceptions of the WIT programme however each participant perceived the experience in different ways.

In the current study the theoretical coding was conducted at a later date where all participants were present. I merged the affinities generated in each focus group and the combined affinities were used during the theoretical coding. In IQA a typical focus group session takes three to four hours to complete (Northcutt & McCoy, 2004, p. 87). Realistically, it was not possible to have all 16 participants present for that length of time hence the IQA process was fragmented. The focus group sessions were videotaped and excerpts are included in this thesis with permission of the participants of the study.

At the commencement of the focus groups, consistent with IQA principles, participants were asked to relax, make themselves comfortable, close their eyes, take a few deep breaths and clear their minds. They were then asked to reflect on their experiences in the WIT programme. After that I put up a poster on which I had previously written issue statements (see Table 1). The issue statements were used to initiate reflection. Six issue statements used were:

Table 1: Issue statements

Writing is thinking on paper William Zinsser (1988)
• Tell about your experiences of WIT tutorials thus far.
• How do you feel about the structure of the WIT tutorials?
• How do you feel about the written tasks you have done?
• What written tasks did you find challenging?
• Have you found the written tasks effective in helping you learn MAF?

> - Can you describe specific tasks/skills/attributes you have acquired/refined as a result of your participation in the WIT programme?

After a brief discussion of the issue statement participants spent about 10 minutes silently reflecting on their experiences on the WIT programme. I provided them with Post-its on which to write their reflections. I told them there was no limit to the number of Post-its they could write, however, there must be only one thought, experience, word, per Post-it. I assured them that their responses were confidential, that they need not concern themselves with what other participants wrote and that the author of each Post-it would remain anonymous. It was necessary for the brainstorming to be conducted in silence to eliminate the influence of dominant members on the group and of myself in my position of power as a lecturer in relation to the participants, my students. My role as facilitator of the process was to provide a safe environment to guide the process and encourage the participants to write without censuring their thoughts, until they had exhausted their ideas (Northcutt & McCoy, 2004, p. 93). Once everyone finished writing, I affixed the Post-its randomly on the wall. For the purposes of this thesis, the verbatim Post-its (Annexure V) are arranged in alphabetical order.

5.2.3   Affinity analysis

Once the brainstorming is complete, then the analysis of the data generated commences. In the **clarification stage**, the participants are asked to begin by silently reading the Post-its. The facilitator then reads each Post-it aloud to make sure that participants understand what is written and to clarify if required. Initially, with the Monday group, I had begun by reading the Post-its aloud so that everyone had a shared meaning of the comments as recommended in IQA protocol. I noticed, however, that they were getting bored and restless so I stopped reading and asked if anyone wanted clarification of any of the statements. They all stated that they understood what had been written. Accordingly I proceeded to the clustering stage. As a result of my experience with the Monday group, I did not read the Post-its aloud to the Thursday group and instead asked if anyone required clarification of meaning. Again all participants were satisfied with their understanding of what had been written.

5.2.4   Inductive coding

In the **clustering stage,** the participants arranged the Post-its in sets with common meanings. This continues until consensus is reached with the placement of the Post-its into affinity groupings yielding a collective view. According to Northcutt and McCoy (2004, p. 98) this

process should be conducted silently to prevent dominant individuals or the facilitator monopolizing the process. With the Monday group after a short while they started talking. I decided against the silence and allowed them to talk among themselves and they appeared to do the sorting very happily. I was attentive to ensure that the process was not dominated by one or two individuals. The Thursday group was interesting in that when they were grouping the Post-its there was talk about auditing and sampling and other technology, showing that they were relating the exercise to what they were learning and the bigger picture of being a CA. With the Thursday group, this exercise worked particularly well due to their application of the auditing metaphor thus ensuring that the thematic groupings 'in our opinion … fairly represent the …' affinities.

5.2.5   Axial coding

Participants then reviewed the Post-its under each grouping to ensure that they were under the correct themes. A Post-it was placed at the top of each thematic grouping naming it. A limited amount of **refining** of Post-its was required to ensure that all of the Post-its were correctly categorised to the relevant affinity. The Monday group produced six affinities and the Thursday group seven affinities (see Table 2). I observed that there was a common core of the affinities generated by each group. I then aggregated the affinities produced by each group and nine common affinities emerged (Northcutt & McCoy, 2004, p. 215). These affinities are shown in Table 2. This was necessary as a common interview protocol was developed from the combined affinities and the integrity of each focus group was maintained. I was mindful of the underlying principle of IQA, that those closest to the phenomenon are most suited to coding it. After the Thursday group I typed up the Post-its and affinities. The next step was the affinity write-up. However, due to the time constraints of the participants they were unable to complete the write-up. I, as facilitator, completed the **affinity write up** (Northcutt & McCoy, 2004, p. 113). The IQA focus group process takes between three and four hours to complete (Lin & Tu, n.d.) and the participants did not have that length of time free between lectures.

Table 2: Monday group, Thursday group and combined group affinities

Monday group affinities	Thursday group affinities	Combined group affinities

	Battlefield Challenging	Challenging
	Criticism	Criticism
Enjoyable	Enjoyable	Enjoyable
	Interactive	Interactive
Structure	Positive structure	Positive structure
Written tasks		Written tasks
Test preparation	Studying positives	Study techniques and test preparation
Understanding		Understanding

5.2.6   Focus group affinity write-up

As noted above two separate focus groups were convened for pragmatic reasons. In response to the issue statements on the participants' experiences in the WIT programme, more than 130 responses were generated in the form of a word, phrase or sentence written on Post-its. The participants in each focus group then sorted the responses into affinities. I merged the affinities from the two focus groups to produce the nine affinities listed in Table 2. A short description of each affinity follows. A detailed analysis of each affinity will be undertaken in subsequent chapters in conjunction with the semi-structured individual interviews, observations and reflective journals. These affinities were used to develop the interview protocol for the individual semi-structured open-ended interviews.

5.2.6.1 Challenging

This affinity represents the fact that some participants found the tasks allocated in the WIT programme to be challenging (see Table 3). Mention was made of relevant costing which is one of the topics taught in MAF which they found especially challenging. Even though some of the tasks assigned were found to be challenging, they enriched student learning. One of the participants reported the tasks were "challenging but funny enough after tut, I go out knowing everything I battle with".

Table 3: Challenging

- Challenging at times but totally worth it
- Intellectually stimulating, informative, well-structured, relaxed yet challenging

- I thought I will pass my second test but relevant costing let me down and end up failing it
- Relevant costing!
- Relevant costing was challenging: I even battle with in the 2nd test
- Tasks are always effective given that one supplements them by studying. To me they've been effective
- Tasks I have already done were challenging but funny enough after tut, I go out knowing everything I battle with
- The WIT tutorials have been challenging because they force you to think 'out the box'
- They were challenging and educational
- Since the WIT program started, the most challenging task was the relevant costing question combined with process costing was the most challenging
- Some task were simple but most of them were challenging

5.2.6.2 Criticism

The affinity *criticism* represented the fact that some participants were critical of the WIT programme (see Table 4). It was noted that the programme could be improved and more done in the future to enhance students' understanding. No specific improvements were suggested or to how to implement improvements. When constructing the Affinity Relationship Table (ART) participants interpreted this affinity as criticisms of their own writing despite the fact that I provided them with a description of the affinity from the focus group comments.

Table 4: Criticism

- Could be bettered and improved for understandability
- Not not really but I believe it would the only way to improve in MAF
- Personally I would prefer it if Mrs Bargate first gave a brief understanding of what the topic is trying to achieve sometimes I know how to calc something but I don't know why
- Possibily more could be done in the future
- The structure of the tut is okay. How we conduct question as a group find a chance to ask question and gain allot of understanding

5.2.6.3 Enjoyment

This affinity represents how the group enjoyed the WIT tutorials (see Table 5). The tutorials were seen as fun, but learning was occurring at the same time often without the student being aware of it. The average duration of the WIT tutorials was two hours compared to 80 minutes for the mainstream tutorials. Because they were enjoying the tutorial they did not realise the time had passed so quickly and they often remarked on this fact. In the second one-on-one interviews, Greg remarked "the 2 hours that we spent with you doesn't really fell like 2 hours, I mean after we only get there and by the time we leave, it's like wow, 2 hours has actually past" (Greg, 561 – 563, 2011). On one occasion I had an appointment to attend after the tutorial. Some of the participants were reluctant to leave the tutorial despite the fact I had informed them of the importance of my appointment. In the end I asked them to lock up and leave the key with the administrator when they were finished.

Table 5: Enjoyment

• Enjoy what you do
• Fun
• Fun, humourous, entertaining
• Fun learning environment
• Interesting (x2)
• Teaching is fun it helps you understand!
• The experiences were fun, innovative and creative

5.2.6.4 Interaction

This affinity describes the participants' preference for working in groups during the tutorial (see Table 6). For the majority of them it was the first time they had worked in groups in tutorials. This was a new method of learning for them and they enjoyed the collaborative learning. Every week I allocated participants to groups which resulted in them getting to know everyone in the class as I did not allow friends to sit with friends. I allocated on the basis of my perception of the ability of each participant such that each group had a mix of 'strong' and 'weak' participants. In the groups they felt comfortable to ask questions without feeling stupid or embarrassed. They said they would never have asked questions in mainstream tutorials for fear of appearing stupid in front of the class.

Table 6: Interaction

- All tutorials should be this interactive
- Engaging different ideas
- Free flowing structure allowing us to ask what we are not sure of
- Got to know new people, made new friends and the group discussions, presentations, etc were fun
- Groupwork
- Group learning
- Have experience a lot from the WIT programme like chatting with other students about problems concerning tut homework
- Have knew a lot of people in this tut and students to ask questions to not necessary during tut even in library or lecture rooms
- I am able to do questions in different ways as I discuss with group members. I'm able to expand my thinking ability now and think in a more objective manner
- Interacting skills
- Interaction skills
- It was interesting because I met new people
- Learning from peers
- More hands on
- Participation with a common goal
- Promotes student interaction and 'peer' learning
- Relevant to the curriculum
- Working in groups helps identify problems and speak about them without feeling embarrassed

5.2.6.5 Personal confidence

This affinity represents the growth in the participants' personal confidence (see Table 7). The programme benefitted them in ways other than purely academic, for example, oral presentation skills and learning to work with others in a group, an essential skill in the workplace. As one of the participants succinctly commented, "Basically I have grown into a man" and the sentiment expressed of "growing up" was echoed by others. From an academic perspective, time management and the motivation to succeed improved.

Table 7: Personal confidence

- Ability to relate
- Answering theory type questions
- Being motivated by the written tasks to pass the course
- Communication with people
- Empowering
- Have also encourage about some students who work very hard for MAF. To me I found MAF very difficult but after 2nd test seeing my class mates passed MAF! Told myself nothing I can't do
- I can now apply what I'm reading into the real world events. Basically I have grown into a man
- I feel more confident in giving answers and asking for help thanks to the programme
- I have learnt to work with other people
- I need to assign more attention/effort into them
- It could never have been done without them
- It helps me to see how MAF fits into everyday life (my life)
- It taught me how to work with people in a group
- Learnt to open up and express my views
- My communication skills, my ability to interact with people, working in groups that are diversified (i.t.o. race, gender, etc.)
- My experiences thus far have been nothing but positive especially the fact that I got to interact on a different level with many different people, making me more outgoing and confident
- My mark has increased by 9% and it's certainly due to the WIT programme
- My presentation skills have improved significantly!
- People skills are vital!
- Speaking in front of the crowd
- This helped me to know that the past does not determine the future
- Those tasks that were informal helped me to express my grief about failing MAF last year
- Time management in tests improved (x2)

5.2.6.6 Positive structure

This affinity represents the structure of the WIT tutorials (see Table 8). The participants enjoyed the structure of the programme as the tutorials were "organised and not monotonous!!" They also enjoyed the fact that the structure of the tutorial was different every week as they were allocated different tasks each week. The collaborative learning was particularly effective and the tutorial was structured to support group work. They also preferred the WIT tutorials to the mainstream tutorials as in the mainstream tutorials the tutor, normally a fourth year student, goes through the solutions 'like a robot' and the students are not involved in the tutorial. This is evidenced by the following comments: "highly superior to the normal tut process" and "should also be tested for its effectiveness in other disciplines".

Table 8: Positive structure

• All of the tasks have been effective
• I have enjoyed the tutorials as they are different every week
• I really approve and enjoy the structuring of the tutorials as it is very effective and efficient
• It is manageable groups
• It should also be tested for its effectiveness in other disciplines
• It sort of forces me to know my work in a natural way
• Organized
• Organised and not monotonous!!
• Other students should be given the opportunity to experience this kind of structure
• Solid structure in how to think
• Structure of the WIT tutorials very good as focuses on the areas where we are battling the most and gives us individual attention
• Structured very well, nice to go through examples extensively in a group (even better when someone in the group knows how to solve the problem)
• The structure is excellent, group work works much more effectively than doing the work individually
• The structure is good

> - The structure of the tuts is great because it's always something new – never the same
> - The WIT tutorials are highly superior to the normal tut process
> - Tutorials should be performed in the same manner in which the WIT tutorials were structured as I personally feel that one learns more from a peer rather than a tutor explaining the work
> - Well structured (x2)
> - Yes! Identifying important aspects of section

5.2.6.7 Study technique and test preparation

This affinity represents a subtle change in the participants' studying technique and test preparation as a result of their participation on the WIT programme (see Table 9). The written summaries helped with studying and preparing for the tests. The written tasks also "help understand the logic behind the calculations" and resulted in a shift from rote learning to learning with understanding. They also benefitted from learning that there are numerous ways to approach a problem and to "arrive at the solutions using more than one method by looking at things from other peoples perspectives".

Table 9: Study technique and test preparation

> - I enjoy writing out, I remember better when we write down and it gives me a feel of how to approach the tests and exams in written format
> - I have learnt time management skills and more importantly, exam technique which helped me complete a lot more in the test than I usually would have!!
> - I learnt how to solve problems and arrive at the solutions using more than one method by looking at thing from other peoples perspectives
> - I struggled with being able to teach other people particular concepts and now I have found out that the way in which I learn these concepts, I interupt the concepts in the wrong way
> - It taught me how to study MAF
> - Learning MAF or any subject without cramming
> - More understanding and relaxed every week as they require us to go through the work
> - Reviewing reasons to why my test 2 mark differs to my set goal and finding possible ideas to improve
> - Study techniques, answering guides to tests, review procedures

- The budgeting slacks written tasks but helps you to understand the section very well in order to write about it
- The written amounts help understand the logic behind the calculations i.e. no repetitive learning of calculations only!
- The written tasks have been effective in helping me learn MAF as they make you think from another perspective
- Totally, at first I used to rush into a question without thinking about it but now I'm a changed man
- Useful tool for reviews and revision purposes, assists in studying the topic and (in certain) weeks provides insight to real world application
- Written is also a form of studing, hence the written tasks is something I enjoy as it helps in equipming me for tests
- Yes as summaries provide for understanding the topic prior to reducing it to one page (or a few)
- Yes we summarised chapters, answered theory based questions. This will help us be prepared for theory type of questions
- Yes, writing helps with remembering for tests
- Yes written tasks helped me learning MAF

5.2.6.8 Understanding

This affinity represents aspects of the participants' improved understanding of MAF concepts developed through the WIT programme (see Table 10). Increased understanding of MAF resulted in the development of different ways of the thinking and making them more focused on preparing for the tutorials.

Table 10: Understanding

- Attending these tutorials have helped me develop 'out of the box' thinking
- Attending these tutorials have helped me express myself and thoughts more easily as well as helping transfer my thoughts onto paper
- Due to joining this tutorial I have went through a few experiences, one of which been staying more focused in tutorials and also learnt to communicate well
- Experience in working in groups with different personalities but with on goal to pass MAF 300

- Helpful. I got quite a better understanding of topics covered in lectures
- I can clearly read a question out to myself and try to understand what it requires of me
- I find that being in the WIT tutorial, I am able to ask questions which I would not have the courage to do in a normal tutorial
- I'm slowly but surely trying to manage my time when writing tests
- It helped me grasp the concepts of MAF much more easily
- My understanding of topics has improved. Its helped in skills needed to work in groups – specially when it comes to explaining
- The written tasks helped me understand the basic concepts
- Really think I've grown in terms of understanding and doing MAF
- My WIT experience has been outstanding

5.2.6.9 Written tasks

This affinity represents the participants' comments on the written tasks (see Table 11). The written tasks contributed to an improvement in learning as one of the participant's commented that the information "stays in your brain longer". It also assisted them with the written component of the MAF tests as their writing practices and understanding of concepts had generally improved.

Table 11: Written tasks

- I found the question that integrated relevant costing with other topics difficult
- I think I have learnt to write and set-out my work alot better thanks to the programme
- It is very effective as it teaches on how to express your thoughts in written and gives you a structure on how to tackle theory based type of questions
- Standard cost and relevant costing ... but after doing some revision and some reading it got much better
- Tasks requiring you to argue specific points
- The summary on std costing
- The written tasks have been relatively ok so far (except for the relevant costing extra question)
- The written tasks have held me as I am now summarising key aspects of every concept taught, not only in MAF but for the other subjects
- The written tasks I most enjoyed were those tasks that required self-reflection

- Writing can be annoying sometimes when the answer is straight forward
- Writing down regurgetated information achieves nothing in my mind
- Writing down something is always nice if you understand what your writing
- Writing is expressing your mind i.e. it facilitates freedom of the mind
- Writing is learning
- Writing is thinking on your piece of paper
- Written tasks have helped me to able to apply different concepts in different ways, not just in the conventional calculation way
- Yes, written tasks are effective, infor stays longer in the brain

5.3   Group reality: systems elements

5.3.1   Detailed Affinity Relationship Table

An **Affinity Relationship Table** (ART) is used by focus group participants to record an analysis of each pair of affinity relationships. The relationship can be one of three, either:

Understanding $\longrightarrow$ written tasks (**understanding** influences **written tasks**)

Understanding $\longleftarrow$ written tasks (**written tasks** influence **understanding**)

Understanding **< >** written tasks (no relationship between the affinities)

Further, participants are asked to write a hypothesis "that reflects their experiences and that supports the cause and effect relationship" (Northcutt & McCoy, 2004, p. 152) between the affinity pairs. This could be in the form of an "if/then" statement. See Annexure VII.

In this research I gave the participants the option of completing the ART individually or in dyads. Eight participants chose to complete it individually and eight chose to do it with a friend, resulting in four dyads. I found that dyads took much longer to complete than the individuals as they had to reach consensus on which way the arrows should go. The exercise was completed during a tutorial period and I chose a week where the topic was minor. The majority of the participants took far longer to complete that exercise than I had anticipated and after about 45 minutes I decided to stop and asked them to return the affinity table to me in the next day or two. Within four days all of the ARTs had been handed to me. The collective ART, in Annexure VIII, is compiled verbatim from the participants' views of the phenomenon. There were some flippant answers, such as "If you don't understand then you criticize the lecturers", however I left them in and did not edit the comments in any manner.

5.3.2 Group composite

With IQA it is possible to analyse the ART at either a group composite level or an individual level to create the **IRD**. In this study, the results were analysed on a group level to determine the group's composite understanding of the phenomenon (Human-Vogel & Mahlangu, 2009). The Pareto protocol is a statistical method that was used to determine the optimal number of relationships to comprise the IRD. The fundamental principle that the Pareto protocol is based on is that "A minority of the relationships in any system will account for a majority of the variation within the system." (Northcutt & McCoy, 2004, p. 157) This optimum number of relationships will be at the point where Power reaches a maximum (as can be seen in Table 12). Using the individual and dyad ARTs (Annexure VIII), each relationship frequency is tallied, entered on a spread sheet and the total number of votes for each relationship calculated. A total of 344 votes were cast for all combinations of affinity pairs. The outcome of the process is frequency of each relationship in affinity pair order (see Table 12).

Table 12: Frequency in affinity pair order

Affinity pair relationship	Frequency	Affinity pair relationship	Frequency	Affinity pair relationship	Frequency
1 → 2	10	2 → 7	10	4 → 8	9
1 ← 2	2	2 ← 7	2	4 ← 8	1
1 → 3	9	2 → 8	7	4 → 9	7
1 ← 3	0	2 ← 8	3	4 ← 9	3
1 → 4	9	2 → 9	7	5 → 6	6
1 ← 4	1	2 ← 9	1	5 ← 6	3
1 → 5	9	3 → 4	8	5 → 7	6
1 ← 5	3	3 ← 4	2	5 ← 7	3
1 → 6	9	3 → 5	8	5 → 8	6
1 ← 6	0	3 ← 5	3	5 ← 8	3
1 → 7	7	3 → 6	9	5 → 9	3
1 ← 7	1	3 ← 6	0	5 ← 9	6
1 → 8	11	3 → 7	9	6 → 7	6
1 ← 8	0	3 ← 7	3	6 ← 7	2
1 → 9	3	3 → 8	3	6 → 8	7
1 ← 9	6	3 ← 8	1	6 ← 8	4

2 → 3	10	3 → 9	4	6 → 9	3
2 ← 3	2	3 ← 9	3	6 ← 9	3
2 → 4	3	4 → 5	9	7 → 8	8
2 ← 4	9	4 ← 5	3	7 ← 8	3
2 → 5	6	4 → 6	7	7 → 9	3
2 ← 5	4	4 ← 6	2	7 ← 9	3
2 → 6	11	4 → 7	8	8 → 9	6
2 ← 6	0	4 ← 7	0	8 ← 9	3
Sub total	**125**	**Sub total**	**112**	**Sub total**	**107**
				Total frequency	**344**

In this study power reaches a maximum (29.683) at 32 relationships which accounts for 74% of the variation in this system (see Table 13). Therefore 32 relationships will be included in the group IRD.

Table 13: Affinities in descending order of frequency with Pareto protocol and power

No	Affinity pair Relationship	Frequency sorted (descending)	Cumulative frequency	Cumulative percent (relation)	Cumulative percent (frequency)	Power
1	2 → 6	11	11	1.389	3.198	1.809
2	1 → 8	11	22	2.778	6.395	3.618
3	2 → 7	10	32	4.167	9.302	5.136
4	2 → 3	10	42	5.556	12.209	6.654
5	1 → 2	10	52	6.944	15.116	8.172
6	4 → 8	9	61	8.333	17.733	9.399
7	4 → 5	9	70	9.722	20.349	10.627
8	3 → 7	9	79	11.111	22.965	11.854
9	3 → 6	9	88	12.500	25.581	13.081
10	2 ← 4	9	97	13.889	28.198	14.309
11	1 → 6	9	106	15.278	30.814	15.536
12	1 → 5	9	115	16.667	33.430	16.764
13	1 → 4	9	124	18.056	36.047	17.991
14	1 → 3	9	133	19.444	38.663	19.218

15	7 → 8	8	141	20.833	40.988	20.155
16	4 → 7	8	149	22.222	43.314	21.092
17	3 → 5	8	157	23.611	45.640	22.028
18	3 → 4	8	165	25.000	47.965	22.965
19	6 → 8	7	172	26.389	50.000	23.611
20	4 → 9	7	179	27.778	52.035	24.257
21	4 → 6	7	186	29.167	54.070	24.903
22	2 → 9	7	193	30.556	56.105	25.549
23	2 → 8	7	200	31.944	58.140	26.195
24	1 → 7	7	207	33.333	60.174	26.841
25	8 → 9	6	213	34.722	61.919	27.196
26	6 → 7	6	219	36.111	63.663	27.552
27	5 ← 9	6	225	37.500	65.407	27.907
28	5 → 8	6	231	38.889	67.151	28.262
29	5 → 7	6	237	40.278	68.895	28.618
30	5 → 6	6	243	41.667	70.640	28.973
31	1 ← 9	6	249	43.056	72.384	29.328
32	2 → 5	6	255	44.444	74.128	29.683
33	2 ← 5	4	259	45.833	75.291	29.457
34	6 ← 8	4	263	47.222	76.453	29.231
35	3 → 9	4	267	48.611	77.616	29.005
36	7 ← 9	4	271	50.000	78.779	28.779
37	7 ← 8	3	274	51.389	79.651	28.262
38	7 → 9	3	277	52.778	80.523	27.745
39	6 ← 9	3	280	54.167	81.395	27.229
40	5 ← 8	3	283	55.556	82.267	26.712
41	5 ← 7	3	286	56.944	83.140	26.195
42	5 ← 6	3	289	58.333	84.012	25.678
43	5 → 9	3	292	59.722	84.884	25.161
44	4 ← 9	3	295	61.111	85.756	24.645
45	4 ← 5	3	298	62.500	86.628	24.128
46	3 ← 9	3	301	63.889	87.500	23.611
47	3 ← 7	3	304	65.278	88.372	23.094

48	3 ← 5	3	307	66.667	89.244	22.578
49	3 → 8	3	310	68.056	90.116	22.061
50	2 ← 8	3	313	69.444	90.988	21.544
51	2 → 4	3	316	70.833	91.860	21.027
52	1 ← 5	3	319	72.222	92.733	20.510
53	1 → 9	3	322	73.611	93.605	19.994
54	8 ← 9	3	325	75.000	94.477	19.477
55	6 ← 7	2	327	76.389	95.058	18.669
56	4 ← 6	2	329	77.778	95.640	17.862
57	3 ← 4	2	331	79.167	96.221	17.054
58	2 → 3	2	333	80.556	96.802	16.247
59	1 → 2	2	335	81.944	97.384	15.439
60	2 ← 7	2	337	83.333	97.965	14.632
61	6 → 9	2	339	84.722	98.547	13.824
62	4 ← 8	1	340	86.111	98.837	12.726
63	3 ← 8	1	341	87.500	99.128	11.628
64	2 ← 9	1	342	88.889	99.419	10.530
65	1 ← 7	1	343	90.278	99.709	9.432
66	1 ← 4	1	344	91.667	100.000	8.333
67	4 ← 7	0	344	93.056	100.000	6.944
68	3 ← 6	0	344	94.444	100.000	5.556
69	2 ← 6	0	344	95.833	100.000	4.167
70	1 ← 8	0	344	97.222	100.000	2.778
71	1 ← 6	0	344	98.611	100.000	1.389
72	1 ← 3	0	344	100.000	100.000	0.000

Table 14 (below) explains the calculations made in Table 13 (above).

Table 14: Explanation of calculations in Table 13

(Northcutt & McCoy, 2004, p. 160)

Cumulative frequency	This column contains the running total or cumulative frequency calculated by adding the number of votes cast for the affinity pair (column 3) added to the previous total (column 4).

Cumulative percent (relation)	Each one of the 72 relationships represents 1/72 or 1.39% of the total possible number of relationships. This cumulative percentage is one of two factors in the Power index.
Cumulative percent (frequency)	The cumulative percentage of votes cast for each affinity pair based on the number of votes cast (344) added to the previous total.
Power	The difference between the cumulative percent (frequency) and the cumulative percent (relation) equals Power. Power is the degree of optimization in the system to minimize the number of affinity relationships.

5.3.3   The MinMax criterion

When deciding which relationships to include or exclude from the composite group IRD, the last two columns of the Pareto table are pivotal in determining where to set the cut-off point as the relationships are displayed in decreasing order of frequency. Relationships 67 to 72 (Table 13) are excluded as they failed to attract a single vote. However the decision still needs to be made whether, in the composite IRD, to account for relationships such as those between 55 and 66 which attracted one or two votes. The elegance of the IQA is based on the trade-off between accounting "for maximum variation in the system ... while minimizing the number of relationships in the interest of parsimony" (Northcutt & McCoy, 2004, p. 160).

5.3.4   Accouting for maximum variance

An appraisal of Table 13 indicates that comparatively few of the possible 72 relationships account for most of the variance, consistent with the Pareto principle. The first 15 relationships (20.833% of the total) accounted for 41% of the variation and the first 32 (44.444% of the total) account for 74.128% of the total variation.

5.3.5   Maximum variance: frequency

Figure 3 is an illustration of the variance accounted for by each succeeding relationship.
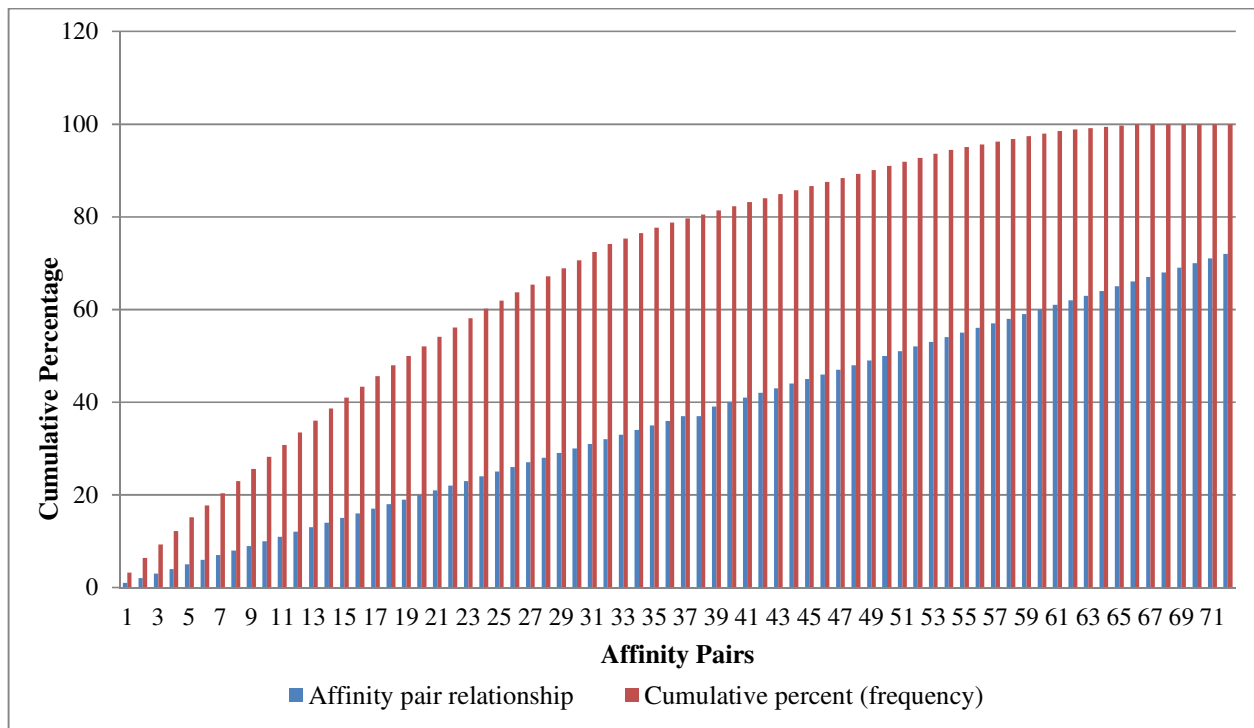
Figure 3: Cumulative percent – total relationships

5.3.6   Minimizing the number of affinities: power

As shown in Figure 4 power reaches a maximum at affinity pair number 32, which accounts of 74% (Figure 3) of the variation in the system. Accordingly, the first 32 affinity pair relationships will be included in the group IRD as this is the optimal number in compliance with the MinMax criterion.
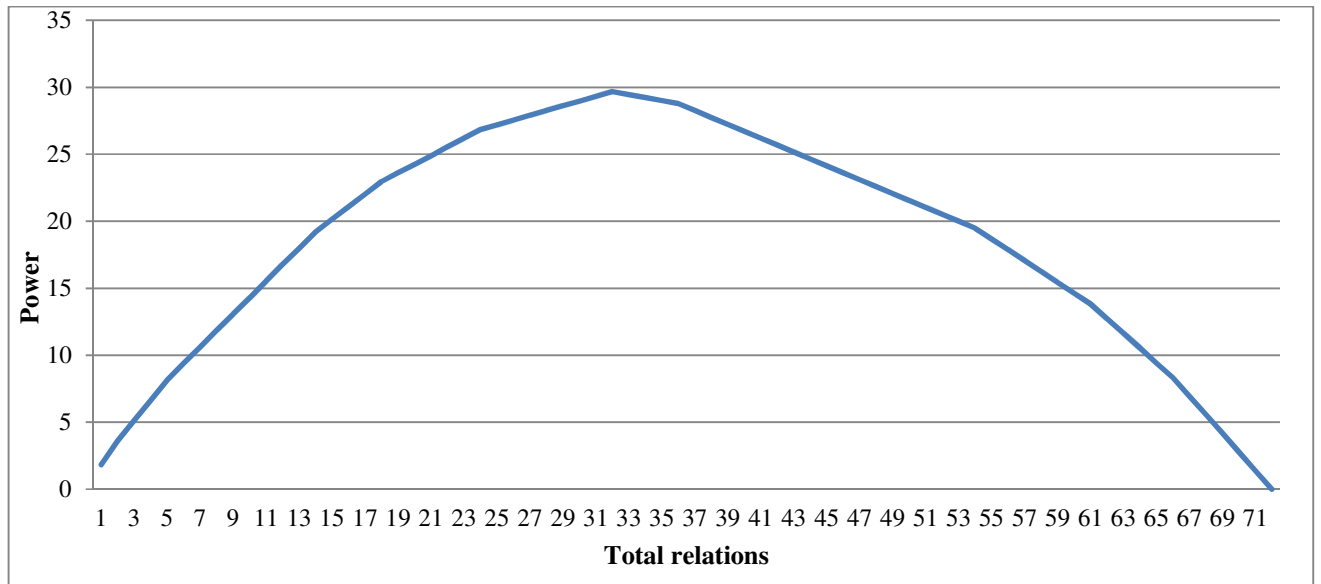
Figure 4: Power to total relationships

5.4   Creating a group composite: the Inter Relationship Diagram

The **Inter Relationship Diagram** (IRD) is created from the first 32 affinity pair relationships (Table 13) and this is the first step in **rationalising** the system (Northcutt & McCoy, 2004, p. 170). Each affinity relationship is mapped to create the composite IRD. The direction of the arrow in each affinity pairing determines which affinity is influenced by which. The up arrows represent the row driving the column and the left arrows represent the column driving the row. For example, the first affinity pairing, $2 \rightarrow 6$ signifies that affinity 2 (understanding), cause, is influencing affinity 6 (enjoyment), effect. The IRD works on a similar principle to double-entry booking as every affinity will have 'two entries' in the tabular IRD and the 'outs' and 'ins' need to balance with the number of affinity relationship pairs (32). Thus the affinity 2 will have ↑ (out) into affinity 6 and the balancing entry will be ← (in) to 2 from 6 (Table 15). Delta (Δ) is the difference between the 'outs' and 'ins' for each affinity. The blue shaded diagonal represents placeholders as affinities cannot influence themselves and each half is a mirror image of the other half.

Table 15: Composite focus group tabular IRD

	1	2	3	4	5	6	7	8	9	out↑	in←	Δ
1		↑	↑	↑	↑	↑	↑	↑	←	7	1	**6**
2	←		↑	←	↑	↑	↑	↑	↑	6	2	**4**
3	←	←		↑	↑	↑	↑			4	2	**2**
4	←	↑	←		↑	↑	↑	↑	↑	6	2	**4**
5	←	←	←	←		↑	↑	↑	←	3	5	**-2**
6	←	←	←	←	←		↑	↑		2	5	**-3**
7	←	←	←	←	←	←		↑		1	6	**-5**
8	←	←		←	←	←	←		↑	1	6	**-5**
9	↑	←		←	↑			←		2	3	**-1**

Table 16: Composite focus group IRD - sorted in descending order

	1	2	3	4	5	6	7	8	9	out↑	in←	Δ
1		↑	↑	↑	↑	↑	↑	↑	←	7	1	**6**
2	←		↑	←	↑	↑	↑	↑	↑	6	2	**4**
4	←	↑	←		↑	↑	↑	↑	↑	6	2	**4**
3	←	←		↑	↑	↑	↑			4	2	**2**
9	↑	←		←	↑			←		2	3	**-1**
5	←	←	←	←		↑	↑	↑	←	3	5	**-2**
6	←	←	←	←	←		↑	↑		2	5	**-3**
7	←	←	←	←	←	←		↑		1	6	**-5**
8	←	←		←	←	←	←		↑	1	6	**-5**

The IRD provided me with the data needed to determine which of the affinities were drivers and outcomes. Affinities with positive deltas (1, 2, 4, 3) are drivers or causes and affinities with negative deltas (9, 5, 6, 7, 8) are outcomes or effects. Northcutt and McCoy (2005, p. 174) comment that there are occasions where all 'outs' and 'ins' have a value other than zero as is the situation in this study. It is still appropriate to label certain affinities as primary (1, 7, 8) which is indicative of a strong cause or effect relationship between the relevant affinities. The nomenclature of the affinities is outlined as tentative SID assignments in Table 17.

Table 17: Tentative SID assignments: focus groups

Affinity		Assignment
1	Positive structure	Primary driver
2	Understanding	Secondary driver
4	Challenging	Secondary driver
3	Written tasks	Secondary driver
6	Enjoyment	Secondary outcome
5	Study technique and test preparation	Secondary outcome
9	Criticism	Secondary outcome
7	Personal confidence	Primary outcome
8	Interaction	Primary outcome

5.5 Focus group Systems Influence Diagram (SID)

5.5.1 Cluttered SID
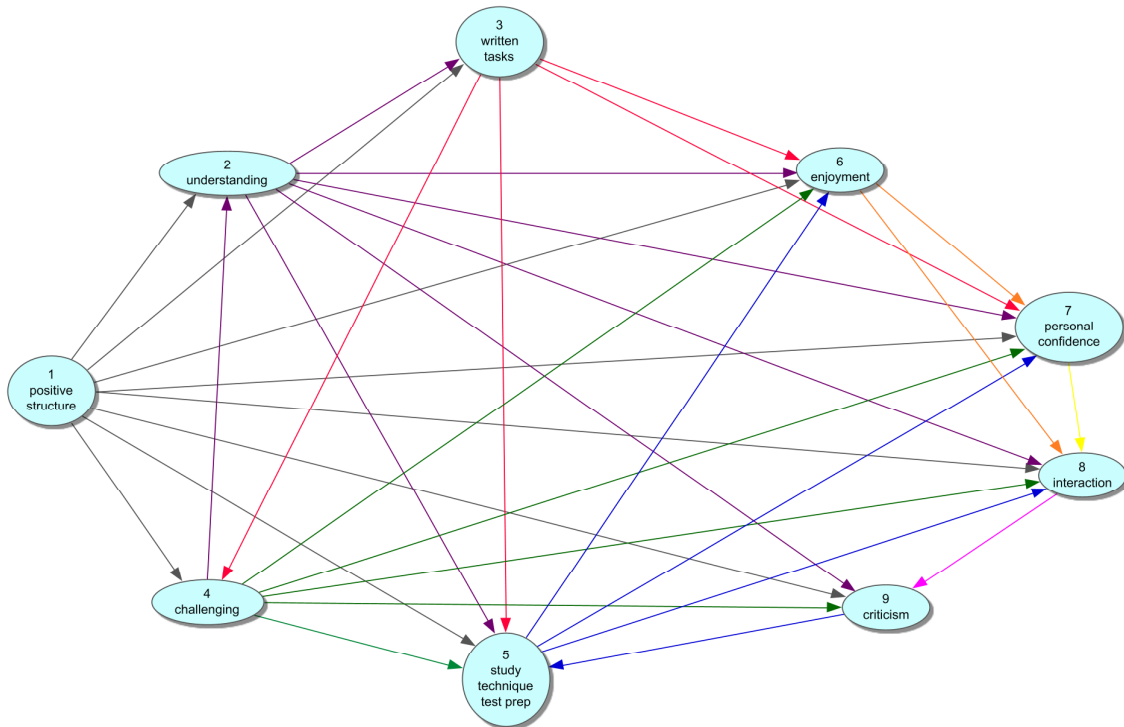
Figure 5: Cluttered SID

The aggregated focus group data is utilised in drawing the **SID**. The SID is a visual representation of all the relationships of the entire system (Northcutt & McCoy, 2004, p. 174). When drawing the SID primary drivers are placed on the extreme left hand side and

primary outcomes on the extreme right hand side. The secondary outcomes and drivers are allocated between the primary drivers and outcomes with the drivers placed on the left and outcomes on the right. For every relationship in the IRD (Table 16) an arrow is drawn between the two affinities indicating the direction of cause and effect the product of which is the cluttered SID, Figure 5. The cluttered SID has limited explanatory value as it is too complex for meaningful analysis. For the SID to have relevance it is a precondition that it be uncluttered by removing redundant links.

5.5.2 Uncluttered SID

Once the relationships are examined all redundant links are removed to simplify the diagram, resulting in an uncluttered SID. In the cluttered SID from this study (Figure 5), $1 \rightarrow 3$ would be considered a redundant link because $1 \rightarrow 2$ and $2 \rightarrow 3$, hence the link $1 \rightarrow 3$ can be removed making the system simpler and one that has optimum explanatory power (Northcutt & McCoy, 2004, p. 177). The process of removing redundant links will continue until all had been removed and the resultant uncluttered SID represents MAF students' experiences of learning in a WIT programme. Figure 6 is a pictorial representation of the uncluttered SID.
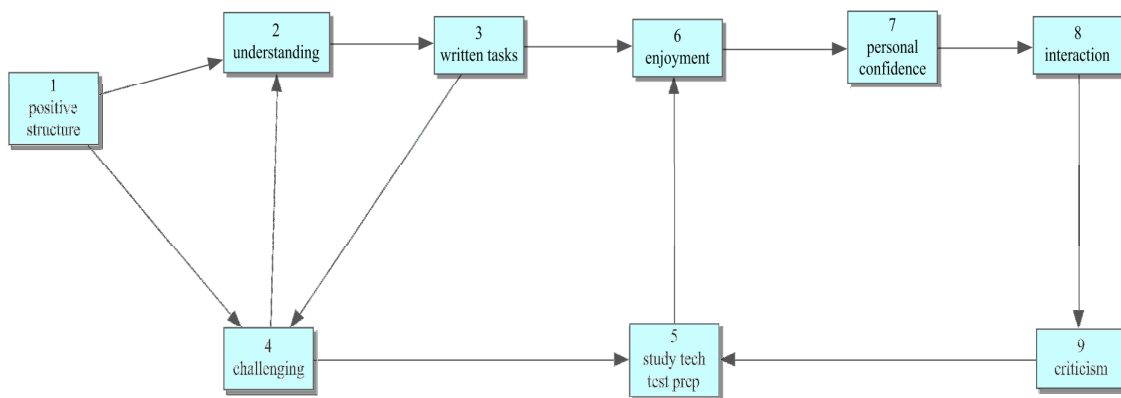
Figure 6: Uncluttered SID

5.5   A tour through the system

Looking at the uncluttered SID represented in Figure 6, the following interpretation can be offered. The learning experiences of MAF students in a WIT programme are driven by the structure of the programme and this influences the students' understanding and the challenging nature of the tasks completed. The improved understanding influences the written tasks, which in turn influences the challenging nature of the programme and this influences

understanding of MAF. These three elements form a feedback loop. The written tasks influence enjoyment and the challenging nature influences study techniques and test preparation. The enjoyment affinity influences personal confidence which influences interaction and this influences criticism which influences studying techniques and test preparation. Another feedback loop is formed between affinities 6, 7, 8, 9 and 5. The outcome of the system is representative of the interactive nature of the WIT programme.

5.6 Feedback loops and zooming

Within the system two feedback loops were identified:

- understanding, written tasks and challenging, enjoyment; and
- personal confidence, interaction, criticism and studying techniques, test preparation.

Northcutt and McCoy (2004, p. 335) state that a feedback loop consists of at "least three affinities, each influencing the other directly or indirectly". Feedback loops can be renamed by reviewing the components of each subsystem. The process is referred to as "zooming" (Northcutt & McCoy, 2004, p. 335). The substitute name for the subsystems will be generated by reviewing the axial coding and descriptions together with the placements of the feedback loops within the overall system. The defined components of the first subsystem (2, 3, 4) suggest *Intellectually Stimulating.* The defined components of the second subsystem (6, 7, 8, 9, 5) suggest *Learning is Fun.* These new "superaffinities" replace the feedback loops via substitution in a new view that is zoomed out (Northcutt & McCoy, 2004, p. 335) (see Figure 7).

Figure 7: WIT learning experience telephoto view SID

The new system is identical to the first (Figure 6) except that the seven affinities from the two feedback loops have been collapsed or zoomed out into more general terms – 'intellectually stimulating' and 'learning is fun'. This telephoto view SID cannot be zoomed any further and the result is an elegant linear system with no branching. This view is used to draw the conclusions presented in Chapter Eight of this study.

5.7   Conclusion

This chapter presented an account of the IQA process. Affinities were identified by participants and presented in the ART from where the relationships between affinities were described in the IRD. The culmination of the chapter is the SID which is a visual representation of the system. The affinities conceived by the participants in the focus groups provides the gist for the interview protocol of the interview phase of the study which is described in the following chapter.

CHAPTER SIX

Describing the Relationships and Analysis

Each tutorial is a new learning experience for me (Shannon, MAF programme, 2011)

6.1   Introduction

As I have shown in the previous chapter, students were divided into two focus groups in which they responded as individuals to an issue statement and after reflection wrote their thoughts on Post-its which they then shared with the group. They later grouped the Post-its under particular themes or affinities. On the basis of these affinities, I present a distillation of students' perceptions of the WIT tutorial programme. The results are analysed according to the group from which they derived, that group having a sense of the beliefs common to the group and concerning the phenomenon. Individual distribution of responses is not taken into account.

This chapter, of necessity long, incorporates the primary and secondary drivers and the primary and secondary outcomes. I was contemplating splitting it into two chapters, but I felt this would detract from the flow and sequencing of the story I wanted to tell. It is divided into four major sections: the primary driver – *positive structure*; the secondary drivers – *understanding, challenging* and *written tasks*; the primary outcomes – *interaction* and *personal confidence*; and the secondary outcomes – *study technique and test preparation*, *criticism* and *enjoyment*. These sections make the chapter accessible and enhance readability.

The data so grouped provide an audit trail for my arguments, rendering the data "more transparent, more traceable, more codified" (Sandelowski, 2005). There follows an analysis of the data which at the end of the previous chapter I showed on a composite System Influence Diagram (SID). The components of the SID consist of individual students' responses or the responses produced in dyads when completing the Affinity Relationship Table (ART) which demonstrate their experiences of the WIT tutorials. The present chapter describes the results of the SID and then presents an analysis of the affinities. My description is as far as possible free from researcher bias – "by presenting only the facts, the researcher adds credibility to the data" (Northcutt & McCoy, 2004, p. 300). A combination of the individual semi-structured open-ended interviews and the students' reflective journals were

used to describe each affinity from the point of view of the group. Excerpts from the interviews have been redacted in accordance with IQA procedures to limit distracting verbal tics, such as *like* and *you know* (Carter et al., 2007, p. 286). Syntax and spelling in the reflective journals has been standardised. The account which is offered is in fact composite and contains statements made by all students.

What follows is a description of how each affinity links to other affinities in the system. Firstly a general description of the affinity is provided. Thereafter its relationship to other affinities in the system is described. The affinity name is in **bold** followed by a short description of the relationship containing a noun or phrase from the composite description in *italics.* The remaining material in quotes are the words of the group used to describe the affinity relationships (Northcutt & McCoy, 2004). This is followed by my analysis of the relationships.

When students experience a programme which they perceive as useful and enjoyable, they are unlikely to be destructively critical. Clearly no programme is flawless and there is always room for improvement. Most of the input was positive, but, as will appear under *Criticism*, negative comments have also been included. Steenkamp et al. (2012, p. 83) also felt "there is evidence of some bias in responses" as the students who responded to their questionnaire were "more motivated or positively inclined". The relationship between the affinities, which I shall call systems relationships, was developed from the individual and dyad ARTs (Annexure VIII). Semi-structured interviews and reflective journals were used to describe the relationships between the affinities.

6.2   Primary driver
6.2.1   Positive Structure [of the WIT tutorial]
The structure of the tutorials was a primary driver of the students' experiences of learning in the WIT programme. Students who were accepted onto the WIT programme perceived themselves as privileged to participate in what they considered an exclusive and valuable experience. They enjoyed the way the tutorials were structured, as a variety of pedagogic strategies were used to maintain interest and enthusiasm. The small tutorial group size facilitated learning in a relaxed, non-threatening environment. The structure of the tutorial influenced all aspects of the students' learning experiences, as illustrated in Figure 8.
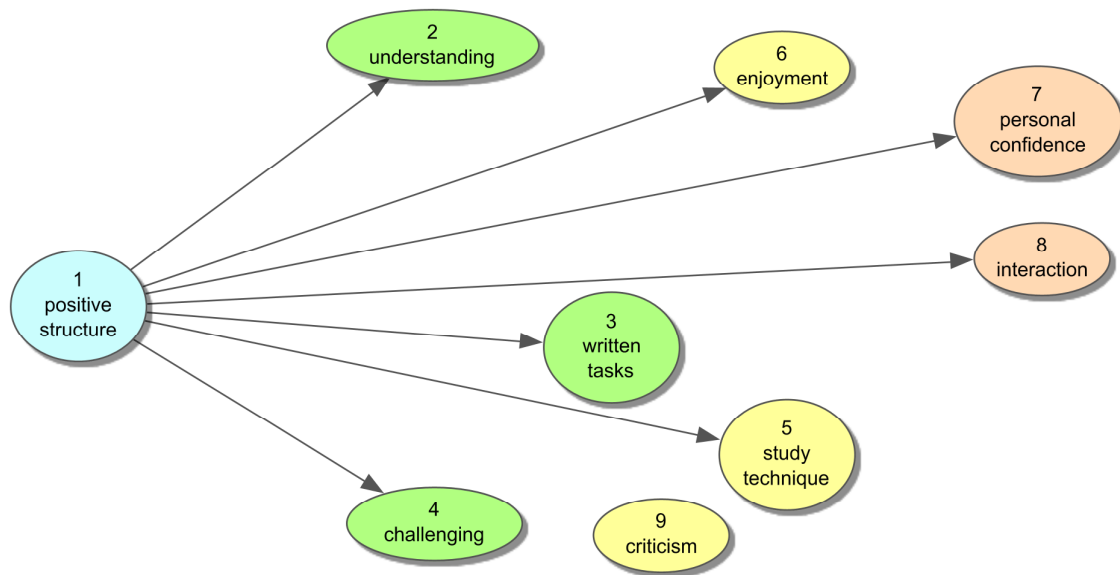
Figure 8: Positive structure

6.2.1.1 Understanding

The students remarked that the *tutorials were well structured and this facilitated systematic and logical understanding.* The structure of the tutorial was such that they worked in small groups. Every week they were differently grouped. A variety of tasks were assigned each week to alleviate the monotony and boredom usually associated with the mainstream tutorials. Keeping them focused and interested advanced understanding of MAF concepts.

> I think that the tutorials were well structured and this created an environment which facilitated systematic and logical understanding. In MAF understanding plays a big part because there is more than one way of doing the question. The positive structure of the tutorial improved my understanding of the topics we studied. In the mainstream tutorials it becomes a bit monotonous, tedious and not very interesting to attend after a day of lectures. The tutorials are primarily dominated by the tutor and you sit there and listen to a so called lecture because they [the tutors] basically just lecture. The tutor would normally go over everything like a robot, there wasn't much understanding. You were being told what the solution is and how to get it. That doesn't help in the test because there is nobody sitting there telling you how to get to the final solution. This meant that you were almost falling asleep after 10 minutes and not really paying attention. In WIT

the tutorials were well organised and the work was varied, every week this helped my understanding. It was helpful being in a smaller tutorial group. If I am struggling it is easier for the tutor to spot me and I can approach her because we have a close relationship. I didn't feel scared asking stupid questions in the tutorial. In the mainstream tutorials if you didn't understand something you will live with it but here in this tutorial my class mates and you, Mrs Bargate can explain it to me. In the WIT programme it didn't matter if you asked stupid questions.

Students appreciated the structured tutorial environment as they felt that this was a necessary condition that facilitated their systematic and logical understanding of MAF. They recognised that the tutorials had shifted their cognitive development. They clearly articulated that their understanding of the content studied was enriched as a result of the tutorials. They also acknowledged that understanding in MAF is critical as there are a myriad ways of asking questions and approaches to answering questions. They felt strongly that the environment was energising and they were attentive in the tutorial and motivated to work harder.

Students compared the WIT tutorials to the mainstream accounting tutorials and felt that the 'monologue method' made the mainstream tutorials monotonous, boring and repetitive. Students struggled to concentrate in the mainstream tutorials and did not gain maximum benefit. They said the tutors often simply read the solution to them with little explanation of underlying concepts. There was very little student participation in mainstream tutorials. With the WIT programme a variety of tasks was set each week and they indicated that this facilitated understanding and attentiveness. They were unanimous about the fact that the variation alleviated boredom and maintained interest and enthusiasm.

Students mentioned that they found the smaller tutorial group (16 – 18 students) non-threatening. This small group size allowed them to receive individual attention. Mainstream tutorial groups consisted of between 35 and 42 students and they found the group size too intimidating to ask questions. In the WIT tutorials, they did not mind appearing 'stupid' in front of their peers because of the bond that developed between them. They were not afraid to verbalise their misunderstandings or confusions to the group. Feeling comfortable with their peers, meant they could ask one another without fear or favour. Being unafraid to ask meant

they were able to interrogate the work at a deeper level instead of limiting themselves to a surface, rote learning approach.

6.2.1.2 Challenging

Students found some aspects of the WIT programme demanding *but because of the solid structure of the programme I was able to manage them.*

> The tutorials are presented in a challenging manner while still maintaining a relaxed environment and this encouraged me to work harder. Some of the questions we did in the tutorial were challenging but because of the solid structure I was able to manage them. These questions stimulated your intelligence. I recall the capital budgeting question, the relevant costing question and the debate, those were extremely challenging. But once again going back to the way the tutorial was structured, the way we had to work through the problems, even if the problems were challenging we were able to manage them. In the mainstream tutorial group there are no challenges. You sit there for one or two periods and just listen. It's basically just a straight forward lecture.

Students alluded to the fact that in the mainstream tutorials there were no challenges as the tutors found it easier to lecture. They said even though they found some of the questions in the WIT programme difficult, due to the way the tutorial was structured, they were encouraged to attempt the questions. They were able to work through the questions collectively and in due course succeed. They noted the tutorial environment was relaxing yet stimulating which was conducive to tackling questions that formerly would have defeated them. Previously they would not have made an attempt at the question. They embraced the challenge and engaged with the work in the supportive environment provided in the tutorial.

6.2.1.3 Written tasks

The students indicated that *the written tasks you gave us weren't just random.* Written tasks were completed both in the tutorial and as homework assignments.

> The structure of the tutorial was good and the written tasks you gave us weren't just random things. You thought about them in relation to the topics

at that time and this helped us get a better understanding of that topic. Writing is a tool that is required for all stages of life and the more a person can master the skill of writing, the more it will enhance communication and productivity throughout an organisation or industry.

The students believed that the written tasks completed each week provided them with practice in MAF discourse writing and noted that the quality of the written tasks were directly relevant to concepts learnt. They perceived the written tasks given were closely connected to the concepts and content that they were required to learn. Because the written tasks were embedded within the new content they became more meaningful to them. They also realised that although they were learning to write in accounting they were learning a skill valuable in other areas of life. When they enter the professional world, competence in writing will be a valuable asset.

6.2.1.4 Enjoyment

The way the tutorial was structured allowed students to enjoy it. *The tutorial was well structured (groups, interactive etc); thus we were able to participate more and enjoy the tutorial.* The time in the tutorial went by so quickly, that they were unaware of the passage of time.

> Depending on the way a tutor leads a tutorial, it can be either interesting or just plain boring. The tutorial was well structured (groups, interactive etc); thus we were able to participate more and enjoy the tutorial. The topics became fun and this made understanding easier. You placed more emphasis on fun yet we learnt at the same time. Since I was doing MAF for the second time, I wanted to do it differently from last year and this year the tutorial has been cool and I enjoyed it. The two hours we spend with you doesn't feel like two hours and no one wanted to go home. I didn't realise how enjoyable doing a question together can be.

Students perceived the tutorials as fun and not as something that they had to do, or was imposed on them. This was something they constantly pointed to – learning was made fun and they benefitted from it. They did not want to miss the tutorial as they felt they would then miss out on something interesting. They remarked that the WIT tutorials were longer than

mainstream tutorials, but they were oblivious to the passage of time. Often the duration of the WIT tutorials extended beyond two hours compared with 75 minutes (often less) of the mainstream tutorials.

Students repeating the course enjoyed this new experience as it provided them with a different approach to that of the conventional mainstream tutorial. The WIT programme offered them opportunities to conceptualise the work differently to the way they did in the previous year. They felt that the WIT programme had boosted their self-confidence and provided a space where they can belong.

6.2.1.5 Study technique and test preparation

The structure of the tutorial provided direction to the students *and helped us identify our problems and write our own notes*. This resulted in a change in study technique and examination preparation, to their advantage.

> I think the tutorials were well structured as we can pin point our problems and address them before they get too far along. As part of our written tasks we were required to write summaries of certain sections. This helped us to identify our problems and write our own notes. Writing summaries as a study technique contributed towards our understanding and this resulted in me refining and improving my study techniques. I also changed the way I prepare for the tutorials. I do them more thoroughly and practice my technique. I used to try and do the tutorial, then study, but now I study first then do the tutorial and this has helped. The time we spend in the tutorial is productive and my understanding has improved which then reduces my study time and test preparation.

An outcome of the WIT programme was an adjustment to the students' study technique and examination preparation. This positive change resulted in them understanding more and consequently spending less time preparing for tests and examinations. Furthermore, they devoted greater time and effort to preparing for the tutorial which meant a more concentrated engagement with material and heightened understanding. Several of the written tasks required them to write summary notes. This was useful as a study technique as they were able to identify and clarify areas of uncertainty well in advance of assessment. The summary notes

were used by them for revision purposes as they provided a précis that could be run through quickly prior to test. They see themselves as shifting from uncomprehending rote learning and memorisation towards a deeper approach to learning.

Students were able to identify their problems, a competence which they previously had lacked. As they were now able to identify their problem areas, they devised their own strategies to overcome the problems.

The WIT programme helped the students to become self-critical and to realise that they are evolving better study techniques. They admitted to a new method of approaching their study of MAF. They were not seeing the tutorial as the only space where learning was happening. They were also able to see how learning in this tutorial space was influenced by their preparation of answers to the tutorial questions and their reflection after the tutorial on the work accomplished. They were now able to see how they could integrate their independent study with the work of the group in a way that helped them to make meaning. They became more efficient at mastering new concepts and content in a short period of time. The positive structure and the nature of the activities and the interaction within the programme contributed to making them more efficient when studying. The effective, productive study techniques refined and refocused their learning and created more time to devote to other subjects because they could now make sense of MAF content quicker.

6.2.1.6 Personal confidence

The tutorial was structured so that students had to present either their own work or their group's work to the class. The *structure of the tutorial resulted in me being more confident in my work.*

> I am usually a very shy and conservative person who doesn't mind blending in a group of people and generally afraid to ask questions in the tutorial. In the mainstream tutorial I blended in very well. During the WIT tutorials we had to go up in front of the class and present our solution or present our argument as in the capital budgeting debate. I have opened up a lot. I found that speaking in front of the class improved my confidence. I am so pleased I had the opportunity to participate because the structure of the tutorial resulted in me being more confident in my work. The spot test we had to do

in class really boosted my confidence because we had to do them under exam conditions. When we wrote test 3, I knew what was required so my confidence was high. I never thought I could get such high marks in MAF. In the tutorial I may be wrong or someone else may have the wrong answer but that doesn't matter, we learn from each other.

Students indicated that the WIT programme provided them with confidence in MAF, which they acknowledged was lacking. They were motivated to achieve and even exceed their own goals. One of the repeating students commented that she could not believe that she could obtain such high marks for MAF; and this was extremely motivating for her. At certain tutorials, they wrote previously unseen spot tests which they felt provided them with an indication of their understanding at that point. They found they were in fact prepared and competent to write the spot tests.

An added benefit articulated by the students was an increased confidence in their verbal communication skills. Communication with the groups was a new experience for some students. They said that in the mainstream tutorials because of the group size it is possible to blend in and not be noticed. They found the WIT tutorial self-fulfilling and affirming.

6.2.1.7 Interaction
The students were overwhelmingly in favour of the interactive structure of the WIT programme. The non-threatening small group and relaxed environment provided a context for meaningful engagement with other students. Obtaining alternative viewpoints on how to address the set work *enhances your understanding*.

> The manner in which the tutorial was structured definitely made us more interactive. Working in groups was something new to me as I don't usually work in groups unless I have to. Now I realise the value of group work because expressing your views and getting someone else's view enhances your understanding. You learn more in that way. Even if you already knew the work you can get a better understanding of it or a more in depth study from someone else's perspective. In the discussions I have to think very carefully about what I am about to explain because it is important that I explain in a way my fellow students will understand. As a teacher you may

teach us something and you might explain it in a way I don't understand but you find that another student understands it in a different way and when they explain it to me I understand it better so that is really nice. Some weeks most of the class had difficulty with a question but we were able to brainstorm a solution in our small groups. Every week we were in different groups so we got an idea of the points of view of each the members of the tutorial group and this helped a lot in terms of widening our perspective in terms of understanding. All tutorials should be more like this as in my opinion it facilitates better learning.

Some students stated that prior to being on the WIT programme they did not like working in groups. After their WIT experience they were conscious of the benefits of collaborative work. Lectures acquainted them with the work, but once they engaged with other students they appreciated the details of practice and theory. They found they could learn from the way others were thinking. Particular areas of misunderstanding or ignorance could be supplied by the help available from a peer and they could trust that someone else would help them.

The interactive arrangement meant that students in the group shared the teaching function with the tutor; students were exposed to other students' perspectives on the study material. A variety of activities were completed within the programme and they were exposed to different peers weekly; they therefore learnt how different peers approached problems. When they saw themselves as teacher to the group, it was not a causal engagement they were having with their peers, but required a high level of abstract understanding for which they were responsible. This required a deep level of thinking about explicitness, depth and conceptual rigour in explanation; they were forced to rehearse this exercise in anticipation of what they were going say to their peers.

To ready themselves to speak about concepts with confidence stretched the students cognitively. They valued the group's openness and willingness to share. This would not have been possible if exposure to other students' different approaches had not been implicit in the structure. By brainstorming a question in the group, eventually a solution was arrived at and everyone benefitted from the experience. The WIT programme provided a space and opportunity for students to demonstrate their competence in a safe, secure environment that fuelled deeper learning and preparedness for the final examination.

6.3   Secondary drivers

6.3.1   Understanding

As a secondary driver of the WIT programme, understanding of MAF concepts impacted on a number of affinities (see Figure 9). Understanding improved the students' confidence, their study techniques and made attending tutorials enjoyable. Understanding of the underlying principles and concepts provided them with the cognitive tools necessary to apply their knowledge to any given situation. Rote learning and simple learning of the necessary steps of a composite process were consequently moderated. Due to their deepened understanding, they were comfortable explaining MAF concepts to family and friends. Students repeating MAF reported an increased understanding of concepts compared to the prior year.
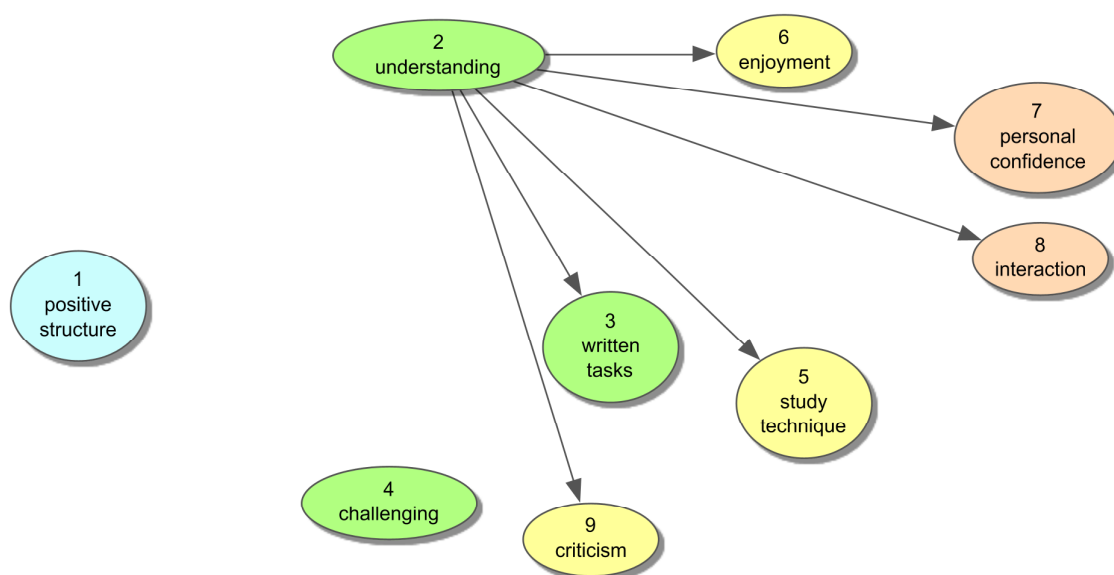
Figure 9: Understanding

6.3.1.1 Written tasks

The written tasks shifted the focus of students learning from a rote learning of concepts to understanding. *Instead of concentrating only on how we calculate the figures, the written tasks helped us to understand the theory behind the calculations.*

> If I try to study out of the textbook nothing sinks in, I have to write. Of the written tasks, the summaries helped me immensely. To me my summary made more sense, rather than the lecture notes that I had received, so that aspect really helped my understanding. When you write out a specific section

it helps you identify what you don't understand. Sometimes you think you understand the concept until you write it down; then you realise you don't understand it as well as you thought you did. I could then go back and look at what I had written and this facilitated my understanding. Instead of concentrating only on how to calculate the figures, the written tasks have helped us to understand the theory behind the calculations. When you are writing something down you write it in the way you are thinking; it is an expression of your own understanding. It's your words so it helps understanding.

Students reported that simply reading the textbook is difficult since they do not comprehend the material. In the WIT programme they were able to make sense of the material if they took what they read and transformed it to another form. Taking a dense piece of material and distilling it into a summary, was of enormous benefit to them when trying to make sense of the material. The process of knowledge transformation made a significant difference to their understanding and development of higher-order thinking skills. To them their summaries, their own construction of meaning made more sense than lecture notes. They acknowledged that the lecture notes could be useful, but to internalise the knowledge, they had to transform it into something that they created.

Students said that once they had been through a piece of work they were able to reflect on what they did and did not understand. They were then able to identify ways to ensure they addressed their lack of understanding. They realised there were different levels of understanding. The initial level was superficial and they later appreciated that they did not fully understand the concept. The act of writing led to them recognising they did not know the work as well as they thought.

Students saw that the development of a deep understanding was an iterative process – read, make sense, then write, then realise they did not fully understand and reflect, re-read, re-work. As they kept on rethinking and rewriting the deep understanding was happening. They saw the importance of moving beyond mechanical calculations to arrive at the answer. When they were able to understand theoretically what the issue was and how the calculation or formulae are embedded in the theory, this deepened the level of understanding and allowed them to apply it in different contexts.

Students came to the realisation that this deep level of understanding happened when they were able to take concepts and render them into their own words. They perceived writing as a vital, necessary skill. The act of writing summaries shifted their attention from the mechanistic calculation of figures, to understanding the theory underlying the calculations. The way they wrote helped internalise construction of meaning. They acknowledged the value of the skill of being able to write and how writing facilitates learning and meaning making.

6.3.1.2 Enjoyment

The tutorial was perceived as a fun place to be and one where understanding occurred pleasurably. *The tutorial has been a huge benefit to me in terms of understanding concepts while enjoying it at the same time*.

> If you understand the concepts work becomes fun. It then makes the work easier when you enjoying doing it and you likely to spend more time working on that subject. You don't think of it as some boring tutorial. The tutorial has been a huge benefit to me in terms of understanding concepts while enjoying it at the same time. The interesting part for me was getting an understanding of how other people think and if their method was better than mine, then using it. I never dreaded coming to [WIT] tutorials – it was never oh gosh when is this going to end? It was the best place to be because I understood and had fun.

Students noted that failure to understand creates tension and anxiety. Work previously seen as tedious became attractive. Enjoyment fed understanding which fed enjoyment. The more they enjoyed MAF the deeper their understanding became and the greater the satisfaction they derived from the tutorials. This became a mutually sustaining relationship as they spent more time studying MAF now that they were enjoying it. They saw an amazing change in themselves and related this to their deeper understanding of concepts.

The students realised that they had been through at least two years of tertiary education to become conscious of the fact that accounting can be interesting especially when the insights of other students were offered. This realisation only came about because the WIT programme was structured in a way that enabled them to listen to what other students thought. When they

realised other students successfully used different methods to theirs, they were able to use the other students' skills to develop themselves which complemented understanding. There was a critical reflection on their own methods, and understanding that their methods were not necessarily the most effective. The WIT programme broke down the inflexibility of doing it their way – they wanted to hear what other students were saying. They could now reflect and evaluate other methods and decide which was best for them.

At no point were the students anxious, reluctant or nervous about attending the WIT tutorials. The programme was designed in such a way that even if they did not know their work, they did not experience any negative feelings as they wanted to be there. They did not 'clock watch' during the tutorial. They alluded to the fact that tutorial programmes should be designed with the dual purpose of enjoyment and promotion of understanding.

6.3.1.3 Study technique and test preparation

As understanding increased, study techniques improved, accordingly there was *no need to go back and cram* prior to the tests and examination.

> It really doesn't work, studying from old test and exam papers, it makes you cram stuff. It makes you think that the next test will be the same. When it came to understanding the ratios, the weaknesses and the strengths and the formulae, before the test we usually memorise them, these are the strengths, these are the weaknesses, this is the formula I just need to find the amounts. I learnt them in isolation. Instead now I have a better understanding in relation to what I am doing. When understanding is happening, there is no need to go back and cram. We discussed concepts in class and then in the test it was, I remember this we had discussed it in the tutorial – it makes studying much easier. When you go back, you brush up on the information and don't waste time on work you know. I don't have to study as hard this year as I did last year because my understanding is better than it was. Also from our discussions in class, I learnt that it's important in tests to write out what is required or important only and not just writing everything I know about a certain question.

The students identified the deficiency in their past study methods. In particular they identified the deficiency in using past examination and test papers as the only basis for helping them to improve their final composite assessment. They acknowledged that studying for tests and examinations from past papers was not the most efficient way to study. This method resulted in them cramming, without full understanding of the concepts, leading to inadequate methods of long-term studying. They realised that using past papers created the perception that the current assessment would be similar. Previously they did not integrate the formulae and concepts into a cohesive frame of reference. The WIT programme enabled them to begin integrating theory and application.

The activity in the WIT programme, the discussion with peers and the tutor helped develop understanding of concepts. After the students had discussed concepts in the tutorial they had a deeper understanding of them and this made studying easier as they were able to remember the discussions. They started to realise that memorisation as a method of learning has limited capacity. With memorisation comes rapid forgetting; understanding, on the other hand, if it is well structured and conceptualised and situated in their cognitive frames, is likely to remain there for a longer period and is easier to retrieve. They may not retrieve all the information if it is memorised. They were learning how to study. When preparing for assessment, they utilised their time more efficiently as they concentrated on areas where they had problems and did not waste time revisiting areas which they understood. The subject was perceived as easier than they initially imagined because now they understood it.

The students exhibited a nuanced understanding of how to respond to questions. They identified the need to be selective and to focus on the expectations of the question. They learnt that even though they may know a lot about an issue, a particular question may not require them to write everything they know about the topic. They need to focus on the specifics of the question. In their development as learners, their conceptual ability became so refined they were able to distil from what they knew in a clear and systematic way what was required from the question. Previously they would write all they knew about a topic, much of which was irrelevant to the question asked. They became more efficient in working out what the expectation was and how to hone in on the specific expectation in a way that does not cloud the answer with superfluous information.

6.3.1.4 Criticism

This affinity was misconstrued by the students as a purely negative activity which resulted in one or two frivolous comments such as *you criticise the lecturers* if they felt their understanding was deficient.

> If I don't understand the work I tend to criticise more because I always find something that is wrong. If your understanding is not as expected criticism comes through and you criticise the lecturers. I don't like to criticise the lecturers, but the lectures for process costing and joint and by-products were highly confusing. The concepts where not clarified thoroughly which made attempting the [pre-set] tutorial [work] disastrous. However, the tutorial did clear up most of the misunderstandings. I would suggest that [lecturer] receives training or is replaced by someone more versed in the field.

Previously the students said when they struggled to comprehend the new material they would try to shift the blame or seek reasons for their lack comprehension outside of themselves. They located it in the lecturer or the structure rather than in themselves. In the WIT tutorials they acquired high levels of maturity and cognition; but in other instances there was still a tension and a contradiction. They tended to blame the plenary lectures and the quality of the delivery of the lecture and the material provided in these sessions. They did however know there was recourse in the tutorial. If the plenary lecture was bad, when they attended the tutorial there was space for them to address their lack of understanding. They had the confidence to say that a certain lecturer was not good enough and that that lecturer requires professional development. They reached a level of comfort with the tutor to be able to articulate their concerns.

6.3.1.5 Personal confidence

As a result of understanding MAF, students felt more confident to engage in *a conversation with someone and talk about MAF*. This confidence extended to tests and examinations.

> I can strike a conversation with someone and talk about MAF, debate it and the really helped me understand my work. I explained *beta* to one of our pastors. He works for one of the investment banks and he was surprised because he didn't understand *betas*. I explained to him why we are doing this

– we are measuring the risk of a business. I am even tutoring my friend at DUT in MAF and tax, I believe in myself now. As my understanding increased, so my confidence was boosted and now I feel more confident when writing tests and examinations.

Students said as a consequence of understanding better they were able to initiate a conversation. Their increased confidence meant they were able to debate with other people at a high level of engagement about MAF. They had reached a level of understanding where they were able to offer what they had learnt to seniors in their community. They were able transfer their knowledge and use it in ways that could help other people. A high level person was impressed that a student understood MAF concepts. The increased knowledge, competence and understanding placed them in a position to help similar students at another tertiary institution. As their understanding increased, their confidence was boosted – a recurring theme of their discussions. There was no longer anxiety about assessments, as they now approached assessment with a positive cognitive frame and because of this knew they were likely to be successful.

6.3.1.6 Interaction

MAF is a subject which teaches that there is more than one way of answering a question. *The group situation helps enormously with understanding because we all work together and feed in to get the answer*.

> The greatest benefit of the programme is we interact with each other and respect for each and every individual regardless of whether he/she understands what they are talking about. There is only so much I can learn from reading my notes, but drawing information from other students really does help understanding. The fact of the matter is that we are here to learn from each other. I was very excited when I reached a 'light bulb' moment on how to work out the normal distribution and z-score by drawing the diagram. It was great to see that everyone finally understood z-scores. I wrestled with z-scores while I was doing the tutorial and during the tutorial I explained it to Edward. Explaining to Edward helped me grasp the concept and now it is firmly planted in my mind. I am looking forward to next week's tutorial as I am hopeful that we will once again have a 'light bulb' moment

whilst working in our groups. The group situation helps enormously with understanding because we all work together and feed in to get the answer. My understanding has improved after explaining to other students, you remember what you explained. I strongly believe that the way the WIT tutorials are conducted should be used in mainstream tutorials. Students understand more and learn faster if a peer is explaining a particular concept rather than a tutor explaining it to a group.

The students indicated that one of the greatest benefits of the WIT programme was that learning is socially constructed. The programme instilled a high level of respect irrespective of the people's knowledge level. They felt that even if their peers did not understand what they were talking about, they were able to listen and this listening helped them (the participants) make sense of their own knowledge. They have learnt to stand back and not to judge people.

Students explained that there is a limit to what they can learn on their own from reading their notes but this can be complemented, supplemented and further reinforced if they engage with other students. They started to see each other as resources.

There was a feeling of excitement among the class when they, as a whole, experienced a 'light bulb' moment: everyone grasped a difficult concept they had been grappling with. In explaining and making it real for other students in their own words, they had to find ways to explain concepts so that they became accessible to the students to whom they were explaining it. This deepened and strengthened their own understanding and would not have happened without the collaborative nature of the tutorial. A profound kind of meaning-making results from being in a group and hearing someone else explaining their understanding of a concept then comparing this understanding with that of other people. It was a realisation for students that they could choose to sit back with what they knew and not contribute, or they could make their knowledge public and allow that process to deepen their knowledge.

This revelation resulted in the students looking forward to the next tutorial in the hope that they would enjoy a similar experience. They said that they grappled with concepts while preparing for the tutorial then in the tutorial they were able to explain it to peers

who had not fully grasped the concept. They valued the input of their peers, possibly more than that of the tutor. They had reached a level of self-sufficiency and noted that the act of explaining the concept to a peer cemented it in their mind. All tutorials, they claimed, should be similarly coordinated as they felt that their learning was enhanced when concepts where explained by a peer in simple language.

6.3.2   Challenging

Challenging was a secondary driver of the system, as illustrated in Figure 10. For most students participating in the WIT programme, certain topics that were taught were perceived as complex, for example relevant costing, and some of the tutorial activities were perceived as challenging. Among the student body MAF had a reputation of being a 'gate-keeper' subject and students had preconceptions of the difficulty of the subject. In retrospect, students on the WIT programme indicated that MAF was less challenging than their initial expectations. Students repeating MAF perceived the WIT programme as less challenging, compared to students' who were doing it for the first time.
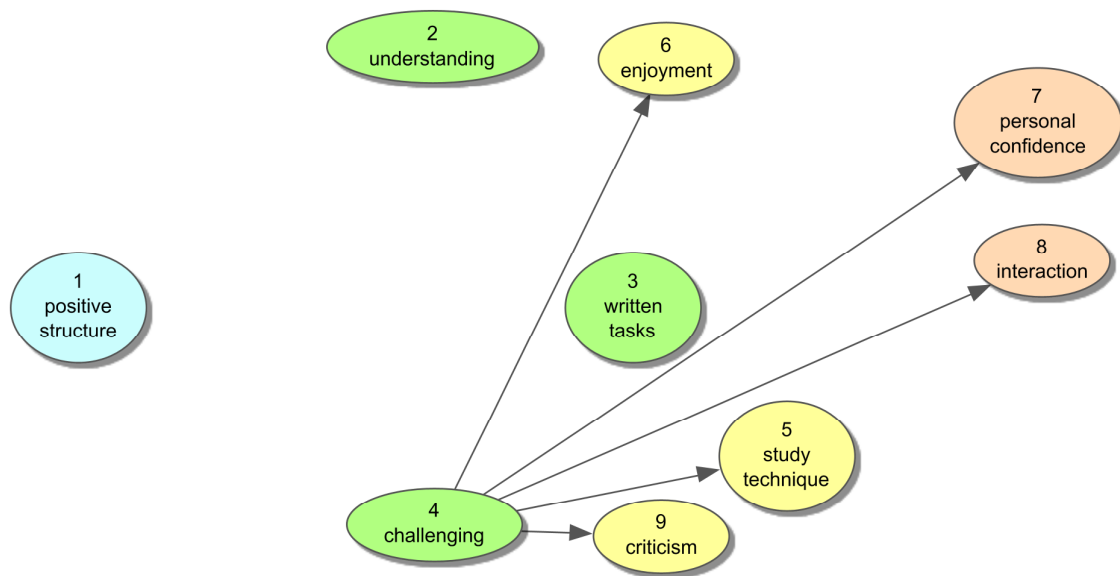
Figure 10: Challenging

6.3.2.1 Enjoyment

With practice previously difficult tasks became less challenging and more enjoyable. In retrospect the students observed that *it's really not that challenging.*

When I first knew I was going to be part of the MAF programme, I was so happy and really felt that this is the year I am going to pass MAF. I knew it would be challenging but I was prepared to do everything required of me. The work was challenging but as we got to understand it, as we developed exam techniques, study techniques, it became less and less challenging and more enjoyable, easier to learn. Looking back at it now, it's not really that challenging. Some of the tasks were challenging and this made the work interesting. Working on solving these problems was fun. There was a sense of enjoyment when we completed a challenging task. Some tasks were challenging but manageably so – not too extreme and not too easy.

Students stated that once they were accepted for the WIT programme they looked forward to participating; they were prepared to do everything that was required from them. They knew it would be difficult but were prepared to put in extra effort and the programme would require them to apply themselves. Knowing that, made them orientate themselves differently. Once they were starting to make meaning deeper understanding, was happening. This was reflected in the advanced study techniques that they started to master as a result of participating in the WIT programme. Because the programme used stimulating activities, from inception they understood that if they were going to succeed on the programme they had to orientate themselves cognitively and psychologically and prepare themselves for success.

Students realised that their existing mental barriers were of their own creation, that these barriers to learning were in fact irrational. They were not averse to the challenging tasks and found the challenge aroused their interest and made the work well within their capabilities. Once they realised the challenges were pushing them to another level, working on solving problems was fun. Problems that were thought previously to be beyond them became solvable. They realised a deep sense of satisfaction once they had solved the problem.

The students felt that the tasks had to be set at the right level for them. Before embarking on the WIT programme, if the tasks appeared too difficult and they were unable to perform them alone, they would give up. The WIT programme required weekly written assignments (see Annexure VI) which at times contained problems and these showed progressive understanding. They did not lose interest and noted that they had overcome their preconceived psychological barriers towards MAF.

6.3.2.2 Study technique and test preparation

Being part of the WIT programme meant that the students prepared more thoroughly for the WIT tutorials than for mainstream tutorials. They would *pre-read* and *attempt all the questions and hand in [their folders].* They benefited from the extra effort in preparing for the tutorial.

> For me I have noticed that if you pre-read, go to the lecture and do your tutorial on time it's not that hard. When you don't pre-read and don't hand it in on time that is when it becomes challenging. Prior to the WIT programme I used to find MAF challenging because I didn't make much effort to attempt all the tutorial questions. Now I attempt all the questions and hand in my folder. Students from the mainstream tutorials ask me why I am handing in my folder as they don't hand in their folders. I say no, I am in the WIT group and I *will* hand in my folder. Many students tell us 'oh but you are on the WIT programme, you have everything easy'. I tell them we don't get more than you but we put in the effort and that is challenging. The challenging tasks help us to improve our study techniques.

Students said that prior to the WIT tutorials they did not make much effort to attempt the set tutorial work. There was a critical self-reflection on old habits and their consequences. The WIT programme facilitated a different way of thinking: though nothing was compulsory, the reactions of their peers motivated them strongly. There was a self-discovery by the students that to succeed they had to apply themselves and make a concerted effort to complete the tasks.

The programme required consistent application. There was a dramatic change in the students' behaviour and they proudly noted that they would now attempt all tutorial questions set and submit their tutorial folders for review. They reached the realisation that it was more important to attempt a question and give them a chance to succeed rather than not attempt the question. The quality and standard of the tasks set helped them to hone their study skills.

When students in the WIT programme were questioned by their colleagues who were not participating in the WIT programme, WIT's participants argued for the value of meeting the full expectations of the tutorial programme. Once they saw the value of a programme, they

demonstrated a commitment, even in the face of public criticism. They were committed to the programme and willing to comply with its demands. They sought feedback in order to proceed. As a result of participating in the programme they created a network of academic friends who worked together with a sense of group belonging.

6.3.2.3 Criticism

The relationship between challenging and destructive criticism was misinterpreted by the students as they claimed that *it is sometimes challenging to deal with criticism.*

> I think that if the tasks pose a challenge, then criticisms can uncover weak spots and suggest in improvements. This criticism would be positive as you would benefit from it. However it is sometimes challenging to deal with criticism because generally people don't like being criticised.

In a programme that is challenging, historically the students would experience difficulties in responding to criticism from the lecturers and tutors. They would struggle with accepting the criticism because they would not know how to deal with it. They were now saying that the criticism in the WIT programme was good because they came to the realisation that critique of your work makes you sharper and deepens your understanding. In the WIT programme, criticism was followed up with suggestions on how to improve. They were able to deal with the criticism as it was supported by the tutor's suggestions on how to address problematic issues.

Positive criticism drew attention to their weaknesses and accordingly they could benefit from it. It did trouble them but they began to understand it differently. They did acknowledge that sometimes it is challenging to deal with criticism as generally we do not like to be criticised even if it is to our advantage.

6.3.2.4 Personal confidence

Being able to complete challenging tasks gave the students a sense of accomplishment and personal achievement which enhanced their confidence. *When you overcome challenging tasks you will be more confident*: This helped with their overall conceptualisation of MAF.

When you overcome challenging tasks you will be more confident in that topic. The tasks required more effort from me than I previously put in to MAF. Now when I attempt a challenging question, and get the correct answer, my confidence increases. There were some tasks that were challenging there was a 'time value of money' question. That challenge also gives you the edge you put all your effort into it. I want to tackle the challenging question because once you know those, everything becomes easy. The WIT programme has given me the confidence that I lacked, especially when it came to tackling complicated questions.

Accomplishing the challenge fed students' confidence and the confidence itself also started to feed the understanding. When they were successfully able to overcome the challenges set, it resulted in increased confidence levels. The WIT programme was designed in such a way that the challenge was at an appropriate level for them to be able to accomplish it. The challenge was sufficiently stimulating in that it required high level thinking and application but initial successes allowed them to develop more faith in their ability. This new found confidence sustained their desire to new challenges, where success again reinforced their confidence.

When students work on challenging tasks it sharpens their ability to diagnose problems. Analytic skills which were previously weak were strengthened as they participated in the WIT programme. They demonstrated the ability to embrace a positive mind set, especially when it came to tackling questions which in the past would have been seen as stumbling blocks.

6.3.2.5 Interactive
As the students worked in groups in the tutorials, they were able to assist each other when engaging with tasks. This *helped us deal with the challenging questions.*

I have always felt that maybe I am the only one who "freaks" out when seeing challenging questions. Discussing the challenging questions in small groups provides insight into different aspects and ways of answering the question. This helped me to see my strengths and weaknesses. We were able to engage with different ideas and explanations which helped us deal with

the challenging questions. A common challenge facilitated interaction between the students.

The students reached awareness that their own insecurities and anxieties regarding MAF were not peculiar to them. This self-awareness resulted from group activities which made them aware that other students faced similar challenges. They shared a common anxiety which they were able to address via the collective efforts of their peers. They again articulated the value of working with peers and listening to their insights, reasoning and thinking. The tasks set were designed to allow for a spontaneous interaction between students. They were able to reflect critically on their own competence and identify how best to use this knowledge to further their personal development.

6.3.3   Written tasks

Written tasks were a secondary driver of the system, as illustrated in Figure 11. The WIT students were expected to complete written tasks each week. These tasks were designed in accordance with writing-to-learn principles (Bean, 2001). Students in the mainstream tutorials did not undertake similar tasks. 'Written tasks' encompassed both reflections on their learning and skill-related tasks such as writing summaries. Reflective writing was new to most of them. It took time for them to embrace reflective writing and appreciate the benefits of doing it. The task most favoured by them was writing summaries as this aided them with their test preparation by providing a quick revision list prior to writing tests. The written tasks also helped them identify their problem areas with MAF.
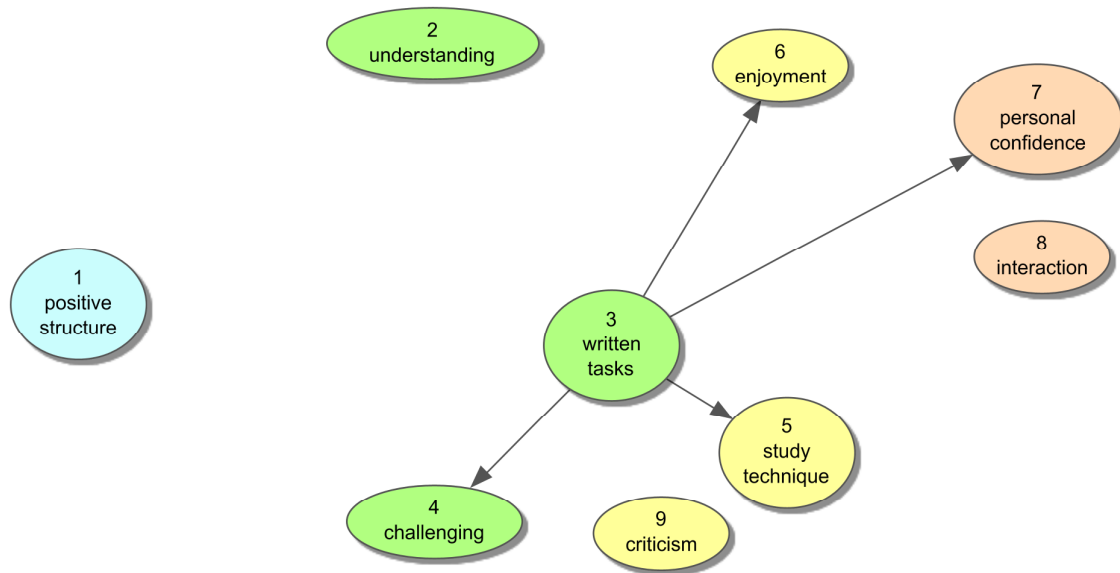
Figure 11: Written tasks

6.3.3.1 Challenging

The students found some of the written tasks difficult. *When we had to write it challenged you because it made you realise where you were unsure about concepts.*

> When we wrote in our books [journals] it creates a direct communication between me and you as my tutor so it is easier for me to say specifically to you what I find challenging. Your response would be directly to me and not generalised. The difficult written tasks made the programme challenging, especially the group debate. The capital budgeting test was also challenging but it helped us identify what we did and did not know. When we had to write, it challenged you because it made you realise where you were unsure about concepts.

Students understood that when they were able to make a substantive contact with the tutor, in doing this they could point to personal issues that they were struggling with; equally the tutor could respond directly to individual needs. They reported that when they were asked to communicate orally with the tutor what their problems were, they were able to do it. They found they benefitted from the response by the tutor to their specific, unique challenges and needs.

Students were not averse to difficult tasks even when the challenge was high because it led to personal reflection and self-diagnosis of the position of each in terms of knowledge. It also highlighted strengths and weaknesses and helped them to learn. Overall the written tasks challenged them to confront concepts which they thought they were comfortable with until they had to formulate them in writing.

6.3.3.2 Enjoyment

The students indicated that they enjoyed the written tasks *because you learn something new each time and I express my point better.*

> The written tasks are interesting, fun and enjoyable because you learn something new each time and I express my point better. It was fun writing on the specific topic especially when the question was work-related such the capital budgeting and standard costing tasks. Writing gives rise to enjoyment. I enjoyed it and I am always talking to my mother about the programme. She says it was a good thing you were accepted for the programme.

Students expressed the fact that for the first time they were deriving pleasure and satisfaction from writing and they were starting to feel good about it. In doing the written tasks they claimed that the more they did it, the more they learnt about themselves. Writing competence increased. They valued written tasks which were clearly related to their course and specific in the demands they made. They enjoyed the WIT programme to such an extent that they shared this satisfaction, pleasure and enjoyment with their relatives. This created a new self-assurance in students exposed to the WIT programme.

6.3.3.3 Study technique and test preparation

The written tasks that students were requested to complete helped with improving study techniques and test preparation. *Having the summaries made MAF learning so much quicker and this helped when it came to learning for tests and the exam.*

> Financial accounting preparation for test 3 took me far longer than I thought it would which left me with less time to study MAF. Having the summaries made MAF learning so much quicker and this helped when it came to learning for tests and the exam. I could run through the summaries on the

day of the test for quick revision. The programme helps us answer questions in the way the examiner wants the question answered. You told us we need to write based on the specific scenario and I realised that this was where most of us make mistakes in theory questions in test – we don't write on the specific scenario. Now I read the scenario, write based on that situation, it is easier and I score more marks. As we did more, the written tasks become easier to complete and this helped me in the test to maximise my marks.

Students said that having engaged in deep, consistent learning all the way through the programme, when it came to preparing for assessment, they did not feel stressed or under pressure even though they had limited time to work on MAF. The way the programme was designed created conditions for them to develop good examination technique which prepared them well for assessment. This left them with time to devote to other subjects and this they considered especially helpful when time allocated to other subjects required more than was scheduled.

The students indicated that they had refined their ability to select from the knowledge in that they had specific pieces of knowledge that they could construct and apply to a very specific context. Rather than writing in general terms about the big issue they were able to point to very specific issues that emerged in the course of assessment, situation specific context answers, for instance, that make more sense than broadly generalised answers. As a consequence of completing the written tasks, they learnt where they made errors in answering test questions and had a better awareness of what the examiner was expecting in the answer. They were able themselves to note common errors in their written work and awareness of these errors promoted an improvement in theory questions in the tests and examinations. As they were progressively exposed during the course of the programme to this more sharply focused preparation, their growing competence and writing skill were continuously reinforced. They could see how continued written practice contributed to an enhanced learning and the reward was a concomitant increase in test and examination marks.

6.3.3.4 Personal confidence

Students were requested to maintain a learning journal as an aid to continuing, regular reflection on their accumulating knowledge and competence. The written tasks required them

to reflect on where their mistakes were coming from. *If you don't reflect you don't know where your mistakes are coming from* and this made it easier for them to identify problematic areas, in turn increasing their self-confidence.

> I believe that if you don't reflect you really don't know where you are going to, where your mistakes are coming from, what you missing out and what you are leaving out. Reading what I had written and where my problems were made it easier to identify those areas where I was having problems. The written tasks helped us to understand better, learn more clearly, which improves our confidence in the section. It gave me more confidence in writing and helped me to express myself better. The tasks also test our knowledge at the point in time, for example the capital budgeting and portfolio management tests. The more you practice writing, the better you get at it, and your confidence increases. When you write it's like cementing a foundation in your head. When you read something it does not get inside and hold on to your brain, but when you write it down it gets in and stays. I think the writing tasks will also help us in the work environment.

Several students commented that if you don't reflect you don't know where you are heading. They started to appreciate the value of both oral and written reflection, without which they would have been unaware of problem areas. They were able to diagnose very specifically what their problems were and they knew that there is help available in the programme to overcome their deficiencies. Having written down and reflected on their issues they were able to clarify what these issues were. They came recognise that the act of writing down their problems was in itself a learning process.

Students could discern an improvement in their writing. With continued writing practice, their confidence rose, which they in turn could see for themselves. They began to understand how writing was a deliberate, purposeful action. They found that their cognitive framing became stronger and they also saw how they had undergone significant growth in more broadly conceptual respects. Key concepts have progressively been reinforced in ways that consolidated the new knowledge and skills. They saw that the writing was fuelling material, deep learning. They were now in a position to reassess their former approaches to working and studying, where much of what they did had been

a merely passive, surface level reading of text – whereas the act of writing resulted in the material now being more fully absorbed. They realised the long-term benefits of writing as a valuable skill in the work environment. They commented that writing creates a permanent record and the act of writing reinforces concepts.

6.4   Secondary outcomes

6.4.1   Study technique and test preparation

One of the secondary outcomes of the WIT programme was that students reported a change in their study techniques and test preparation (see Figure 12). Previously they relied on past test and examination papers as their primary method of studying. As a consequence of participating in the WIT programme, they revised their study techniques and test preparation to learn with deeper understanding. This shift reduced the amount of time they spent studying and increased confidence and enjoyment in MAF.
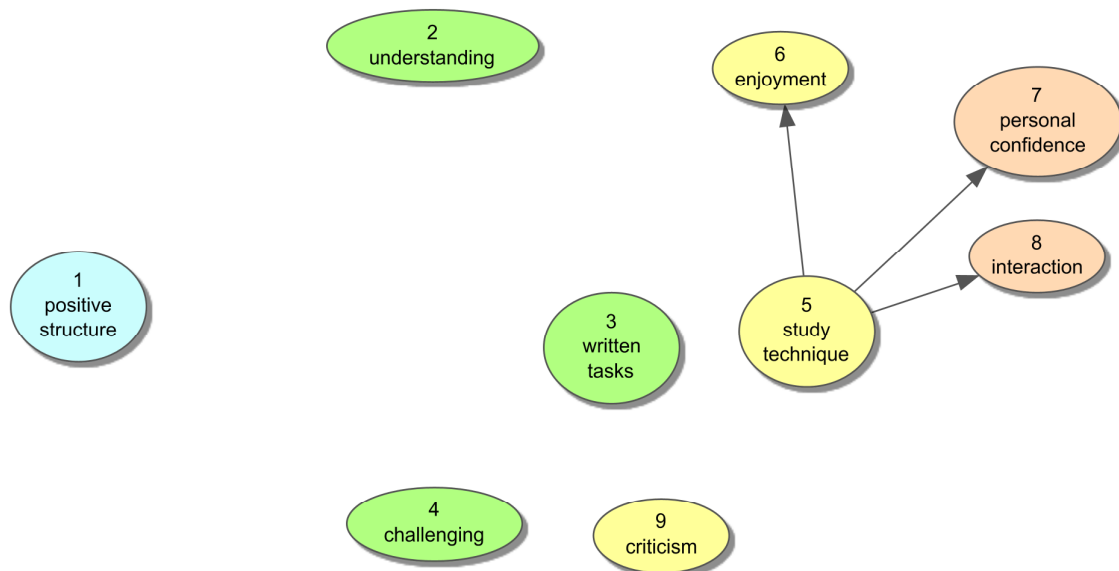
Figure 12: Study technique and test preparation

6.4.1.1 Enjoyment

In the WIT programme, learning was seen as enjoyable and never dull or boring. *It was something you would look forward to going to.* The tutorials were a *fun place to learn.*

> The mistake I made was I studied MAF from old test and exam papers and
> that was my problem. I don't do that anymore. I have started to enjoy MAF

and get interested, more confident in it, so my studying technique and test preparation improved. In the past, I have been to many tutorials and they are just boring. You drag yourself there and you get to a point where you say I am going to take the solution, sign and go because you just don't see the point anymore. But this tutorial you go there with that oomph, I am going to get something out of it. I no longer dreaded going to tutorials, it was something you would look forward to going to. It was fun and interesting. You never look at doing a tutorial question in a fun environment, it's usually work, another question I have to do. There were a lot of laughs and the most impactful thing that came out of the tutorial was that it was a fun place to learn. It has also helped with my study strategy as I now have an A1 poster on my wall with the written principles of every topic. My study plan makes me confident because it is easy and fun.

There was a personal reflection and acknowledgement by the students that the problem was with them and they needed to rectify it. They recognised that their previous technique of focusing study on past test and examination papers was not optimal. They now demonstrated a more active, nuanced engagement with the conceptual material and manifested a perceptible increase in confidence in their capacity to master the subject.

In particular, the students also reported a heightened sense of engagement and interest in attending and participating in WIT tutorials – along with some less favourable observations about less innovative mainstream tutorials. There was generally speaking a consensus that WIT tutorials had been beneficial and a fun learning environment. Unexpectedly, at a late stage in their studies, they discovered that academic learning can be fun. There was broad confirmation that appropriate tutorials actively helped with study strategy and confidence building.

What further emerged from students' comments was that because they were enjoying the WIT programme they were also beginning to develop their own individual resources. They began to develop personal capacities and inclinations which, from some of their reports, were even reflected in the way that they constructed their personal spaces, with posters and other signifiers on the walls of their rooms. This would speak of a higher level of thinking about themselves and their work. What was initially difficult, boring, uninteresting had now been

assimilated to a point where they could begin to develop their own methods and materials – plan actively and effectively for their own intellectual advancement.

6.4.1.2 Personal confidence

Being accepted onto the WIT programme led to a change in the students' study techniques and subsequently an influence on their personal confidence. *I understand more* and now *I attempt all the* tutorial *questions so that helped my confidence.*

> Being part of the WIT programme has been a great blessing in my life. It has taught me to work extra hard and extra smart. In the past I never read a question properly before attempting it, I would just shoot straight to answering it and end up getting the wrong answer. I read the question carefully and understand what is required before answering it. If I thought the question was hard I would leave it for last. I kept procrastinating and never getting down to doing it. Now that I understand more I attempt all the questions so that helped my confidence. Today I am proud to say that I have a new approach. I am asking a lot of questions so that I can understand, study less and focus more on exam and test technique. I am keeping my head high to reach the top stars. I think confidence and study techniques go hand-in-hand. I am more confident now with MAF and correspondingly my study techniques have improved.

This particular student's comment conveys unmistakeable enthusiasm for the programme, but it was also echoed in one way or another by a number of others. They testify to more efficient, more effective study techniques, closer engagement with the new knowledge, and acknowledgement that all of this requires hard work.

A common perception that emerged from students' reflections was that formerly they had been less likely to read thoroughly both provided information and consequential requirements in tests or assignments, and they were also able to identify other individual weaknesses in previous study and examination techniques. They became more focused, more careful and more attentive to requirements; being able to analyse what was required, dismantle it, unpack it, drawing on the knowledge that they had acquired, being selective in what they needed for the task and applying it to the demands of the question.

Previously the students' threshold of what they were prepared to attempt for something like a tutorial was quite low and once they reached that threshold they gave up on any further requirements, leaving out seemingly difficult questions or procrastinating on tackling them. By the end of the WIT programme they showed more perseverance, and a readiness to give their best shot when presented with an intellectual challenge. Their comments identified new and different ways of working, which they were ready to adopt in tutorials through greater interaction, and more willingness to ask questions to clear up misunderstandings. This suggests greater readiness to take responsibility for their own learning and the realisation that understanding can only come about if they are prepared to ask the questions that directly affect them. This 'deep' approach to learning means they understood more – with the further bonus that study time was reduced.

6.4.1.3 Interaction

Students reported that they enjoyed the interaction in tutorials, working in groups, and indicated that they learnt well in these situations irrespective of the relaxed environment. They *put in extra effort* when preparing for the tutorials because they wanted to arrive well prepared and able to help peers as the tutorial proceeded.

> By joining this tutorial I now put in extra effort to do my tutorials as I do not like to arrive confused and unable to help anyone in my group so I ensure that I am adequately prepared unlike with the mainstream tutorial. This extra effort is proving beneficial to me. With MAF there are often two or three different ways of getting to a final solution so what other people are thinking and how they understand it opens up your mind to different methods, quicker methods, methods that are better understood but quicker to implement.

Students saw the value of persevering, making an extra effort and applying themselves, not simply going through the motions. There was an increasing perception expressed in some of the comments that they wanted to arrive at the tutorial focused and ready to engage with and assist their peers, to whom they now recognised a responsibility. They began to see themselves as resources, both to themselves and to those they worked with, but with an

understanding that this was preparation for their future professional responsibility of continuous work and commitment.

In addition to learning substantive content, the students were simultaneously learning different methods of approaching problems, methods which were sometimes quicker than those they had been accustomed to. Listening to others stimulated ways of thinking which they themselves had not previously encountered. There was also openness to fresh ways of learning, with less inflexibility and rigidity in considering another person's point of view, accompanied by a readiness to consider their own weaknesses and those mutually identified in the group. They are able to compare their methods with new ones, or those used by their peers, and select the most appropriate. They came to understand that techniques learnt from peers could save valuable time in tests and examinations, and likewise that poor techniques used in coming to terms with new content also meant time wasted.

6.4.2   Criticism

Criticism was noted as an affinity during the focus group interviews (see Figure 13), but an ambiguity which immediately became apparent was the concept extended to both criticism of self in relation to the learning process and criticism of external factors in regard to various aspects of the MAF programme, such as teaching faculty and materials provided. When it came to completing the ARTs, the students were provided with examples of criticism emerging from the focus groups that steered attention towards more immediately personal consideration of the learning process. Even so, the 'criticism' affinity continued to be misunderstood and during the individual interviews it failed to emerge as particularly significant in the students' minds.
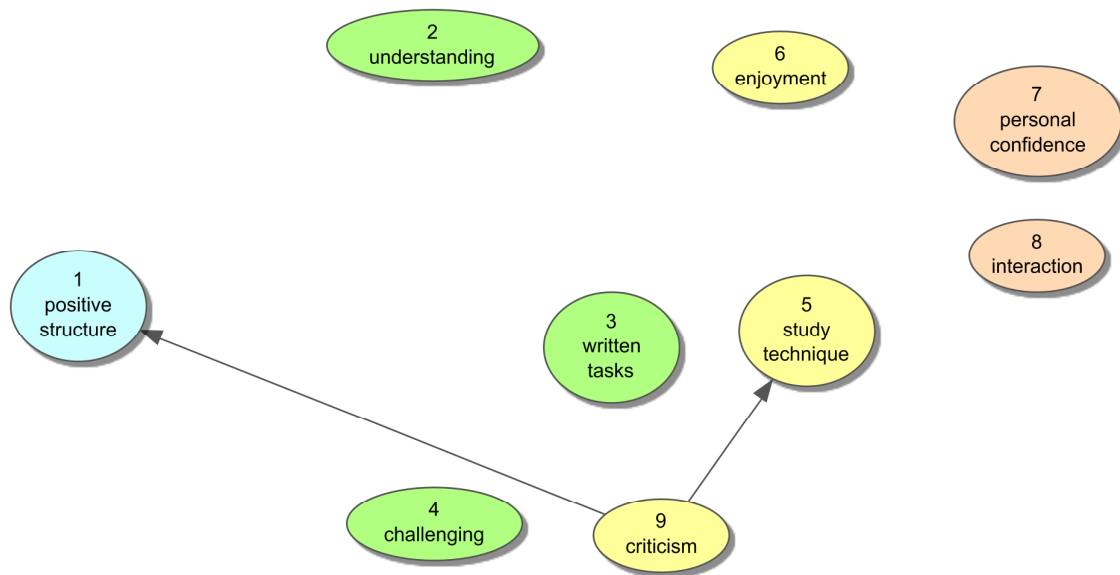
Figure 13: Criticism

6.4.2.1 Positive structure

The students observed that *the group was small and maybe next time it could be a bit bigger.* They also suggested that there should be more groups to provide more students with the *opportunity to participate* in the WIT programme. When the affinities were developed in the focus group interviews they mentioned difficulties with the lecturing of some topics in the MAF programme but in the tutorial stages many of the problem areas were resolved.

> Through criticism one can express their concern with the existing structure to facilitate improvements. My criticism would be that the group was small and maybe next time you could make it a bit bigger, not too big because then it will get out of control. Or there could be more than one group. This would provide space for those people who want to come into the programme and really need the opportunity, to be part of the programme. The lectures [process costing] were highly confusing as to the methods to work out the answers to questions. Much of it was due to the introduction of the equivalent units concept as well as why the costs were split according to material and conversion. This wasn't clarified thoroughly which made attempting the tutorial disastrous. Regarding [relevant costing] lectures, perhaps more extensive examples could have been used in lectures and basic concepts were not comprehensively explained. Limiting factor was not

135

mentioned in class, the textbook was weak in this area but we still had a tutorial question with a limiting factor. This meant that I could not prepare for the tutorial as well as I hoped to. The tutorial cleared up a lot of the issues as reasons for the calculations were made clear as well as the formats in the notes were presented more logically. The group discussion really helped here.

Although students commented on the smallness of the tutorial group they also felt that the group should not become too big and unmanageable. They expressed a wish for the WIT programme to be extended to afford its benefits to other students who needed assistance and could benefit from the programme as they had. Other tutorial groups do exist for the MAF programme, apart from the research sample group, and all other groups would have been exposed to the same material but as the lecturer was also the tutor in their case they perceived the tutorial as special or exclusive. They appeared to be conscious that they were a special group and receiving special tuition which was different from other tutorial groups. This perception may have been unfounded but they evidently felt a sense of responsibility being in the group. There would inevitably be differences in quality of instruction across tutorial groups, but they identified a particular quality in the WIT programme, had friends or peers in other groups, and making comparisons came to the conclusion that the WIT group had a distinctive character that they would have liked others to have experienced. They did suggest the possibility of having more than one group to accommodate students who especially needed assistance, although they saw that numbers made this impracticable. On the other hand, they also felt that students must want to be part of the programme and be motivated to work hard to gain maximum benefit from participation.

The formal plenary sessions for MAF were presented by different lecturers in the School of Accounting. Students perceived plenaries as being unevenly effective, creating difficulties for some topics and affecting confidence in tackling the associated tutorial material. They mentioned confusion arising from disjuncture between pace of the lecture, lecture notes, textbook and tutorial questions. The combined instructional elements are designed to equip students to tackle the tutorial questions ahead of each tutorial. They complained of a lack of coherence and flow between the elements for certain topics and the WIT tutorial provided a safety net where they could clarify issues which were confusing.

6.4.2.2 Study technique and test preparation

The students experienced difficulties with the lecturing of a handful of topics. This they articulated in the focus group interviews when the affinities were developed. However, at the tutorial many of the problematic areas were resolved. A critical self-reflection articulated by them was that *criticism of your study techniques will assist you in developing better study techniques.*

> I feel that criticism of your study techniques will assist you in developing better study techniques. You can learn from the criticisms and use them to improve your study techniques and for preparation and writing of tests and examinations. The criticism needs to be given in an appropriate manner otherwise it could have negative implications. I would like more tutorial questions and those questions should be more like the tests.

Students could see the value of critiquing and thereby refining their study techniques. They commented that the criticism had to be constructive and positive so as to afford them a direct benefit. They did not want criticism that would just drag them down. They also noted that 'criticism' as they encountered it in the WIT programme from the tutor and from their peers was appropriately directed – focused on the kinds of skills and competences that they required for success. They were happy with criticism so long as it was presented in a manner they could feel comfortable with.

Over the short period of the WIT programme it was not likely that every student would undergo a complete change of attitude. They had historically been 'taught to the test' and a small minority could not entirely let go of this. It is probable that such students would continue to have difficulty mastering concepts in such a way that they could flexibly adapt them to unknown contexts.

6.4.3   Enjoyment

In comparison with the mainstream tutorials which were considered boring and an effort to attend, the students identified the WIT tutorials as a space where they could simultaneously learn and enjoy themselves. They enjoyed the interactive nature of the WIT tutorials and there was also an increase in their confidence (see Figure 14).
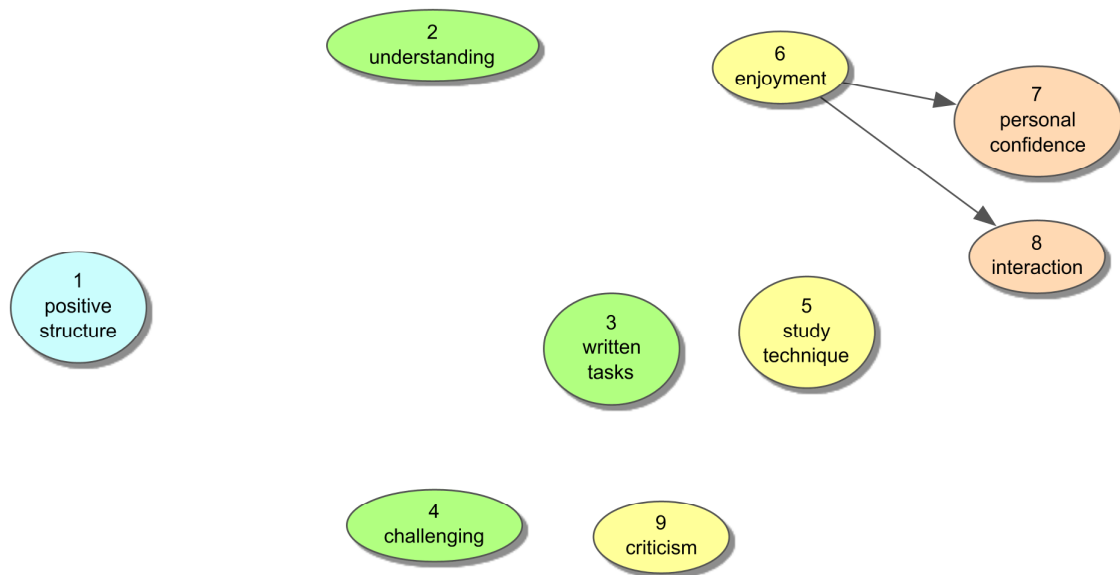
Figure 14: Enjoyment

6.4.3.1 Personal confidence

The students took pleasure in the WIT tutorials; they indicated that they *enjoyed the programme*, which facilitated *confidence*. There was a correlation between enjoying the tutorial and boosted confidence.

> For me, I have enjoyed the programme and my confidence has increased. Yesterday I was so excited heading home and last night I did the valuation question myself and it was right. This really boosted my confidence. When we started valuations I didn't know where to start now I know how to do them, and now I enjoyed working on the questions. Some students were shy at the start now they are far more confident and comfortable with presenting work to the class. It is the best place to be on a Tuesday afternoon!

Students enjoyed the WIT programme and felt relaxed in the tutorial, and this contributed towards their increased confidence. The enjoyment meant that they worked harder and were more motivated. A mark of increased confidence was their expression of enthusiasm for the tutorial experience and indeed for going home to get 'stuck into' – looking forward to tackling MAF questions which previous attitudes had frequently been quite apprehensive. The satisfaction gained from new found competence helped in turn to kindle their growing confidence.

There was evidence of quite fundamental attitude shifts. Students noted that peers, who were initially shy, reserved and reluctant to share, now had confidence to talk and present work to the class. Students with initially negative sentiments towards MAF now declared that the WIT tutorial was the *best place to be on a Tuesday afternoon.*

6.4.3.2 Interaction

The students enjoyed that fact the *there was more involvement by the students* in the WIT tutorials. The tutorial employed a variety of group activities each week in which students enjoyed working with and learning from each other and the interactive impetus extended beyond the confines of the classroom.

> I really enjoyed the WIT tutorials because there was more involvement by the students and they were fun because we did something different each week. The group discussion facilitates communication and provides an enjoyable, interesting environment. Before I found group work a waste of time but now I realise it is a fun way of learning and interacting with people from different cultures. It was fun to interact with other students and discuss different topics. Ben was always cracking jokes and jokes relieve the tension and you feel relaxed. Being able to work in teams and communication are important for both learning and applying theory to solutions. I have made friends in this group who help me whenever I have a problem on a particular topic, even out of the classroom, when we are studying in the library and this has brought joy to my life.

Students gained a fresh perspective on the stimulus to be derived from peer interaction and how this could promote assimilation of knowledge and skills and their ability to link theory to practice. They found the environment stimulating and the interactiveness they enjoyed in the WIT programme went some way towards countering previous scepticism towards group work.

One of the students turned out to be a comedian and entertained the others with a send-up of tutorial questions. They commented that this relieved the tension and that the relaxed atmosphere stimulated learning. Students also said they derived enjoyment from interacting with students from different cultures and learning how to relate to one another. They

commented that the interactive nature of the tutorials would stand them in good stead when they started working, and this was coupled with a perception that working in teams was an important component of many jobs. In the tutorials, friendships and collegial relationships were engendered that extended to mutual help and shared study outside of the classroom. Students mentioned the enjoyment they derived from being part of a network or support group in the knowledge that there was help that could also be accessed beyond the confines of the classroom.

6.5   Primary Outcomes

6.5.1   Interaction

A primary outcome of the WIT programme was the productive collaboration between students which resulted from the interactive nature of the tutorials (see Figure 15). However, they were reluctant to criticise, though occasionally they mentioned they felt the content of lectures had prepared them inadequately at times. Self-criticism was implied in the process of seeking help from others in the group.
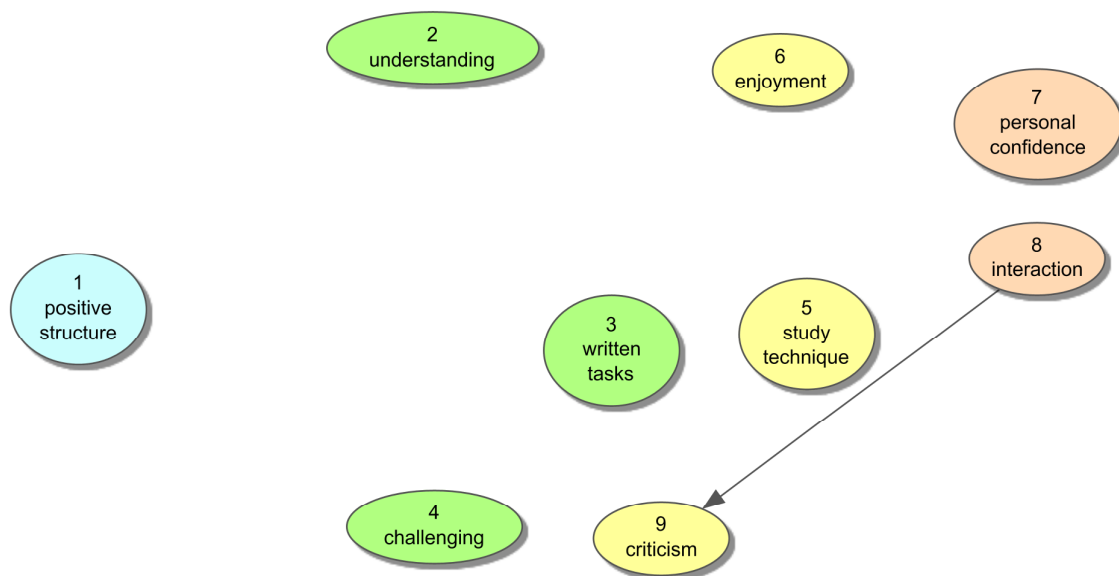
Figure 15: Interaction

6.5.1.1 Criticism

The focus group interviews provided the students with a platform to voice their criticisms. The interactive nature of the focus *group interviews helped us to identify our criticisms collectively.* Inadequacies or omissions which were identified by the entire group would be regarded as real and not subjective problems.

The interactive nature of the focus group interview helped us to identify our criticisms collectively, both negative and positive criticisms. My criticism would be that sometimes in the tutorial none of us in the group knew how to do the question and that really used to irritate me but we would brainstorm a solution and eventually we all got there. I have got so much out of it; there is nothing I can criticise as it helped me with my studies.

The interactive nature of the learning experience afforded the students the opportunity to articulate critique of the structure of the WIT programme. In the process of engaging with one another they were able to identify a criticism. The programme created a space for them to come to terms with uncertainty and learn to deal with it. They expressed frustration when no-one in the group knew how to tackle a question. But whereas a lone student working individually was blocked at this point, the group was able to work with the uncertainty until the problem was resolved. The programme was designed to create opportunities for uncertainty and challenges to arise. Some students found this irritating but eventually saw the benefit. There were often situations where the group did not know how to proceed but a shared approach to resolving the uncertainty allowed for an eventual solution. What the programme did teach was resilience and the value of brainstorming ideas. In a cognitively demanding context they learnt that they were more likely to develop and learn when they were challenged rather than being shown everything by the tutor. Overcoming uncertainty through collaboration was a useful life-skill for them to have learned because uncertainty is often encountered in the work environment.

6.5.2 Personal confidence

A further primary outcome of the WIT programme was an increase in personal confidence of the students as a consequence of interacting with other students (see Figure 16). They recognised they were not alone in misunderstanding a question or concept and took comfort in the fact that other students experienced similar problems.
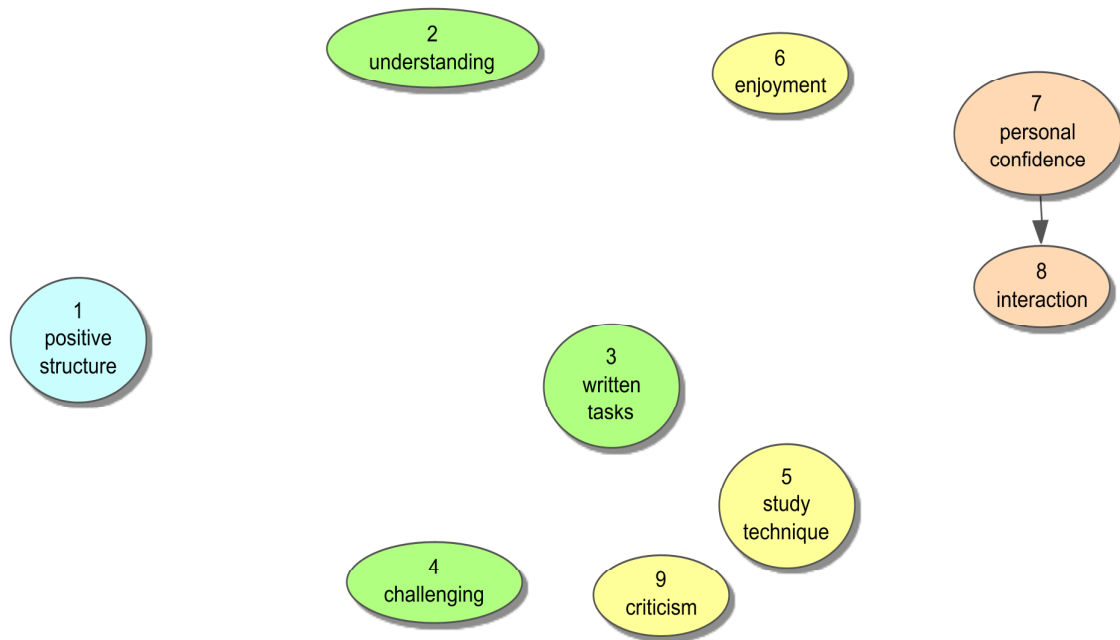
Figure 16: Personal confidence

6.5.2.1 Interaction

The students' confidence increased due to the interactive nature of the WIT programme. *If you are confident in understanding a certain topic you will be able to interact with students and explain it to them.*

> For me MAF is a difficult subject and I used to dread attending tutorials and started losing hope. Everyone said it was hard. I thought I was the only one who didn't understand. Working in groups in the WIT programme made me I realise that there were other students who didn't understand and fortunately there were students who did understand. They were able to share their teaching with me and this made MAF easier and much clearer to me. When we are discussing work in groups, if you are confident in understanding a certain topic you will be able to interact with other students and explain it to them. That increases your confidence. Prior to the WIT tutorials I was not confident speaking in a group. I am not outspoken and I am very conservative and I am scared of saying the wrong thing. In class if you asked me a question I would not be eager to answer it, afraid that I may be wrong. In the WIT programme I find it easier to voice my opinion and if I am wrong it is not such a big deal so my confidence has grown with the programme. I now feel more confident in

142

the work and my personal confidence has increased. From being a part of the WIT tutorial group, I realised that a positive mind-set is required to achieve more than just a pass mark.

The extent to which the level of students' personal confidence changed was evident from their students' confessions that the subject (MAF) was difficult and they were afraid of it. Because of the fear they dreaded attending tutorials and did not realise they were negatively constructing themselves and reinforcing these feelings. As a result of participating in the WIT programme, they stated they overcame their fear of MAF. The general, almost traditional belief among students was that MAF is a difficult subject and they were apprehensive before even starting the subject. There was a self-fulfilling prophecy of inadequacy. Working in groups made them realise that this was a common phenomenon and they were not abnormal. They felt encouraged hearing from peers who were facing similar challenges.

Contrary to the common belief that students are individualist and self-centred, they were happy to share their knowledge. By sharing, they made life easier for one another and helped to build each other's confidence. They remarked that the interaction between peers resulted in their gaining confidence when explaining the work to peers. In being enablers and helping other people to articulate what the issues were, their own self-esteem increased.

Many students had constructed themselves as introverted personalities, scared of saying the wrong thing. They said they were concerned they would be wrong or were too shy to contribute to the discussion. As a result of participating in the programme they overcame their apprehension and felt confident in voicing their opinion, irrespective of whether they were right or wrong. They had a support group that could help them deal with uncertainty. Confidence with regard to content knowledge improved and they felt more secure about what they were learning. Being in the group, meant that personal confidence also increased. Students who considered themselves 'no-hopers' (some were repeats) felt empowered to do really well and become strong in the discipline.

6.6   Conclusion
In conclusion, the students articulated the benefits of participating on the WIT programme. They benefitted to the extent that their understanding increased and this lead to improved study preparation and examination techniques and an all-round increase in their self-

confidence. The following chapter provides a discussion of the key themes that emerged from the study.

CHAPTER SEVEN

Discussion

> *I feel that by attending these tuts I don't just rush through my tut work and not complete it or give up as quickly as I used to. I feel there is an incentive to try to complete the tut properly rather than giving up when I get stuck* (Tara, WIT programme, 2011)

7.1   Introduction

Using IQA and the affinities helped me to arrive at the key themes that have emerged from this study. The results showed that incorporating a WIT programme into an undergraduate accounting subject was associated with positive learning experiences for the students who participated. These results provide an encouraging indication to accounting faculty that accounting can be made fun to learn. The introduction of writing-to-learn assignments impacts positively on students' experiences of learning accounting. The WIT programme was specifically designed for students in an accounting curriculum and was not developed by or in conjunction with the English/communication department. This design presents students with a single instructor and contributes towards dispelling the misconception that writing belongs in the English department and not in the accounting department (Hoff & Stout, 1989).

The approach taken in this study was to use writing-to-learn assignments in MAF as a pedagogical tool to enhance students' learning and understanding of MAF concepts (Emig, 1977; Almer et al., 1998; English et al., 1999). Learning to write was not the primary objective of the writing assignments, but using writing-to-learn can have a concomitant benefit in improving students' writing practices (learning-to-write). The stereotypical accounting student is usually perceived to be averse to writing, however the students in this study showed that they were prepared to embrace written assignments dispelling the myth is that typical accounting students are more numbers orientated. The belief is that accounting is a technicist, mathematical, process-orientated discipline.

In this chapter I return to the literature to theorise the extent to which the literature confirms, disconfirms or advances new understandings of the phenomenon of students' experiences of learning in a WIT programme. The connection to the theory is informed by the findings of the study. Because of the multifaceted nature of learning and all the affinities are connected

with one another in complex ways, I will be presenting the findings in relation to the literature and simultaneously integrating the affinities. The *structure* of the learning environment is the primary driver of the system, and the other affinities (excluding *criticism*) revolve and link with each other and with the programme structure.

7.2   Structure of the WIT programme

What emerged in this study as a key factor was the structure of the WIT programme. The structure of the programme was a move from the traditional teacher-centred tutorial towards a student-centred tutorial by incorporating active learning pedagogies encouraging student participation in the learning context. The learning context makes a significant contribution to students' motivation, learning approaches and performance (Adler et al., 2001; Hall et al., 2004). The WIT programme was well received by the students and its structure influenced their enjoyment, understanding, and study techniques, and provided them with an interactive learning environment where everyone was valued. If faculty can establish an active, positive learning environment and embed it within a received curriculum, there is a greater likelihood of students developing a deep approach to learning. When students become actively involved in the construction of knowledge rather than being passive recipients their interest in the subject and understanding and retention of knowledge improve accordingly (Krom & Williams, 2012). Changing the tutorial environment from a teacher-centred traditional tutorial to a more student-centred tutorial leads to more active participation by students in learning. Other authors who confirm the importance of learning context in contributing to students' motivation and performance and influencing students' learning experiences are Gow et al. (1994); Sharma (1997); Lucas (2001); Hall et al. (2004).

Students may be more or less receptive to changes in the learning environment, so one cannot say that all participants benefitted equally from the innovations in this tutorial programme; changing the learning environment is only one of the factors affecting student learning (Hall et al., 2004). Depending upon how they *perceive* the learning environment, other factors such as motivation, intrinsic interest and previous educational experiences (Steenkamp et al., 2009) will also impact on how they receive the changes.

In addition to the academic gains they were able to report, the students also cited extra-academic benefits from their participation in the WIT programme such as the growth in personal confidence, augmented self-belief and generally positive change in attitude that were

also noted by (Dobbie & Joyce, 2008). Particularly noted by the WIT participants was the confidence-building they gained from having to present work orally to the full tutorial. Several authors have commented on the importance, over and above technical competence, of oral communication skills in the working life of an accountant (Wygal & Stout, 1989; Gabriel & Hirsch, 1992). They liked the fact that oral presentations gave them confidence in public speaking. As the WIT programme progressed there was a notable increase in oral participation by the students and perceptible growth in their self-confidence and self-belief. (Wygal & Stout, 1989, p. 251) relate a similar experience with using informal writing techniques: "there was a perceptible increase in *oral* participation as the term progressed" [italics in original].

7.3   Small group interaction

The massification of higher education has resulted in large impersonal lectures and tutorials (Steenkamp et al., 2012). Students feel overwhelmed by the scale of the university. The students in this study revealed that the small-group, interactive nature of the tutorials gave them a sense of belonging. To gain maximum benefit from a writing intensive programme and student interaction in tutorials, the group should be limited to a maximum of 20 participants (Brenner & Nichols, 2009). English et al. (1999, p. 227) likewise advise that small group teaching works best when "student numbers are kept to a maximum of twenty". The small group size presents benefits and challenges. As a consequence of working in small groups, the students cited both academic and non-academic benefits and limitations.

In the tutorial the students worked in groups of four or five (O'Connor & Ruchala, 1998), and the groupings were changed each week by me to preserve their diversity in terms of race, gender, personality and academic ability. These groups "are more likely to be representative of a real-world situation where individuals have little say in selecting the people with whom they work" (Ballantine & McCourt Larres, 2007, p. 165). Rotating the group membership helped students to get to know everyone in the tutorial. They were able to discuss academic issues but also formed new friendships and established relationships with peers which extended beyond the confines of classroom (Gabriel & Hirsch, 1992; Dobbie & Joyce, 2008). As a result of the interactive nature of the WIT programme they learnt social integration, understanding and tolerance of different race and gender groups and religions.

In the WIT tutorial, each week the students worked in groups on problem-solving exercises. Most of the students said that it was a novel experience for them to work in small groups and interact with peers (Adler & Milne, 1997a). They said the small peer group provided them with space to ask elementary questions and receive help from peers (Adler & Milne, 1997a; Dobbie & Joyce, 2008). They also developed a sense of familiarity and trust with one another (O'Connor & Ruchala, 1998). They were required to discuss and debate the questions and one from each group presented the group's work to the class. The students commented that working in groups would help them afterwards in the workplace, and also that having to make presentations to the class at large improved their verbal communication skills and their confidence speaking in front of an audience. Verbal presentation skills are one of SAICA's core competencies and essential in the business world.

Small groups promote discussion and involvement of all members and provided opportunities which students particularly valued for discussing work with peers who were at a similar level of understanding (Dobbie & Joyce, 2008). Consistent with findings by English et al. (1999), the students became engrossed in the tutorial discussions. Interaction among them allowed for reflection on content and provided opportunities for learning from one another. They were occasionally uncertain how to get going with a question, which made them uneasy (see English et al., 1999). A smaller group size may be a constraint when students are brainstorming a challenging question, where more members could enable more input for arriving at a solution. It made them anxious that there were so many different ways of asking and answering MAF questions.

Talking/explaining in the group was something that students welcomed as a way to sharpen their own understanding of concepts. Active participation in discussion helped to develop familiarity with a specific discourse community, within which they now began to articulate their understandings or misunderstandings. The unique setting of the tutorial was a supportive environment where they felt comfortable displaying ignorance and misconceptions; they could ask 'stupid' questions with no loss of face (Cope & Staehr, 2005; Matas et al., 2011). The feeling of not being afraid to ask questions which display lack of understanding contrasts interestingly with the finding of Koch and Kriel (2005, p. 633), who noted that even in small classes "some students were hesitant to ask questions if it meant that they had to expose their lack of understanding". Peers play a critical role in supporting deep approaches to learning (Lord & Robertson, 2006). With increased confidence in discipline-specific writing and

148

speaking, students assume greater responsibility for their own learning and become actively involved in it. Small group work encourages students to accept responsibility for their own learning and is a move towards learner-centred approaches to teaching and learning (Hall et al., 2004).

The interactive nature of the programme enabled students to share the construction of knowledge through exposure to perspectives offered by other participants (Lord & Robertson, 2006; Ballantine & McCourt Larres, 2007). The peer group interaction provided them with opportunities to consider how other students understood concepts and approached their learning (Cope & Staehr, 2005), thus learning from one another. The student asking a question was learning from the peer answering the question and the student explaining was also learning. Students comprehend course concepts better when they attempt to explain them to each other (O'Connor & Ruchala, 1998). They commented that they needed to know their work well in order to explain it to peers who required help during the tutorial. The WIT programme sought to provide a safe, supportive environment where all ideas were valued. They said that they enjoyed the interactive nature of the tutorials, showing that higher education need not be individual, solitary and for personal interest only. The students were ready to share and expressed interest in each other's wellbeing. The challenge for faculty is to construct a climate where students interact with each other and reap the benefits of active, collaborative learning.

The students also commented that when they listened to their peers presenting their views on an issue, there was immediate feedback which helped them to reflect on where the gaps were in their knowledge and understanding. They found that immediate interactive feedback worked well for them. Ability to self-diagnose is powerfully enabling for students, and reflection is an important learning tool which they can use "to correct past deficiencies and build on their strengths" (Adler & Milne, 1997a, p. 200). When they cannot figure out where they are going wrong, they are likely to struggle. In the interactive structure of the WIT programme feedback happened among peers and was no longer dispensed solely by the tutor. Because it was immediate it had a greater impact and strengthened the meaning-making. A number of authorities stress the importance of promptness in feedback to students (Adler & Milne, 1997a; Cope & Staehr, 2005; McVay, Murphy, & Yoon, 2008). Frequent and timely feedback provides students with the opportunity to reflect on what they have learnt and what

149

they still need to learn. It can also contribute to modifying and improving behaviour and reducing anxiety (Bean, 2001).

Another benefit of working in small groups is that it helps students develop as writers within a discipline. In attempting to articulate workable understandings, they simultaneously learn to write more effectively in and for that particular discourse community (O'Connor & Ruchala, 1998). As Emig (1977, p. 123) succinctly notes, "talking is a valuable, even necessary form of pre-writing". Through small group work faculty are able to provide a space where students can safely explore the conventions of language used by the communities they wish to enter. The social and collaborative natures of meaning-making activities are too often ignored by faculty, since it is in such an environment that real conversations take place, with students leading one another to a more effective understanding of the discipline.

From the tutor/facilitator point of view, a benefit of small group size gives the tutor/facilitator sufficient opportunity to detect 'at risk' students. The small number of participants in the WIT programme made it easier for me to identify students who were 'at risk' and recommend remedial attention. I did advise one of the students who was under-achieving because of inadequate English language proficiency to seek help from the Student Counselling Unit. Regrettably the student chose not to follow this advice, but it also has to be recognised that as faculty there is a limit to what we can do to help students. English et al. (1999, p. 232) noted a similar reluctance on the part of students to seek help when recommended: "students generally failed to take up the opportunity to receive remedial help".

Despite the many benefits of the interactive small groups this structure also presented challenges. One criticism of the WIT programme structure voiced by participants was the small size of the tutorial group. The limit on the group size unfortunately meant that other students who might have benefitted from the WIT programme were unable to participate in it. Those who were participants spoke highly of the WIT programme and recommended it to their friends. Comparable research by Dobbie and Joyce (2008) and Steenkamp et al. (2012), using peer-assisted learning, found that students who participated in the initiatives said they would advise other students who they knew were struggling to make use of the opportunity to participate in such initiatives.

Faculty designing learning programmes need to be constantly aware that number of students in a tutorial is not a static, 'one-size-fits' all factor. Different group sizes maybe appropriate to different levels of study and ultimately the ideal group size hinges upon the students themselves. The high student numbers in MAF programme would make it logistically challenging to roll out the WIT programme to all students, needing approximately 32 tutorial groups, and much as they valued the programme, the WIT participants acknowledged that there would be logistical constraints to extending the programme to the entire MAF cohort. Prior research has shown that a lack of suitably qualified tutors (Adler & Milne, 1997a; Dobbie & Joyce, 2008; Steenkamp et al., 2012) and venue/timetabling constraints (Adler & Milne, 1997a; McVay et al., 2008) are factors limiting the implementation of similar programmes to a large number of students in tutorial groups of 20 students per group.

An infrastructure provision challenge encountered in this study was the lack of suitable tutorial venues for small group work and no permanent 'home' tutorial venue. A variety of venues had to be used depending on their availability, none being ideal, and simply searching for venues consumed physical and mental energy, not to mention having to rearrange desks and chairs into clusters at the beginning of the tutorial and then return them to rows at the end of the tutorial. Although none of the students mentioned the nomadic existence as a problem, I would argue that more permanence in venues would have deepened their sense of belonging. Their lack of concern about the physical context went counter to research on optimal classroom configuration for interactive learning (Adler et al., 2001; McVay et al., 2008).

The opportunity to implement this high level pedagogy becomes constrained by the context which in this case is the physical resources. In a South African university where student intake has escalated rapidly in the past decade, both faculty and infrastructure are subjected to severe strain. Conditions in Australia and New Zealand appear to be little different, with faculty reporting large undergraduate numbers and inadequate resources to support innovative teaching as factors that militate against learner-centred approaches (Adler et al., 2000). No matter how well a curriculum is designed, or how theoretically and academically strong it may be, structural constraints are likely to impede learner-centred approaches (Adler & Milne, 1997a; Adler et al., 2000; McVay et al., 2008). Interactive pedagogies are difficult, if not impossible, in tiered-seating venues (of whatever size) which are often all that can be found for tutorials. At the same time there are always likely to be some students who are

reluctant to commit to learner-centred approaches and prefer to remain passive participants in the learning process (Matas et al., 2011) with their lecturer as the traditional 'sage on the stage'.

7.4   Enjoyment

With higher education perceived as a serious space for serious learning it is easy for faculty to forget how, at all ages, the best learning happens when it is enjoyed by the learner. Children learn without even realising it when they are having fun, but later in life we are all socialised into higher education – and higher learning in a sphere such as accounting – as an intense space where enjoyment is an irrelevance. The *enjoyment* affinity taps into their affective domain and students in this study said they realised that when learning was enjoyable and interesting it shifted their whole motivation for wanting to master the subject. Previously their attitude was that they 'had to' pass MAF to qualify with an accounting degree.

The WIT students clearly indicated that for them the issue of enjoyment was another plus in the programme structure. They enjoyed the interactive engagement which put an end to boredom, and week by week they were keen to attend so as not to miss out on what was happening. In marked contrast, they perceived mainstream tutorials as boring and ineffective – as did the respondents in a study by Palm (2007) who complained that their accounting tutorials were a boring waste of time. The WIT programme, on the other hand, was explicitly designed to make the learning experience as enjoyable as possible, with tasks to actively and pleasurably engage the students in mutually instructive participation. Following Palm (2007), prescribed tutorial questions were supplemented with a range of stimulating activities, based on writing-to-learn principles, that allowed scant opportunity for passive, bored detachment (see also Lucas & Meyer, 2004). The tutorials were perceived by students as a fun space where learning happens and they were motivated to attend tutorials.

A number of studies have found that when students participate in activities that appeal to them they benefit more from the activity (Stout et al., 1991; Braun & Simpson, 2004; Jinkens, 2008; Steenkamp et al., 2009; Krom & Williams, 2012). Baird et al. (1998) reported that class attendance and participation increased when an active learning pedagogy was introduced in tutorials, with notably more positive attitudes of the students towards the subject. Students in the current study said they no longer dreaded attending MAF tutorials

and found the subject less challenging than they had been led to expect; Steenkamp et al. (2009) note that perceived difficulty of a module can hinder success. Faculty need to be mindful of students' apprehensions about accounting courses (Krom & Williams, 2012), and design programmes from which students derive enjoyment while learning at the same time. Palm (2007, p. 99) aptly observes: "How can we as educators provide our students with an enjoyable learning environment *and* academically rewarding learning outcomes?" [italics in original].

Students discovered that their previously marginal interest was captured by the unexpected enjoyment of tackling the exercises; writing suddenly turned out to be fun. When students perceive the learning environment negatively, this "causes a shift in students' priorities from mastery goals to coping goals" (Human-Vogel, 2006, p. 629). A positive learning context, on the other hand, can raise academic achievement by fostering self-esteem and strengthening commitment to the task (Human-Vogel & Mahlangu, 2009). The positive disposition fuels motivation, which fuels confidence, which fuels understanding.

7.5   Written tasks

In this study writing-to-learn tasks were set for every tutorial in a series of 18 tutorials. Over this limited period of time it is not possible to predict how enduring any changes would be in students' attitudes and intellectual engagement. For fuller benefit from writing-to-learn programmes students need sustained exposure to a new pedagogy; constant and consistent reinforcement stands the best chance of inculcating long-term behaviour change (Emig, 1977; Hirsch Jr. & Collins, 1988; Scofield & Combes, 1993; Baird et al., 1998; Ashbaugh et al., 2002; Firch et al., 2010).

The variety of the tutorial exercises proved to be a key factor in the programme. Students said they enjoyed being confronted with a range of assignments, challenging them to respond with an array of roles and skills. Among the tasks were debates, role playing and practical application of MAF concepts where they applied what they learnt to their daily lives, for example cash budgets (see Annexure VI). An appropriate mix of assignments is recommended so as to develop a range of abilities (Gabriel & Hirsch, 1992). The important implication for faculty is that programmes need to provide a variety of instructional materials that link the new concepts and content with practical applications (Matas et al., 2011). Students must be able to connect with an element of real-world authenticity in an assignment,

whether written or oral: the role/identity a student is being asked to adopt as writer/speaker must be clearly established (management accountant/student), the audience or interlocutor to whom their writing/speaking is addressed must be plainly recognisable (a client, an elderly relative), and the task must be a specific undertaking (advising on a standard costing system/explaining process costing) (Mohrweis, 1991; Stout et al., 1991; Garner, 1994; McIsaac & Sepe, 1996; Catanach & Rhoades, 1997; Bean, 2001).

Writing-to-learn activities such as summarising and answering focused questions involve cognitive elaboration, which, as defined by Braun and Simpson (2004, p. 74) is, "any activity that supports, specifies, or clarifies the information to be learned" (1998, p. 487). When students are motivated to develop their own explanations, research shows that they are more likely to take ownership of the knowledge and retain it (Chu & Libby, 2010). Whilst writing about concepts, students understand them at a deeper cognitive level. Of the written assignments set, students said they found summary writing to be the most beneficial. Summarising helps them in the learning of course content, forcing them into "comprehending, retrieving, selecting and processing information and ideas" (English et al., 1999, p. 233). Summaries also help students in recognising what they do or do not know about the material and in retention of information (Baird et al., 1998). Developing appropriate writing assignments cannot simply be taken for granted; it takes skilled faculty to discern the students' particular requirements and set tasks at an appropriate level – slightly above where the students are so that they aspire to move to the next level.

Accounting students sometimes see accounting as having little inherent meaning and they focus instead on simply learning a technique (Lucas, 2001) hence the importance of linking the written assignments to real world experiences. The WIT students said they enjoyed the writing assignments because they were connected with real-world contexts. Writing assignments need to be designed in ways which integrate learning in the discipline with core content which is context specific (Hoff & Stout, 1989; Baird et al., 1998; Gottschalk & Hjortshoj, 2004). When written educational assignments were matched with needs that would

154

actually arise in professional writing, it heightened subsequent recall of concepts by the students (Ashbaugh et al., 2002). Students in the WIT study said it was important that they could see the link between theory and practice. Assignments that lack specificity and focus could compromise the quality of the written work which the students produce and thwart the objectives of the initiative. Discipline-specific writing helps inculcate students into the discourse community and learn discipline specific writing mores and traditions (O'Connor & Ruchala, 1998). The written assignments used in this study were carefully selected to cover key concepts (May & Arevalo, 1983; Stout et al., 1991; Gabriel & Hirsch, 1992). When the students see that the written assignments are well integrated with the curriculum and connected to context, intellectual concepts can begin to come alive. In other words, they liked assignments that bridged the gap between theory and practice (see May & Arevalo, 1983; Chu & Libby, 2010).

The cohort in this study was a cross-section of students from high achievers to borderlines, mirroring the population of MAF students. While all abilities in the WIT class articulated the point that they had drawn benefit from the programme, this assumption needs to be treated with caution owing to potential self-reporting bias. Almer et al. (1998) reported that one-minute papers were beneficial to all students irrespective of their level of ability. Other studies reported that weaker students benefitted more from writing assignments than top students (Stout et al., 1991; Baird et al., 1998; Sin et al., 2007). Top students would have achieved irrespective of the intervention and the greatest benefit was to students who would normally have the most difficulty with the subject. Even so, students in the current study were unanimous that they valued the written assignments and that these assignments helped them learn by identifying important points. Because this was a qualitative study rather than quantitative, WIT students' grades were not compared with those from nonparticipants to determine whether they outperformed students outside the programme. Nor was there a comparison between the grades of participant students with differing academic abilities. English et al. (2004) question whether grades can measure the effectiveness of an intervention programme. More conventional accounting education research suggests that the outcome of learning should be reflected in examination grades, yet it remains the case that students continue to pass notwithstanding firmly lodged misconceptions about basic disciplinary concepts (Lucas, 2000, p. 481).

Students commented on the value of a self-diagnosis or personal stock-take for measuring their progress against the programme requirements. In particular they learn from the process of writing itself which involves constant deep reflection. Framing and structuring a sentence to make it coherent and comprehensible for a potential reader could be said to slow down the brain (Emig, 1977) in an intrinsically self-reflective action of the mind. With active reflection students "realise that they do not understand the work as well as they might think" (Steenkamp et al., 2009, p. 134). In the iterative process their self-diagnosis is increasingly sharpened, feeding confidence building and promoting understanding.

WIT students were asked to keep a reflective journal as part of the writing-to-learn assignments and they seem to have found this particularly productive, commenting that it gave them the opportunity to actively reflect on their own learning style. This helps students "to correct past deficiencies and build on strengths" (Adler & Milne, 1997a, p. 200). A number of authors have commented on the importance of students having time to consider and reflect on their learning (Barclay, 1996; Cope & Staehr, 2005; Matas et al., 2011). The object of the reflective journaling in this study was for students to monitor their learning goals and progress, reflect on critical points they had reached, and assume responsibility for their own learning (Hogan, 1995; Howieson, 2004; Ballantine & McCourt Larres, 2007). They also became accustomed to the idea that communication skills are a vital skill in accounting (Hoff & Stout, 1989; South African Institute of Chartered Accountants, 2011).

Writing assignments were helpful in other ways that cannot be measured by assessment results (Baird et al., 1998). The students themselves reported that they had begun to acquire transferable competencies such as formal writing, working in groups, dealing with uncertainty, note-taking and critical thinking skills, all of which would be an asset for them outside the realm of academia. They particularly acknowledged the benefit they found in enhanced writing practices, and more specifically in technical writing (see May & Arevalo, 1983), both for academe and in their envisaged future workplaces.

7.6   MAF as challenging

The students reported a perception among the student body that MAF was something to be feared as a 'gatekeeper' subject. Students commonly found the subject challenging as it was their first exposure to higher-level concepts in Managerial Accounting and Financial Management. Students repeating the subject said they had negative perceptions of MAF and

felt vulnerable in having to tackle it. In their case there was the probability of having been psychologically damaged by the experience of failure and there was a strong chance they would fail again (De Lange, Waldmann, & Wyatt, 1997; Muller, Prinsloo, & du Plessis, 2007). Students repeating the subject may "have failed to grasp basic concepts in their first attempt and may not have the necessary skills" (De Lange et al., 1997, p. 304) to succeed the second time round. For students like these, writing-intensive instruction assists them in acquiring the skills they had previously lacked and gives them a fresh chance of success.

These anecdotal negative attitudes towards MAF could well create barriers to learning ahead of a student's actual encounter with the course (Lucas & Meyer, 2004; McGuigan & Weil, 2010). Steenkamp et al. (2009, p. 116) note that students who had no prior exposure to accounting at secondary school similarly found first-year accounting at university "very challenging". Students in the WIT programme said on the other hand that even though they found the programme challenging the tasks assigned were at an appropriate level to challenge them – neither too easy nor too difficult. Students respond positively to interventions if they deem the task demands within their capabilities (Lucas & Mladenovic, 2004), and graduated, supported practice raises the level of metacognitive knowing (Reynolds et al., 2012).

The students felt that the tasks set had been at an appropriate level – not too hard and not too easy. When a programme is set up as challenging, negative perceptions may begin to circulate about it, with students being less willing to apply themselves diligently. Students in the WIT programme did not see it that way. They geared themselves mentally for the challenge and worked on their tasks with vigour. Had the activities been less of a challenge it is quite likely that they would have become bored and possibly have left the programme.

Reflecting on their WIT experience, students reported that as a result of their participation in the tutorial programme they now had a more positive interest in MAF and were more fully engaged in learning. This is consistent with findings by English et al. (1999) and Krom and Williams (2012) who reported a similar positive change in students' attitudes after they had been engaged in non-traditional writing exercises.

Prompted to discuss the significance of 'criticism', some participants understood it as an invitation to blame faculty for their results being below par. Adler et al. (2001, p. 1/2) comment that when students feel their achievement is below expectation "the result is finger

pointing and blame apportioning … while teachers are perceived as incompetent and/or uninspiring". Research has shown that accounting students may have different perceptions of the locus of responsibility for learning (Lord & Robertson, 2006), not being prepared to accept responsibility for their own learning and looking to apportion blame outside of themselves. "[R]ather than becoming personally (emotionally and physically) involved in [their learning]" (Sharma, 1997, p. 135), students externalise it, adopting a surface approach to learning (Lucas, 2001; Leveson, 2004).

7.7 Challenges to faculty in devising and implementing a WIT programme

From the facilitator's point of view there are advantages and disadvantages in collecting and commenting on journal writing and other weekly written assignments. It was important for me to provide feedback every week to affirm to the value of their efforts and to encourage their buy-in to the process. On the positive side, marking the written work allowed me to get to know the students on a more personal basis as it opened up a new channel of faculty–student communication (Wygal & Stout, 1989; Gabriel & Hirsch, 1992). It also provided me with the opportunity to timeously identify areas where students were experiencing difficulties assimilating subject content (Wygal & Stout, 1989; Stout et al., 1991; Gabriel & Hirsch, 1992; Almer et al., 1998; Chu & Libby, 2010).

Having appropriate material/tasks ready for every class, and keeping up the review of what the students produce, is inescapably challenging and time-consuming task for faculty (Stout et al., 1991; Gabriel & Hirsch, 1992). The tasks devised have to maintain a focus on the important issues in the topic and they must also have variety to stave off boredom (Wygal & Stout, 1989). Students also differ greatly in their individual learning styles, and variety in the writing-to-learn assignments is also important in seeking to accommodate these differences (Braun & Simpson, 2004; Divoll & Browning, 2010). There also need to be new tasks devised each year to keep the assignments fresh and interesting. The time demands in planning and developing suitable writing assignments may well be a reason for reluctance on the part of faculty to adopt writing-to-learn interventions in accounting programmes (Matas et al., 2011).

The students were expected to submit the additional written tasks along with their prescribed tutorial work every week for me to review. Even though not all students completed the written tasks every week, and despite the small number in the cohort, it was time consuming

to read the work every week and also write encouraging comments, but it had to be done; prompt effective feedback is crucial for motivating students to continue producing meaningful work (Baird et al., 1998; Cate & Dynan, 2010). Lucas (2010, p. 41) comments that "making personalized responses … can have multiple benefits for both students and teacher". Adler et al. (2001) make a similar point in stressing the need for students to receive constructive, considered feedback which is frequent and timely.

Feedback should be "affirming and building rather than tearing down" (Gabriel & Hirsch, 1992, p. 257). Stout et al. (1991, p. 137) comment dryly that "the instructor['s] … level of excitement diminished quickly" having to mark and comment on written assignments every week. Faculty need to keep in mind a student's level of maturity when giving critical feedback; the student is more likely to take account of criticism when it is appropriate and respectful, as were the WIT students, who were not averse to their work being critiqued. As Gabriel and Hirsch (1992, p. 259) state "Instructors must use care when sharing comments". Reflection (on critique) is an important learning tool which allows students to correct their weaknesses and build on their strengths (Adler & Milne, 1997a).

Even though setting of writing assignments is heavily time-consuming it remains a crucial way for students to acquire the discourse of accounting; lacking the discourse, they are left with "an under-developed discipline-based cognitive and conceptual framework" (Koch & Kriel, 2005, p. 635). In this study I developed and assessed the written tasks without any prior experience of teaching writing or any particular English skills. Accounting faculty often argue indeed that they not trained to teach writing and assess English, yet, as I hope to have demonstrated in this study, developing a writing-to-learn programme does not require expertise in teaching writing or English language. A single instructor who integrates writing into an accounting programme and emphasises the value of writing in accounting is preferable to "an Accounting/English team, which perpetuates student misconceptions that "English" does not really belong in accounting" (Hoff & Stout, 1989, p. 94). As Gottschalk and Hjortshoj (2004, p. 7) aptly observe – "*For your course and field of study, who else is going to teach writing if you don't?"* [italics in original].

Journals are especially beneficial to students who maybe introverted or reticent about engaging in face-to-face interaction with faculty. Faculty–student interaction needs to be treated sensitively as students share thoughts on personal and private matters. Journals

provide faculty with in-depth information about students' happiness, concerns or disappointments. Some of the students wrote on personal issues and it was essential for me to respond empathetically. Students learn when there are clear, tangible channels of communication between students and faculty, and tutorial programmes need to create space for written communication to happen between faculty/tutors and students.

From the point of view of researcher/tutor, even though students volunteered to participate in the WIT programme their commitment to the programme could not be taken for granted. Commitment to extra work, for example, is likely to flag if it is not graded. Attendance was erratic for a small minority and a few failed to complete any assigned work or completed it sporadically with little effort applied.

At this point in their studies (third year), the students would have chosen MAF either towards meeting the compulsory requirements of SAICA or towards a degree with MAF and financial accounting as majors. It was reasonable to expect that they would be intrinsically motivated to study having chosen accounting as a career (Jackling, 2005; Muller et al., 2007). Inadequate student preparation was not peculiar to this study. Of the students in the study by Steenkamp et al. (2012, p. 76), 40% said they "did not prepare well for tutorial sessions". Only one student withdrew from the present programme, because (he said) it required too much extra work (see also Scofield, 1994; Chu & Libby, 2010).

None of the work done in the WIT programme was graded and there was no extrinsic motivation for students to maintain a journal or complete the written assignments; even so, lack of grading should not significantly deter completion of tasks. Almer et al. (1998) found, for instance, that students whose one-minute papers were not graded performed better than those whose papers were graded. Because the extra work in the WIT programme was optional with no consequences for not completing the work it was difficult to assess the effort and the complex cognition applied by the participants (Ng et al., 1999). It had to be taken on trust that students would complete the assigned work even if only as an after-thought, as was also conjectured by Ballantine and McCourt Larres (2007).

Prior research has shown that if writing contributes less than 10% to the course grade, students regard it as too insignificant to make an earnest effort at completing it (Adler & Milne, 1997a; Howieson, 2004; Samkin & Francis, 2008). When students are exposed to

writing over an extended period of time however, they begin to see for themselves the value of writing as a learning tool.

Assessment of a task does lend it importance, but in this study it was not possible to allocate grades to additional work in the WIT tutorial over and above what was required of students in the rest of the MAF class. Numerous studies show that accounting students tend to be strategic learners "unwilling to participate in learning beyond formal assessment requirements" (MacFarlane, 2001, p. 377) and in order for them to make an effort at completing additional tasks, the marks on offer must be worth the effort expended (Gabriel & Hirsch, 1992; Howieson, 2004; Samkin & Francis, 2008). On the other hand, excluding tasks from formal assessment "sends a negative signal to students" (MacFarlane, 2001, p. 377) about their importance. Howieson (2004, p. 18) found that the attitude of some students' was "resigned to the fact that the [learning] journal was another necessary assessment task" and saw little merit in completing it.

Grading writing assignments adds to an already heavy marking load of faculty. In the current study, the written tasks were not graded and research has shown that students benefit from writing assignments even if they are ungraded (Scofield, 1994; Almer et al., 1998).

7.8   Conclusion

Although students insisted that they found the 'new' tutorial structure beneficial it cannot be concluded with certainty that the changes to the tutorial structure were specifically responsible for an improvement in participants' learning. There was no doubt however that their interest in the subject changed markedly following their participation in the WIT programme, and that they were more actively engaged with understanding and learning MAF concepts (English et al., 1999). The benefits of the WIT programme were more than academic and extended to embrace personal and intellectual growth (Hesketh, 2004). The next chapter concludes the study and furnishes recommendations.

CHAPTER EIGHT

Conclusions and Recommendations

The WIT programme has given me the confidence that I need to stay on path to becoming a qualified accountant (Edward, WIT programme, 2011)

8.1   Introduction

In the previous chapter I presented a discussion of the key findings regarding students' experiences of learning in a WIT programme and engaged in a discussion of these in relation to the Conceptual Framework. In this chapter I provide final comments on the thesis and describe a model that is grounded in the findings of the study. This tentative model may be useful to higher education curriculum designers as it offers insights into the construction of writing-to-learn programmes for student learning in higher education.

8.2   Overview of the study

8.2.1   Background, rationale and critical questions

In Chapter One I presented the purpose of this case study which was to explore managerial accounting and financial management students' experiences of learning in a writing intensive tutorial programme. The programme was developed for third-year Bachelor of Commerce students who were enrolled for the subject Managerial Accounting and Financial Management III (MAF) at the University of KwaZulu-Natal in 2011. The writing intensive tutorial programme was based on the writing-to-learn approach, which uses informal, exploratory writing as a method of learning at a deeper conceptual level. As a MAF lecturer for many years, I have observed that the students in my class have an inclination to rote learn from past test and examination questions. This learning is not conducive to quality learning as the underlying concepts are never fully comprehended and students' academic performance is adversely affected as a result.

The research questions which framed this study were:

> *What are MAF students' experiences of learning in a Writing Intensive Tutorial Programme?*
>
> *Why do MAF students experience learning in the Writing Intensive Tutorial Programme in the way they do?*

The intervention described in this study comprised a variety of writing-to-learn assignments that focused on writing as a method of learning. Repeated, consistent practice is fundamental to learning from writing as "writing through its inherent re-inforcing cycle involving hand, eye, and brain marks a uniquely powerful multi-representational mode of learning" (Emig, 1977, p. 124/125).

8.2.2 Literature review

There is very little to be found in the literature on the accounting education in South Africa, and nothing on the implementation of writing-to-learn programmes in accounting curricula. Students entering the study of accounting at tertiary institutions are often unaware of the importance of writing in the work of an accountant. The perception among these students is that accounting is primarily computational and process orientated.

Accounting students do, however, need to understand the crucial importance of writing from the outset of their careers in accounting. Incorporating writing into the academic programme presents a number of challenges to accounting faculty. Some faculty will argue against having writing included in accounting programmes as it should be the domain of language specialists (Gammill, 2006). Faculty also maintain that they are not trained to teach and grade student writing (May & Arevalo, 1983; Corman, 1986; Stocks et al., 1992; Scofield & Combes, 1993; Ng et al., 1999). Faculty further contend that inclusion of writing assignments would take time away from teaching technical content (Wygal & Stout, 1989; Stout et al., 1991; Sin et al., 2007; de Villiers, 2010). Since the accounting curriculum is already extensive, with core subjects and compulsory topics which must be taught, an integrative approach goes some way towards overcoming many of these concerns (Hirsch Jr. & Collins, 1988; Mohrweis, 1991; Gabriel & Hirsch, 1992; O'Connor & Ruchala, 1998).

Research into approaches to learning on the part of accounting students have yielded mixed results. Some studies (Gow et al., 1994; Hassall & Joyce, 2001) have reported that students adopt a deep approach to learning and other studies (Booth et al., 1999; Mashishi & Rabin, 2000; Flood & Wilson, 2008) point to a predominately surface approach to learning. The strategic approach to learning (basically, seeking to match themselves against assessment requirements) was the preferred approach of accounting students (Howieson, 2004; Samkin & Francis, 2008; Byrne et al., 2009). In the event, students' approaches to learning are

affected by a range of factors such as the teaching style of faculty, and whether assessment practice is reproductive or demands higher-order thinking skills.

8.2.3 Conceptual framing

Knowledge is constructed through interaction between faculty and peers in a real-life social context, and the present study was located, theoretically, in a social constructivist paradigm, which sees collaboration and negotiation of meaning as developed in a discourse community of peers. Social constructivism influenced the development of the WIT programme and the accompanying pedagogy. The shared construction of knowledge was used in answering the research questions posed through the methodology employed. Collaborative learning encourages students to become actively engaged in the learning process. The small group nature of the WIT programme was conducive to collaboration and shared construction of meaning through exposure to alternative perspectives. Focus groups were used to generate data on students' collective experiences of learning in the WIT programme.

The notion of writing *per se* as a method of learning derives from the seminal work of Emig (1977), extended by Zinsser (1988). The educational objective of writing-to-learn is on student understanding of subject matter (O'Connor & Ruchala, 1998; English et al., 1999). Writing-to-learn can be incorporated into all academic programmes to help students learn subject content. Writing-to-learn is informal writing, or writing for self, and is typically ungraded. Writing-to-learn assignments include journal writing, freewrites, one-minute papers and one-page summaries (Baird et al., 1998; Bean, 2001; Kavanagh & Drennan, 2008). An added benefit of writing-to-learn is improvement in students' learning-to-write, which is formal writing usually done for assessment.

The concepts of deep and surface approaches to learning came into play in the study. The deep approach to learning is an active approach to learning and is associated with students being intrinsically motivated and interested in the subject. The students' approach is to understand and high scores are usually the consequence of this approach to learning (Sharma, 1997; Ramburuth & Mladenovic, 2004). With the surface approach to learning, learning is passive and motivation is extrinsic. Students tend not to engage with the material and rote learning for short-term recall prevails (Lucas, 2001; Lord & Robertson, 2006; Flood & Wilson, 2008).

8.2.4 Methodology and methodological contribution

This qualitative case study was informed by the tenets of social constructivism. Case studies provide for an in-depth analysis from a limited number of participants. They are strong in reality and bounded by space and time. All students registered for MAF in 2011 were offered the opportunity of participating in the study. From the students who volunteered to participate, a purposive sample of 18 participants was selected. The duration of the writing intensive tutorial programme was 18 weeks.

In this study Interactive Qualitative Analysis (IQA) was used as a research method. IQA is consistent with the social constructivist paradigm. As a methodology, IQA is relatively new (Northcutt & McCoy, 2004) and is based on a rigorous application of protocols. So far as I have been able to determine, IQA has not thus far been used in accounting education research equivalent to the present study. In two focus groups, the participants formulated their experiences of learning in a WIT programme at a group-level. Semi-structured open-ended individual interviews were conducted which added analytical depth to focus group data by allowing participants to reflect on their personal experiences of participating in the WIT programme.

Application of IQA in the current context required an adaptation of the protocols as I knew that I needed to generate data in order to answer the critical questions of the study, but was limited by time constraints. The methodology was constructive and I continuously reflected on any adaptations to assess whether the data I was generating was helping me answer the critical questions that drove the study.

Using IQA as a research design scaled back the power relations between me as teacher/researcher and the participants (i.e., my students). IQA ensures that the voice of the participants is valued and supplements the voice of the researcher. As a qualitative researcher I am a key research instrument, central to the study and as such I inevitably influence and shape the research process. These considerations guided me during the process of data generation. Other researchers using IQA as a methodology have similarly adapted the procedure to suit the demands of their particular research (Lodewyckx, 2005; Human-Vogel, 2006; Human-Vogel & Mahlangu, 2009; Tabane, 2010; Tabane & Human-Vogel, 2010; du Preez, 2012).

IQA is a complex procedure and could have made the study too difficult to manage. If the entire process had been adhered to data collection would have extended beyond the duration of the programme. IQA also imposes time demands on the participant subjects. As Lodewyckx (2005, p. 90) remarks, "It is difficult to get fifteen people together for three sessions of one and a half hours each". Using the principles of IQA, the context determines how far the theory can be applied. As a qualitative researcher working in higher education, embedded as I am as a teacher, I had to make pragmatic adaptations to the IQA process. The majority of the participants in the study were third-year university students taking four year-long major subjects with a heavy workload and high class-contact hours (Adler & Milne, 1997a). These constraints necessitated adaptations to the IQA process; I made choices that meant both losses and gains. For instance, if at the outset I had explained to the participants how much time they would need to follow the process to its conclusion, applying the methodology to the letter, I might have lost them.

8.2.5   Findings

The main finding of this study is the following: in a well structured, collaborative, fun, stress-free tutorial environment where everyone is valued, meaningful learning occurs naturally. The focus groups generated nine affinities from which ultimately a visual presentation was derived of the relationship between those affinities. The primary driver of the system was the *structure* (1) of the WIT programme. Secondary drivers identified were *understanding* (2), *challenging* (4) and the *written tasks* (3). The secondary outcomes were *study techniques and test preparation* (5), *enjoyment* (6) and *criticism* (9). The primary outcomes identified were *personal confidence* (7) and *interaction* (8).

Figure 17: WIT learning experience telephoto view SID

The 'telephoto view' in Figure 17, indicates the importance that participants attached to the structure of the WIT programme. When a tutorial programme is well structured, students are able to see the benefits of attending tutorials then learning becomes 'fun'. Their understanding of concepts increases when they are given appropriately challenging written tasks that scaffold their learning. Participants in the study were able to reflect on their current

166

study techniques and begin to adjust these techniques, leading in turn to more effective learning. One of the first differences they reported was that they were now less fixated on learning from past exam papers and now began to see the possibility of deeper content understanding. The interactive nature of the tutorial contributed to the development of both personal confidence and writing practices, both crucial for their future professional careers.

Traditionally students struggle with MAF because they see it as essentially mathematical and process-oriented. Findings from this study suggest that when accounting programmes are designed in particular ways with the right kinds of materials, appropriately challenging to students and supporting peer interaction, then misgivings begin to fall away and they can even derive enjoyment from an intellectual challenge. The positive qualitative outcomes are apparent in participant comments from both the interviews and students' reflective journals. Overall, the affinities indicate that the WIT programme has both academic and non-academic benefits for the students. Small peer group work in tutorial sessions provided space for collaborative problem solving in a safe, unpressured environment. It also provided invaluable opportunity to discuss work with fellow students and ask 'dumb' questions. Less directly academic benefits included increased self-confidence, public speaking, social integration and building friendships.

Perhaps it should be expected that third-year students would see the value of group work, but this is probably seldom the case. But when a programme is structured to encourage communication between faculty and students, and between the students themselves, and when the material is sufficiently stimulating and challenging it offers actual enjoyment, which in turn becomes positive self-motivation.

Overall the students were positive regarding their experiences of learning on the WIT programme. They could point to improvement in their study skills and in their understanding, along with growth in social and communication skills. Learning needs to be founded in a triad of faculty/self/peer relationships. Or as Lord and Robertson insist, "Knowledge is understood to be perspectival, socially constructed rather than simply passed on" (Lord & Robertson, 2006, p. 56).

8.3   Limitations of the study

In interpreting the findings of this study, it is important to bear in mind its limitations. The study was limited to a single instructor, who was also one of their lecturers, teaching a small sample of students over a limited period of time. A variety of writing-to-learn activities were utilised (Hirsch Jr. & Collins, 1988; Wygal & Stout, 1989) in order to keep the students interested and preclude boredom and monotony – complaints they themselves articulated in relation to mainstream tutorials. Equally, however, the diversity of activities they were exposed to precludes inferences about the causal effect of any one specific activity on the enhancement of learning (Baird et al., 1998). Rather, the WIT programme needs to be considered holistically.

A further limitation of the study is that neither tutorial attendance nor the additional work allocated to the students counted towards their final assessment. The subject requirements to obtain a DP are that students attend 80% of the tutorials, but this is seldom enforced and they know it as a toothless prerequisite. As many students are strategic learners, if the work does not count towards assessment they are likely to be markedly less motivated and less committed to the task (Kolb, 1984; Adler & Milne, 1997b). I had to rely on the students' goodwill and self-motivation to complete the assigned tasks. Adler and Milne (1997a, p. 201) have found "that anything less than 10% [of their assessment] is often seen by the [accounting] students as too insignificant to demand their earnest efforts".

The study focused on students' own perceptions of their individual experiences in the WIT programme and there are inherent weaknesses and potential biases in self-reporting (Matas et al., 2011). I had to take the participants' responses at face value as indicative of their true intentions and understanding (Myburgh, 2005; Human-Vogel, 2006; McVay et al., 2008). I interviewed the students and the impact of situation subjectivity cannot be ignored (Matas et al., 2011). Their perceptions may not have reflected reality and could have been tainted by interview bias attributable to the lecturer/student relationship or a desire to respond in a way the student thought would please the researcher.

Data collected relates to one group of students in a third-year subject taught by one tutor. Findings reveal their experiences of learning in the WIT programme. The focus of this study was on the students and the views of lecturers or other stakeholders in the academic community were not considered. Different groups of students in different subjects, in

different years of study with different tutors may realise different results. The results are not generalisable beyond the scope of this study but the findings provide direction to related future studies. Students would also have experienced the WIT programme differently depending upon intrinsic factors such as academic ability, prior learning experiences and cultural background.

All the direct and indirect effects of the written assignments may not be discernible, considering the limited period of time that the intervention was conducted (Stout et al., 1991; Hall et al., 2004). The study did not attempt to measure whether the written assignments increased long-term retention of concepts because of the limited time period and it was not possible to control for extraneous influences such as student motivation or study environment. As this was a qualitative study, the MAF marks obtained by the students in the WIT programme were not compared and/or contrasted with the students attending mainstream tutorials.

The WIT programme was custom-made to the requirements of the researcher, the subject and the particular group. Because the programme was very specific it does not necessarily lend itself to curriculum inclusion in all accounting programmes offered at UKZN or elsewhere (Hoff & Stout, 1989). Similar programmes would need to be tailored to meet the specific requirements of individual subjects and the resources available (Gabriel & Hirsch, 1992). However, the underlying principle of writing as a method of learning is adaptable to any subject.

To roll out a similar tutorial programme to the entire MAF cohort would require a huge investment in resources, both financial and manpower (Steenkamp et al., 2012). It would require more than 30 tutorial groups, suitably trained, dedicated and motivated tutors, and appropriate venues. The cost could be prohibitive within budget constraints, although they might not outweigh the benefits of increased pass rates and motivated students.

As this was a qualitative case study specifically restricted to MAF students, the results may not be generalisable to the wider population as the results are context dependent by nature. According to Rule and John (2011, p. 105) the purpose of a case study is "generating in-depth, holistic and situated understandings of a phenomenon". It is true that a case study is specific to a bounded case but it is undertaken in order to say something about the bigger

phenomenon under study that goes beyond the specifics of the limited number of students participating, in this case, the WIT programme. Hesketh (2004) in her study of curriculum reform noted that "It has shown that the [case] study did enable a curriculum to be improved" (2004, p. 120). The perceived cause-and-effect relationships between the affinities in structuring the mindmap (see Chapter 5) is based on the participants' personal meaning-making and is of necessity limited to the immediate context.

Despite these caveats, this study provides faculty with an insight into students' experiences of learning in a writing intervention tutorial programme in an accounting course. It also offers some guidance in implementing similar interventions in other accounting courses. The findings suggest there are benefits in using informal writing assignments in accounting courses to improve learning. Other accounting subjects may benefit from instigating similar programmes. It is suggested that accounting researchers further examine writing-to-learn as a means of encouraging a deep approach to learning and that the findings be disseminated to the academic community.

8.4   Suggestions for further research

This study of a writing intensive tutorial specific to managerial accounting and financial management invites future research, since very little has otherwise been reported on the potential of writing-to-learn programmes in the accountancy field in South Africa. Further research in this area could assist accounting faculty in analysing students' approaches to learning and in the design of teaching interventions that foster 'deep approach' learning.

Future research could consider the potential of similar programmes in other accounting subjects. O'Connor and Ruchala (1998, p. 101) recommend that writing initiatives be incorporated in all accounting courses rather than merely "developed within the context of a single course in isolation from the remainder of the overall accounting curriculum". This could not be accomplished without full buy-in from faculty, along with training in the design of writing-to-learn assignments. Collaboration between English/communication faculty could initially be helpful to assist accounting faculty with assignment design (Gabriel & Hirsch, 1992). The crucial point is that students need to see that writing practices are inseparable from technical accounting knowledge.

Comparative study could investigate whether writing assignments have a differential impact on the grades of top students compared to average and weaker students (Baird et al., 1998). Yet another area for investigation could be comparison between assessment results and student satisfaction of participants in WIT tutorials and participants in a mainstream tutorial programme.

An enduring problem for all teachers, which this research also highlights for potential ongoing enquiry, is appropriately nuanced determination of competency levels in a diverse cohort of students entering a subject, so that the subject will present them with appropriate challenges without causing incapacitating discouragement.

This study should be seen in the context of wider debate on student learning in higher education. The results presented here provide qualitative support for close incorporation of writing-to-learn assignments in accounting programmes. Since it was a single case study with a limited number of participants from one tertiary institution, any conclusions must be drawn with caution, but further research could further determine its efficacy.

In concluding this thesis, I propose a model (see Figure 18) which arises from the study's findings regarding student learning in higher education. The model may inform future accounting programme design.

8.5   Towards a model for student learning in a writing-to-learn programme

The objective in all higher education is for students to be able to acquire, make meaning and make sense of new knowledge in order to arrive at what could be termed *deep understanding*. The model presented in Figure 18 integrates the various ways in which this deep understanding comes about. The key factor that holds the process together (as far as this study is concerned) is programme structure. Programme structure is everything that holds the programme together – lecture materials, faculty, environment, and, crucially, students. The major finding in this study confirms that the programme structure, thus conceived, is paramount. The constructs that constitute this model are grounded in the data generated from the study.

The programme structure for a writing-to-learn programme works well when all facets of the programme are in harmony; it can lead to various positive outcomes and when it successfully fosters interaction between students. This interaction in turn will feed student confidence in a

self-reinforcing process. As students grow in confidence they become more ready to talk to each other about complex concepts and they develop particular skills that allow them to articulate in deep and profound ways. This evolving confidence further fuels confidence levels which again is likely to raise the frequency and levels of cognitive engagement that
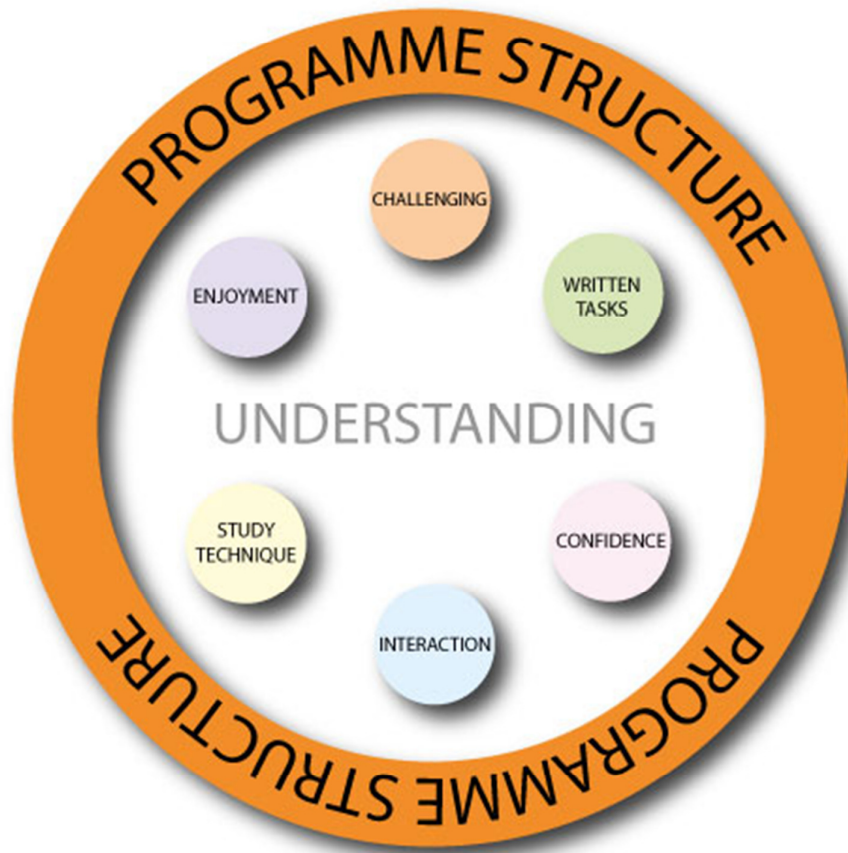
Figure 18: A model for student learning in a writing-to-learn programme

happen between students as the interaction becomes viewed as a space for 'testing out' personal competence levels. The responsibility of the instructor is to keep the interaction at a sufficiently challenging level, supported, for example, by the written tasks that students will have assigned in preparation for the class. This is a crucial aspect of the model in that it requires a perceptive and discerning instructor who has firm apprehension of the shifting levels of cognitive development that is likely to occur. In other words, it is about pitching the level of challenge at an appropriate level which in itself is a constantly shifting target. The model (grounded in the findings of the study) suggests that increased confidence and

interaction amongst students is likely to generate deep levels of satisfaction and personal enjoyment of the teaching and learning enterprise or the meaning making. Again, the enjoyment fuels the interaction which fuels confidence and so on. This intellectual space where interaction, confidence and enjoyment play itself out allows for personal reflection especially as it relates to assessing personal study technique in relation to those of others in the interactive assemblage, with a view to constant appraisal and refinement thereof. As this happens, each student's study techniques are constantly being refined. The affinities in the model are dynamic and mutually sustaining fuelling each other's development, in a network of constantly growing and mutually nourishing relationships.

Like any model, it has its limitations. In applying the model to other contexts that may want to use writing-to-learn as a strategy, faculty have a role as facilitators to encourage students to embrace the process and see value in it for themselves. In addition to good judgement about the level at which to pitch the tasks, faculty do also need to be perceptive and alert to where students are in the unfolding interactions between them. Interaction and enjoyment are good but in the classroom these need to be directed to academic pursuits. Without diminishing the value of extra-academic rewards from the programme structure such as new-found personal confidence, it remains the work of faculty to keep students focused on the task at hand to ensure that depth and complexity of new content is not compromised.

Students at university can have strongly entrenched ideas on how to learn. If the interaction among the students is very strong and they are deriving ideas from one another there may be misunderstandings which results in incorrect information being offered, hence the role of the instructor to provide constant guidance. Interaction works well if there are elements in the class who already have productive learning approaches. The responsibility of the academic instructor is to steer students appropriately, and show them how to be self-reflective, when ideas begin to flow.

8.6   Conclusion

A writing-to-learn programme cannot simply be handed to faculty. They need to develop it in a way relevant to their specific course, which works for them and is sustainable by them. Implementing such a programme is an iterative process and requires support and commitment from administrators, faculty and students (Gabriel & Hirsch, 1992). Writing programmes need to constantly evolve as demands change and different pedagogy are tried (May &

Arevalo, 1983). It is essential that faculty are convinced of the usefulness of such programmes otherwise they will fail. Programmes tend to fail once the zealots have moved on because the programmes were too idiosyncratic and not institutionalised (Gabriel & Hirsch, 1992). A writing programme legitimises writing in an accounting classroom and uses techniques which enhance understanding of concepts and the concomitant benefits are improved communication skills without sacrificing course content.

Finally this study points to the importance of an interactive learning environment in promoting interest in the subject and better quality learning. Accounting programmes have a concentration of technical knowledge which must also closely incorporate written and oral communication skills, problem solving and critical thinking. These are make or break competencies for accounting students in their future professional careers, but it is not effective to teach them as separate skills. Students in the present study responded eagerly to the writing-to-learn component in their tutorials, which seems a hopeful augury that continually growing communication skills will become an ingrained habit, serving them indispensably in the critical oversight which will be their ongoing professional responsibility.

REFERENCES

Adler, R. W., & Milne, M. J. (1997a). Improving the quality of accounting students' learning through action-oriented learning task. *Accounting Education, 6*(3), 191 - 215.

Adler, R. W., & Milne, M. J. (1997b). Translating ideals into practice: an examination of international accounting bodies' calls for curriculum changes and New Zealand tertiary institutions' assessment methods. *Accounting Education, 6*(2), 109 - 124.

Adler, R. W., Milne, M. J., & Stablien, R. (2001). Stituated motivation: an empirical test in an accounting course. *Canadian Journal of Administrative Sciences, 18*(2), 101 - 115.

Adler, R. W., Milne, M. J., & Stringer, C. P. (2000). Identifying and overcoming obstacles to learner-centred approaches in tertiary accounting education: a field study and survey of accounting educators' perceptions. *Accounting Education, 9*(2), 113 - 134.

Adler, R. W., Whiting, R. H., & Wynn-Williams, K. (2004). Student-led and teacher-led case presentations: empirical evidence about learning styles in an accounting course. *Accounting Education, 13*(2), 213 - 229.

Ahlawat, S., Miller, G., & Shahid, A. (2012). Promoting liberal learning in a capstone accounting course. *Journal of Business Education, 5*(1), 11 - 24.

Almer, E. D., Jones, K., & Moeckel, C. L. (1998). The impact of one-minute papers on learning in an introductory accounting course. *Issues in Accounting Education, 13*(3), 485 - 497.

Andrews, J. D., & Sigband, N. B. (1984). How effectively does the "new" accountant communicate? Perceptions by practitioners and academics. *The Journal of Business Communication, Spring*, 15 - 24.

Ashbaugh, H., Johnstone, K. M., & Warfield, T. D. (2002). Outcome assessment of a writing skill improvement initiative: results and methodological implications. *Issues in Accounting Education, 17*(2), 123 - 148.

Au, K., H. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of Literacy Research, 30*(2), 297 - 319.

Auyeung, P. K., & Sands, D. F. (1994). Predicting success in first-year university accounting using gender-based learning analysis. *Accounting Education, 3*(3), 259 - 272.

Baeten, M., Kyndt, E., Struyven, K., & Dochey, F. (2010). Using student-centred learning environments to stimulate deep approaches to learning: factors encouraging or discouraging their effectiveness. *Educational Reserch Review, 5*, 243 - 260.

Baird, J. E., Zelin II, R. C., & Ruggle, L. A. (1998). Experimental evidence on the benefits of using "Writing to Learn" activities in accounting courses. *Issues in Accounting Education, 13*(2), 259 - 276.

Ballantine, J. A., Duff, A., & McCourt Larres, P. (2008). Accounting and business students' approaches to learning: a longitudinal study. *Journal of Accounting Education, 26*, 188 - 201.

Ballantine, J. A., & McCourt Larres, P. (2007). Final year accounting undergraduates' attitudes to group assessment and the role of learning logs. *Accounting Education: an international journal, 16*(2), 163 - 183.

Barac, K. (2009). South African training officers' perceptions of the knowledge and skills requirements of entry-level trainee accountants. *Meditari Accountancy Research, 17*(2), 19 - 46.

Barclay, J. (1996). Learning from experience with learning logs. *Journal of Management Development, 15*(6), 28 - 43.

Bargate, K. (2012). The readability of Managerial Accounting and Financial Management textbooks. *Meditari Accountancy Research, 20*(1), 3 - 21.

Barnes, D., Britton, J., & Rosen, H. (1971). *Language, the learner and the school*. Harmondsworth: Penguin Books.

Bean, J. C. (2001). *Engaging ideas: the professor's guide to integrating writing, critical thinking, and active learning in the classroom* (1st ed.). San Francisco: Jossey-Bass.

Beattie, V., Collins, B., & McInnes, B. (1997). Deep and surface learning: a simple or simplistic dichotomy? *Accounting Education, 6*(1), 1 - 12.

Bezuidenhout, L. P. (2008). *Using assessment and reflexive teaching practices to inform and guide changes to the teaching and learning activities in Introductory Accounting*. Paper presented at the South African Accounting Association, Johannesburg.

Biggs, J., Kember, D., & Leung, D. Y. P. (2001). The revised two-factor Study Process Questionnaire: R-SPQ-2F. *British Journal of Educational Psychology, 71*, 133 - 149.

Bolt-Lee, C., & Foster, S. D. (2000). Examination retakes in accounting: increasing learning by writing after the exam. *Language and Learning Across the Disciplines, 4*(2), 40 - 46.

Bonk, C. J., & Smith, G. S. (1998). Alternative instructional strategies for creative and critical thinking in the accounting curriculum. *Journal of Accounting Education, 16*(2), 261 - 293.

Booth, P., Luckett, P., & Mladenovic, R. (1999). The quality of learning in accounting education: the impact of approaches to learning on academic performance. *Accounting Education, 8*(4), 277 - 300.

Borthick, A. F., Jones, D. R., & Wakai, S. (2003). Designing learning experiences within learner's zones of proximal development (ZPD): enabling collaborative learning on-site and online. *Journal of Information Systems, 17*(1), 107 - 134.

Botha, W. (2001). Pre-qualification education of registered accountants and auditors in South Africa: perspectives on whether the education process is normatively justified. *Meditari Accountancy Research, 9*, 35 - 59.

Braun, R. L., & Simpson, W. R. (2004). The pause method in undergraduate auditing: an analysis of student assessments and relative effectiveness. *Advances in Accounting Education Teaching and Curriculum Innovations, 6*, 69 - 85.

Brenner, L., & Nichols, P. (2009). *Developing Writing Intensive (WI) teaching and learning resource pack*. Unpublished resource pack.

Britton, J., Burgess, T., Martin, N., McLeod, A., & Rosen, H. (1975). *The development of writing abilities (11 - 18)*. London: Macmillan.

Bruffee, K. A. (1984). Collaborative learning and the "conversation of mankind". *College English, 46*(7), 635 - 652.

Bruffee, K. A. (1986). Social construction, language, and the authority of knowledge: a bibliograhical essay. *College English, 48*(8), 773 - 790.

Bruffee, K. A. (1999). *Collaborative learning: higher education, interdependence, and the authority of knowledge* (2nd ed.). Baltimore: The John Hopkins University Press.

Byrne, M., & Flood, B. (2004). Exploring the conceptions of learning of accounting students. *Accounting Education, 13*(4), 25 - 37.

Byrne, M., Flood, B., & Willis, P. (2002). The relationship between learning approaches and learning outcomes: a study of Irish accounting students. *Accounting Education, 11*(1), 27 - 42.

Byrne, M., Flood, B., & Willis, P. (2004). Using the student learning framework to explore variation in academic performance of European business students. *Journal of Further and Higher Education, 28*(1), 67 - 78.

Byrne, M., Flood, B., & Willis, P. (2009). An inter-institutional exploration of the learning approaches of students studying accounting. *International Journal of Teaching and Learning in Higher Education, 20*(2), 155 - 167.

Carter, M., Ferzli, M., & Wiebe, E. N. (2007). Writing to learn by learning to write in the disciplines. *Journal of Business and Technical Communication, 21*(3), 278 - 302.

Catanach, A. H. J., & Golen, S. P. (1997). Developing a writing model for accountants. *Accounting Education, 2*(1), 41 - 60.

Catanach, A. H. J., & Rhoades, S. (1997). A practical guide to collaborative writing assignments in financial accounting courses. *Issues in Accounting Education, 12*(2), 521 - 536.

Cate, T., & Dynan, L. (2010). Structured writing assignments as pedagogy: teaching content, enhancing skills. *Journal of Applied Economics and Policy, 29*, 47 - 60.

Chiurri, M., & Varaksina, A. (2006). End of the myth: CPAs do have to write. *The CPA Journal, 70*(5), 9 - 10.

Chu, L., & Libby, T. (2010). Writing mini-cases: an active learning assignment. *Issues in Accounting Education, 25*(2), 245 - 265.

Coetzee, S., & Oberholzer, R. (2009). The tax knowledge of South African trainee accountants: a survey of the perceptions of training officers in public pratice. *Accounting Education: an international journal, 18*(4 - 5), 421 - 441.

Cohen, A. J., & Spencer, J. (1993). Using writing across the curriculum in economics: is taking the plunge worth it? *Journal of Economic Education, Summer*, 219 - 230.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). New York: Routledge.

Committee on the Financial Aspects of Corporate Governance. (1992) *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee.

Cooper, B. J. (2004). The engima of the Chinese learner. *Accounting Education, 13*(3), 289 - 310.

Cope, C., & Staehr, L. (2005). Improving students' learning approaches through intervention in an information systems learning environment. *Studies in Higher Education, 30*(2), 181 - 197.

Corman, E. J. (1986). A writing program for accounting courses. *Journal of Accounting Education, 4*(2), 85 - 95.

Correia, C., Langfield-Smith, K., Thorne, H., & Hilton, R. W. (2008). *Management Accounting, information for managing and creating value South African edition*. Maidenhead: McGraw-Hill Education.

Creswell, J. W. (1994). *Research design qualitative & quantitative approaches*. Thousand Oaks: SAGE Publications.

Creswell, J. W. (2009). *Research design qualitative, quantitative and mixed methods approaches* (3rd ed.). Thousand Oaks: SAGE Publications, Inc.

Crumbley, D. L., & Smith, L. M. (2000). Using short stories to teach critical thinking and communication skills to tax students. *Accounting Education, 9*(3), 291 - 296.

Cunningham, B. M. (1991). Classroom research and experiential learning. Three successful experiences - the impact of student writing in learning accounting. *Community Junior College, 15*, 317 - 325.

Davidson, L. S., & Gumnior, E. C. (1993). Writing to learn in a business economics class. *Journal of Economic Education, Summer*, 237 - 243.

Davidson, R. A. (2002). Relationship of study approach and exam performance. *Journal of Accounting Education, 20*, 29 - 44.

Day, M. M., Kaidonis, M. A., & Perrin, R. (2003). Reflexivity in learning critical accounting: implications for teaching and its research nexus. *Critical Perspectives in Accounting, 14*(2003), 597 - 614.

De Lange, P., Jackling, B., & Gut, A.-M. (2006). Accounting graduates' perceptions of skills emphasis in undergraduate courses: an investigation from two Victorian universities. *Accounting and Finance, 46*, 365 - 386.

De Lange, P., & Mavondo, F. (2004). Gender and motivational differences in approaches to learning by a cohort of open learning students. *Accounting Education, 13*(4), 431 - 448.

De Lange, P., Waldmann, E., & Wyatt, K. (1997). Personal characteristics and academic achievement of undergraduate accounting students studying through open learning. *Accounting Education, 6*(4), 295 - 306.

de Villiers, R. (2010). The incorporation of soft skills into accounting curricula: preparing accounting graduates for their unpredicatable futures. *Meditari Accountancy Research, 18*(2), 1 - 22.

de Vos, A., Strydom, H., Fouche, C., & Delport, C. (2009). *Research at grass roots for the social sciences and human service professions* (3rd ed.). Pretoria: Van Shaik Publishers.

Delves Broughton, P. (2008). *What they teach you at Harvard Business School: my two years in the cauldron of capitalism*. London: Penguin Group.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1998a). *Collecting and interpreting qualitative materials*. Thousand Oaks: SAGE Publications Inc.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1998b). *The landscape of qualitative research theories and issues*. Thousand Oaks: SAGE Publications, Inc.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1998c). *Strategies of qualitative inquiry*. Thousand Oaks: SAGE Publications, Inc.

Dirkx, J. M., & Smith, R. O. (2004). Thinking out of a bowl of spaghetti: learning to learn in online collaborative groups. In T. S. Roberts (Ed.), *Online collaborative learning: theory and practice* (pp. 132 - 159). London, England: Information Science Publishing.

Divoll, K., & Browning, S. (2010). The "classroom ticket" to concept retention. *International Journal for the Scholarship of Teaching and Learning, 4*(2), 1 - 13.

Dobbie, M., & Joyce, S. (2008). Peer-assisted learning in accounting: a qualitative assessment. *Asian Social Science, 4*(3), 18 - 25.

du Preez, H. (2012). *Open book assessment in the qualifying examination of South African Chartered Accountants, a thesis submitted for the degree of Master of Taxation*. University of Pretoria, Pretoria. Retrieved 26 May, 2012, from http://upetd.up.ac.za/thesis/available/etd-09212011-125019/unrestricted/dissertation.pdf.

Duff, A. (2004). Understanding academic performance and progression of first-year accounting and business economics undergraduates: the role of approaches to learning and prior academic achievement. *Accounting Education, 13*(4), 409 - 430.

Duff, C., & Zidulka, A. (2008). Why writting skills are vital for CAs. Retrieved 3 July, 2012, from http://www.ica.bc.ca/kb.php3?artid=2810.

Edmond, T., & Tiggeman, T. (2009). Accounting experiences in collaborative learning. *American Journal of Business Education, 2*(7), 97 - 100.

Eley, M. G. (1992). Differential adoption of study approaches within individual students. *Higher Education, 23*, 231 - 254.

Elias, R. Z. (2005). Students' approaches to study in introductory accounting courses. *Journal of Education for Business, 80*(4), 194 - 199.

Emig, J. (1977). Writing as a mode of learning. *College Composition and Communication, 28*(2), 122 - 128.

English, L., Bonanno, H., Ihnatko, T., Webb, C., & Jones, J. (1999). Learning through writing in a first-year accounting course. *Journal of Accounting Education, 17*, 221 - 254.

English, L., Luckett, P., & Mladenovic, R. (2004). Encouraging a deep approach to learning through curriculum design. *Accouting Education, 13*(4), 461 - 488.

Eun, C. S., & Resnick, B. G. (2007). *International Financial Management*. New York: McGraw-Hill/Irwin.

Faris, K. A., Golen, S. P., & Lynch, D. H. (1999). Writing apprehension in beginning accounting majors. *Business Communication Quarterly, 62*(2), 9 - 21.

Firch, T., Campbell, A., Filling, S., & Lindsay, D. H. (2011). An accounting writing proficiency survey. *Journal of Business Education, 4*(4), 15 - 23.

Firch, T., Campbell, A., Lindsay, D. H., & Garner, D. E. (2010). On developing the writing skills course for accounting students. *American Journal of Business Education, 3*(4), 61 - 65.

Flood, B., & Wilson, R. M. S. (2008). An exploration of the learning approaches of perspective professional accountants in Ireland. *Accounting Forum, 32*, 225 - 329.

Gabriel, S. L., & Hirsch, M. L. J. (1992). Critical thinking and communication skills: integration and implementation issues. *Journal of Accounting Education, 10*, 243 - 270.

Gammill, D. (2006). Learning the *write* way. *The Reading Teacher, 59*(8), 754 - 762.

Garner, M. R. (1994). An efficient approach to writing across the curriculum: microthemes in accounting classes. *Journal of Education for Business, 69*(4), 211 - 218.

Gee, J. P. (2003). Opportunity to learn: a language-based prespective on assessment. *Assessment in Education, 10*(1), 27 - 46.

Gottschalk, K., & Hjortshoj, K. (2004). *The elements of teaching writing a resource for instructors in all disciplines* (1st ed.). Boston: Bedford/St.Martins.

Gouws, D. (1997). Perspectives surrounding accounting communication. *Meditari Accountancy Research, 5*, 61 - 82.

Gouws, D., & Terblanche, A. (1998). The accountant as a facilitator of communication. *Meditari Accountancy Research, 6*, 91 - 119.

Gow, L., Kember, D., & Cooper, B. (1994). The teaching context and approaches to study of accountancy students. *Issues in Accounting Education, 9*(1), 118 - 130.

Haggis, T. (2003). Constructing images of ourselves? A critical investigation into 'approaches to learning' research in higher education. *British Educational Research Journal, 29*(1), 89 - 104.

Haggis, T. (2009a). Beyond mutual 'constitution': looking at learning and context from the perspective of complexity theory. In R. Edwards, Biesta, G and Thorpe, M (Ed.),

Rethinking contexts for learning and teaching: communities, activities and networks.
London: Routledge.

Haggis, T. (2009b). What have we been thinking? A critical overview of 40 years of research in student higher education. Retrieved from https://dspace.stir.ac.uk/bitstream/1893/455/1/Haggis%20Studies%20in%20HE%202 009.pdf

Haigh, M. J. (2001). Constructing Gaia: using journals to foster reflective learning. *Journal of Geography in Higher Education, 25*(2), 167 -189.

Hall, M., Ramsay, A., & Raven, J. (2004). Changing the learning environment to promote deep learning approaches in first-year accounting students. *Accounting Education, 13*(4), 489 - 505.

Hall, S., & Tiggeman, T. (1995). Getting the big picture: writing to learn in a finance class. *Business Communication Quarterly, 58*(1), 12 - 15.

Hand, L., Sanderson, P., & O'Neil, M. (1996). Fostering deep and active learning through assessment. *Accounting Education, 5*(1), 103 - 119.

Harris, M. (2010, 23.05.2010). Accountancy's brave new world, *Sunday Times,* p. 1.

Harwood, E. M., & Cohen, J. R. (1999). Classroom assessment: educational and research opportunites. *Issues in Accounting Education, 14*(4), 691 - 724.

Hassall, T., & Joyce, J. (2001). Approaches to learning of management accounting students. *Education + Training, 43*(3), 145 - 153.

Henning, E. (2010). *Finding your way in qualitative research* (1st ed.). Pretoria: Van Shaik Publishers.

Hesketh, J. H. (2004). What can we know from case study research? *Journal of Education, 33*, 103 - 124.

Hesketh, J. H. (2011). Accounting academics' multiple challenges: issues-driven learning offers a way forward. *South African Journal of Accounting Research, 25*(1), 1 - 34.

Hirsch Jr., M. L., & Collins, J. D. (1988). An integrated approach to communication skills in an accounting curriculum. *Journal of Accounting Education, 6*, 15 - 31.

Hodges, H. F. (1996). Journal writing as a mode of thinking for RN-BSN students: a leveled approach to learning to listen to self and others. *Journal of Nursing Education, 35*(3), 137 - 141.

Hoff, K. T., & Stout, D. E. (1989). Practical accounting/english collaboration to improve student writing skills: the use of informal journals and the diagnostic reading technique. *The Accounting Educators' Journal, 2*(2), 83 - 96.

Hogan, C. (1995). Creative and reflective journal processes. *The Learning Organization, 2*(2), 4 - 17.

Howieson, B. (2003). Accounting practice in the new millennium: is accounting education ready to meet the challenges? *The British Accounting Review, 35*, 69 - 103.

Howieson, B. (2004). *The use of self-reflective study journals in a postgraduate accounting theory course: a case study*. Paper presented at the Southern African Accounting Association, Durban.

Human-Vogel, S. (2006). Students' mental models of positive mood and self-regulation in learning. *Psychological Society of South Africa, 36*(3), 613 - 633.

Human-Vogel, S., & Mahlangu, P. P. (2009). Commitment in academic contexts: first year education students' beliefs about the aspects of self, the lecturer and instruction. *South African Journal of Higher Education, 23*(2), 309 - 328.

Hylton, J., & Allen, J. (1993). Setting specific purposes for writing-to-learn assignments: adapting the dialogue notebook for a Human Services course. *Teaching Sociology, 21*(1), 68 - 78.

International Federation of Accountants. (2005). IES 3 - Professional skills and general education. Retrieved 28 June, 2012, from http://www.ifac.org/sites/default/files/publications/files/ies-3-professional-skills-1.pdf.

Jackling, B. (2005). Perceptions of the learning context and learning approaches: implications for quality learning outcomes in accounting. *Accounting Education: an international journal, 14*(3), 271 - 291.

Jayasinghe, K. N. (2009). Learning accounting through non-accountants. Retrieved 21 May, 2012, from http://cadair.aber.ac.uk/dspace/bitstream/handle/2160/7402/2009%20-%20JAYASINGHE,%20KN.%20-%20TC1%20-%20Learning%20Accounting%20Through%20Non-Accountants.pdf?sequence=1.

Jinkens, R. C. (2008). Do our teaching methods agree with how we believe classes should be taught? Student input, from the perspective of younger and older accounting students. Retrieved from http://jinkens.info/uploads/DRAFT_Jinkens_Do_Our_Teaching_Methods_Agree_with_How_We_Believe_Classes_Should_Be_Taught_1.pdf

Joubert, B., Coetzee, S., & Oberholzer, R. (2009). Tax topics a trainee chartered accountant should be taught: a survey of perceptions in and outside public practice *Meditari Accountancy Research, 17*(1), 15 - 31.

Kalliath, T., & Coghlan, D. (2001). Developing reflective skills through journal writing in an OD course. *Organization Development Journal, 19*(4), 61 - 70.

Kalman, C., Aullis, M. W., Shelley, R., & Godley, J. (2008). Students' perceptions of reflective writing as a tool for exploring an introductory textbook. *Journal of College Science Teaching, 37*(4), 74 - 81.

Kalman, J., & Kalman, C. (1998). Writing to learn. Retrieved 13 February, 2012, from http://www.cdtl.nus.edu.sg/link/jul1998/te1.htm.

Kavanagh, M. H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting and Finance, 48*, 279 - 300.

Khuzwayo, W. (2010, 17.11.2010). Financial services face skills crunch, *The Mercury - Business Report,* p. 1.

Kim, B. (2006). Social constructivism. Retrieved 9 January, 2012, from http://projects.coe.uga.edu/epltt/index.php?title=Social_Constructivism.

Kinchin, I., & Hay, D. (2005). Using concept maps to optimize the composition of collaborative student groups: a pilot study. *Journal of Nursing Education, 51*(2), 182 - 187.

King Committee on Corporate Goverance. (2009). *King report on corporate governance for South Africa*. Johannesburg: Institute of Directors.

Koch, E., & Kriel, M. (2005). An argument for integrating language or language-related skills in the accounting curriculum. *South African Journal of Higher Education, 19*(3), 626 - 637.

Kolb, D. A. (1984). *Experiential Learning: experience as the source of learning and development*. New Jersey: Prentice-Hall.

Kranacher, M.-J. (2007). "The problem with communication ...". *The CPA Journal, July*, 80.

Krom, C. L., & Williams, S. V. (2012). Tell me a story: using creative writing in introductory accounting courses to enhance and assess student learning. *Journal of Accounting Education, in press*, 1 - 16.

Laird, T. F. N., & Garver, A. K. (2010). The effect of teaching general education courses on deep approaches to learning: how disciplinary context matters. *Research in Higher Education Journal, 51*, 248 - 265.

Landelahni Recruitment Group. (2010). *Fast facts: financial services short report 2010.*

Langer, J. A., & Applebee, A. N. (1987). *How writing shapes thinking*: National Council of Teachers of English.

Leshem, S., & Trafford, V. (2007). Overlooking the conceptual framework. *Innovations in Education and Teaching International, 44*(1), 93 - 105.

Leveson, L. (2004). Encouraging better learning through better teaching: a study of approaches to teaching in accounting. *Accounting Education, 13*(4), 529 - 548.

Lillis, T. (2003). Student writingas 'academic literacies': drawing on Bakhtin to move from *critique* to *design. Language and Education, 17*(3), 192 - 207.

Lillis, T., & Scott, M. (2007). Defining academic literacies research. *Journal of Applied Linguistics*.

Lillis, T., & Turner, J. (2001). Student writing in higher education: contemporary confusion, traditional concerns. *Teaching in Higher Education, 6*(1), 57 - 68.

Lin, C.-Y., & Tu, C.-C. (n.d.). Combined IQA approach with a case study for information system requirements. Retrieved 15 February, 2012, from http://140.130.135.23:8080/dspace/bitstream/TTCIR/405/1/PICMET2010-%E6%9E%97%E7%B4%94%E9%9B%85.pdf.

Llewellyn, S., & Milne, M. J. (2007). Accounting as codified discourse. *Accounting, Auditing & Accountability Journal, 20*(6), 805 - 824.

Locke, K., & Brazelton, J. K. (1997). "Why do we ask them to write, or whose writing is it, anyway?". *Journal of Management Education, 21*(1), 44 - 57.

Lodewyckx, D. P. G. (2005). *An Interactive Qualitative Analysis of Educational Psychology Students' Self-Efficacy Beliefs in Career Counselling, a thesis submitted for the degree Magister of Education.* University of Pretoria, Pretoria. Retrieved 26 February, 2012, from http://upetd.up.ac.za/thesis/available/etd-12202006-132015/unrestricted/00dissertation.pdf.

Loo, R., & Thorpe, K. (2002). Using reflective learning journals to improve individual and team performance. *Team Performance and Management, 8*(5/6), 134 - 139.

Lord, B. R., & Robertson, J. (2006). Students' experiences of learning in a third-year Management Accounting class: evidence from New Zealand. *Accounting Education: an international journal, 15*(1), 41 - 59.

Lucas, G. M. (2010). Initiating student-teacher contact via personalized reponses to one-minute papers. *College Teaching, 58*, 39 - 42.

Lucas, U. (2000). Worlds apart: students' experiences of learning introductory accounting. *Critical Perspectives in Accounting, 11*, 479 - 504.

Lucas, U. (2001). Deep and surface approaches to learning within introductory accounting: a phenomenographic study. *Accounting Education, 10*(2), 161 - 184.

Lucas, U., & Meyer, J. H. F. (2004). Supporting student awareness: understanding student perceptions of their subject matter within introductory courses. *Innovations in Education and Teaching International, 41*(4), 459 - 469.

Lucas, U., & Meyer, J. H. F. (2005). 'Towards a mapping of the student world': the identification of variation in students' conceptions of, and motivations to learn, introductory accounting. *The British Accounting Review, 37*, 177 - 204.

Lucas, U., & Mladenovic, D. R. (2004). Approaches to learning in accounting education - editorial. *Accounting Education, 13*(4), 399 - 407.

Lundblad, H., & Wilson, B. A. (2007). Saks and the unholy trinity: vendors, the Securities and Exchange Commission and the hedge fund. *Journal of Business Case Studies, 3*(1), 23 - 32.

MacFarlane, B. (2001). Developing reflective students: evaluating the benefits of learning logs within a business ethics programme. *Teaching Business Ethics, 5*, 375 - 387.

Mampana, R., & Bouwer, C. (2011). The influence of township schools on the resillience of their learners. *South African Journal of Education, 31*, 114 - 126.

Marton, F., & Säljö, R. (1976). On qualitatative differences in learning: I-outcome and process. *British Journal of Educational Psychology, 46*, 4 - 11.

Mashishi, K., & Rabin, E. (2000). A study of the approaches to learning engagement with the learning context and conceptions of learning of a group of fourth year accounting students. *South African Journal of Accounting Research, 14*(2), 1 - 19.

Matas, C., Ng, C., & Muurlink, O. (2011). Using the IGCRA (individual, group, classroom reflective action) technique to enhance teaching and learning in large accountancy classes. *Journal of Technology and Science Education, 1*(1), 24 - 37.

Matherly, M., & Burney, L. (2009). Using peer-reviewed writing in the accounting curriculum: a teaching note. *Issues in Accounting Education, 24*(3), 393 - 413.

May, G. S., & Arevalo, C. (1983). Integrating effective writing skills in the accounting curriculum. *Journal of Accounting Education, 1*(1), 119 - 126.

McChlery, S., & Visser, S. (2009). A comparative analysis of the learning styles of accounting students in the United Kingdom and South African. *Research in Post-Compulsory Education, 14*(3), 299 - 315.

McGuigan, N., & Weil, S. (2010). *Student preconceptions of introductory accounting: galloping over the biggest threshold of them all!* Paper presented at the Third Biennial Threshold Concepts Symposium, Sydney. Retrived 21 May, 2012, from.

http://www.organizzazione.unina.it/cms7/proceedings/proceedings_stream_33/McGuigan_and_Weil.pdf.

McInnerney, J. M., & Roberts, T. S. (2004). Collaborative or coopertive learning? In T. S. Roberts (Ed.), *Online collaborative learning: theory and practice* (pp. 203 - 214). London, England: Information Science Publishing.

McIsaac, C. M., & Sepe, J. (1996). Improving the writing of accounting students: a cooperative venture. *Journal of Accounting Education, 14*(4), 515 - 533.

McVay, G. J., Murphy, P. R., & Yoon, S. W. (2008). Good practices in Accounting education: classroom configuration and technological tools for enchancing the learning environment. *Accounting Education: an international journal, 17*(1), 41 - 43.

Meditari Accoutancy Research. Retrieved 13 February, 2012, from http://www.emeraldinsight.com/journals.htm?issn=2049-372X.

Micheal, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education, 30*, 169 - 167.

Mohamed, E. K. A., & Lashine, S. H. (2003). Accounting knowledge and skills and the challenges of a global business environment. *Managerial Finance, 29*(7), 3 - 16.

Mohrweis, L. (1991). The impact of writing assignments on accounting students' writing skills. *Journal of Accounting Education, 9*, 309 - 325.

Morgan, G. J. (1997). Communication skills required by accounting graduates: practitioner and academic perceptions. *Accounting Education, 6*(2), 93 -107.

Morse, J. M. (1998). Designing funded qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 56 - 85). Thousand Oaks, California.

Mulder, C. (2010). In South Africa, the highly qualified is king. *SA Accountancy*.

Muller, H., Prinsloo, P., & du Plessis, A. (2007). Validating the profile of a successful first year accounting student. *Meditari Accountancy Research, 15*(1), 19 - 33.

Myburgh, J. E. (2005). An empirical analysis of career choice factors that influence first-year accounting students at the University of Pretoria: a cross-racial study. *Meditari Accountancy Research, 13*(2), 35 - 48.

Nakonechny, J. (2007). Teaching and learning: a two-way street: University of British Colombia.

Ng, J., Lloyd, P., Kober, R., & Robinson, P. (1999). Developing writing skills; a large class experience: a teaching note. *Accounting Education, 8*(1), 47 - 55.

Northcutt, N., & McCoy, D. (2004). *Interactive Qualitative Analysis: a systems method for qualitative research*. London: Sage Publications.

O'Connor, T. J., & Ruchala, L. V. (1998). A model for small-group writing labs in an accounting curriculum. *Issues in Accounting Education, 13*(1), 93 - 111.

Palm, C. (2007). The 'Jim factor' - my experience as a first-time accounting tutor. *Accounting Education: an international journal, 16*(1), 97 - 100.

Prinsloo, F. (2004). *Developing a competency framework for entry-level Chartered Accountants (SA).* Paper presented at the Southern African Accounting Association, Durban.

Prosser, M., & Trigwell, K. (2001). *Understanding learning and teaching* Buckingham: SRHE and Open University Press.

Ramburuth, P., & Mladenovic, D. R. (2004). Exploring the relationship between students' orientation to learning, the structure of students' learning outcomes and subsequent academic performance. *Accounting Education, 13*(4), 507 - 527.

Ravenscroft, S. P., Buckless, F. A., & Hassall, T. (1999). Cooperative learning - a literature guide. *Accounting Education, 8*(2), 163 - 176.

Ravenscroft, S. P., Rebele, J. E., St Pierre, K., & Wilson, R. M. S. (2008). The importance of accounting education research. *Journal of Accounting Education, 26*, 180 - 187.

Rebele, J. E. (1985). An examination of accounting students' perceptions of the importance of communication skills in public accounting. *Issues in Accounting Education*, 41 - 50.

Reinstein, A., & Houston, M. (2004). Using the securities and exchange commission's "plain English" guidelines to improve accounting students' writing skills. *Journal of Accounting Education, 22*, 53 - 67.

Reinstein, A., & Trebby, J. P. (1997). How accounting educators can help improve their students' writing skills. *Journal of Education for Business, 73*(2), 105 - 126.

Reynolds, J. A., Thaiss, C., Katkin, W., & Thompson Jr, R. J. (2012). Writing-to-learn in undergraduate science education: a community-based conceptually driven approach. *CBE Life Sciences Education, 11*(1), 17 - 25.

Riordan, D. A., Riordan, M. P., & Sullivan, M. C. (2000). Writing across the acounting curriculum: an experiment. *Business Communication Quarterly, 63*(3), 49 - 59.

Rivard, L. P. (1994). A review of writing to learn in science: implications for practice and research. *Journal of Research in Science Teaching, 31*(9), 969 - 983.

Rule, P., & John, V. (2011). *Your guide to case study research* (1st ed.). Pretoria: Van Schaik Publishers.

Sadler, E., & Erasmus, B. (2005). The academic success and failure of black chartered accounting graduates in South Africa: a distance education perspective. *Meditari Accountancy Research, 13*(1), 29 - 50.

Samkin, G., & Francis, G. (2008). Introducing a learning portfolio in an undergraduate financial accounting course. *Accounting Education: an international journal, 17*(3), 233 - 271.

Sandelowski, M. (2005). Book review of IQA. *Qualitative Health Research, 15*(5), 719 - 720.

Sarbanes-Oxley Act of 2002. (2002) *Public Law 107 - 204 - July 30, 2002*. Washington: US Government.

Saudagaran, S. M. (1996). The first course in accounting: an innovative approach. *Issues in Accounting Education, 11*(1), 83 - 93.

Scofield, B. W. (1994). Double entry journals: writer-based prose in the intermediate accounting curriculum. *Issues in Accounting Education, 9*(2), 330 - 352.

Scofield, B. W., & Combes, L. (1993). Designing and managing meaningful writing assignments. *Issues in Accounting Education, 8*(1), 71 - 85.

Sharma, D. S. (1997). Accounting students' learning conceptions, approaches to learning, and the influence of the learning-teacher context approaches to learning. *Accounting Education, 6*(2), 125 - 146.

Simons, K., Higgins, M., & Lowe, D. (1995). A profile of communication apprehension in accounting majors: implications for teaching and curriculum revision. *Journal of Accounting Education, 13*(2), 159 - 176.

Sin, S., Jones, A., & Petocz, P. (2007). Evaulating a method of integrating generic skills with accounting content based on a functional theory of meaning. *Accounting and Finance, 47*, 143 - 163.

South African Institute of Chartered Accountants. (2011). Competency Framework Detailed Guidance for Academic Programmes. Retrieved 2 April, 2012, from https://www.saica.co.za/Portals/0/LearnersStudents/Examinations/CompetencyFramework_CAs.pdf.

South African Institute of Chartered Accountants. (2012a). Becoming a CA Retrieved 10 September, 2012, from https://www.saica.co.za/Training/BecomingaCA/tabid/157/language/en-ZA/Default.aspx.

South African Institute of Chartered Accountants. (2012b). Competency Framework 2012: detailed guidance for the academic.

South African Institute of Chartered Accountants. (2012c). List of SAICA accredited programmes - 2012. Retrieved 10 September, 2012, from https://www.saica.co.za/Portals/0/LearnersStudents/documents/List%20of%20accredited%20programmes%202012.pdf.

South African Institute of Chartered Accountants. (2012d). Markers' and umpires' comments Part 1 of the Qualifying Examination 2012. Retrieved 28 June, 2012, from https://www.saica.co.za/Portals/0/LearnersStudents/Examinations/Past%20Exam%20Papers/QE12012/QE%201%202012%20Examiners%20comments.pdf.

South African Journal of Accounting Research. Retrieved 13 February, 2012, from http://www.sajar.co.za.

Stacey, E. (2005). A constructivist framework for online collaborative learning: adult learning and collaborative learning theory. In T. S. Roberts (Ed.), *Computer-supported collaborative learning in higher education* (pp. 140 - 161). London, England: Idea Group Publishing.

Stainbank, L., Oakes, D., & Razak, M. (2010). *A student's guide to international financial reporting* (6th ed.). Pietermaritzburg: S & O Publishing.

Stake, R. E. (1998). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 86 - 109). Thousand Oaks, California: SAGE Publications, Inc.

Steenkamp, L., Baard, R., & Frick, B. (2009). Factors influencing success in first-year accounting at a South African university: a comparison between lecturers' assumptions and students' perceptions. *SA Journal of Accounting Research, 23*(1), 113 - 140.

Steenkamp, L. P., Baard, R. S., & Frick, B. L. (2012). A holistic investigation into a tutor programmed in first-year Financial Accounting. *Meditari Accountancy Research, 20*(1), 68 - 87.

Stocks, K. D., Stoddard, T. D., & Waters, M. L. (1992). Writing in the accounting curriculum: guidelines for professors. *Issues in Accounting Education, 7*(2), 193 - 204.

Stout, D., E, Sumutka, A., R, & Wygal, D., E. (1991). Experiential evidence on the use of writing assignments in upper-level accounting courses. *Advances in Accounting, 9*, 125 - 141.

Stout, D. E., & DaCrema, J. J. (2004). A writing intervention for the accounting classroom: dealing with the problem of faulty modifiers. *Journal of Accounting Education, 22*, 289 - 323.

Stout, D. E., & Ruble, T. E. (1991). The learning style inventory and accounting education research: a cautionary view and suggestions for future research. *Issues in Accounting Education, 6*(1), 41 - 52.

Stowe, K. (2010). A quick argument for active learning: the effectiveness of one-minute papers. *Journal for Economic Educators, 10*(1), 33 - 37.

Stowers, R. H., & White, G. T. (1999). Connecting accounting and communication: a survey of public accounting firms. *Business Communication Quarterly, 62*(2), 23 - 40.

Summary of Results. (2010).

Sundem, G. L. (1999). Accounting Education Change Commission: its history and impact.

Sundem, G. L., Williams, D. Z., & Chironna, J. F. (1990). The revolution in accounting education. *Management Accounting (IMA), 72*(6), 49 - 53.

Tabane, R. J. (2010). *Integration and learners' feelings of belonging in a desegregated former House of Delegates school, a thesis submitted for the degree Doctor of Philosophy.* University of Pretoria, Pretoria. Retrieved 23 February, 2012, from http://upetd.up.ac.za/thesis/available/etd-05012010-163911/ >.

Tabane, R. J., & Human-Vogel, S. (2010). Sense of belonging and social cohension in a desegregated former House of Delegates School. *South African Journal of Education, 30*, 491 - 504.

Tempone, I., & Martin, E. (1999). Accounting students' approaches to group-work. *Accounting Education: an international journal, 8*(3), 177 - 186.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education, 37*, 57 - 70.

van der Schyf, D. B. (2008). The essence of a university and scholarly activity in accounting, with reference to a Department of Accounting at a South African university. *Meditari Accountancy Research, 16*(1), 1 - 26.

Visser, S., McChlery, S., & Vreken, N. (2006). Teaching styles versus learning styles in the accounting sciences in the United Kingdom and South Africa: a comparative analysis. *Meditari Accountancy Research, 14*(2), 97 - 112.

Webb, G. (1997). Deconstructing deep and surface: towards a critique of phenomenography. *Higher Education, 33*, 195 - 212.

Wilson, R. M. S. (2011). Alignment in accounting education and training. *Accounting Education: an international journal, 20*(1), 3 - 16.

Wisker, G. (2005). *The good supervisor: supervising postgraduate and undergraduate research for doctoral theses and dissertations*. Basingstoke: PalgraveMacmillan.

Woods McElroy, B., & Coman, C. L. (2002). Writing to learn in Managerial Accounting classrooms: further evident about student performance and perception. Retrieved 19 July, 2012, from http://www.westga.edu/~bquest/2002/writing.htm.

Wyatt, T. J. (2010). A sex-based examination of violence and aggression perceptions among adolescents: an interactive qualitative analysis. *The Qualitative Report, 15*(4), 823 - 851.

Wygal, D. E., & Stout, D. E. (1989). Incorporating writing techniques in the accounting classroom: experience in Financial, Managerial and Cost courses *Journal of Accounting Education, 7*, 245 - 252.

Zinsser, W. (1988). *Writing to learn*. New York: Harper & Row, Publishers, Inc.

ANNEXURES

ANNEXURE I – Request to Dean

UNIVERSITY OF
KWAZULU-NATAL

7 March 2011

Prof L Stainbank
Head of School: Accounting

Dear Prof Stainbank,

PREMISSION TO CONDUCT RESEARCH AS PART OF A PHD QUALIFICATION

NAME: Karen Bargate

STUDENT NO.:   771770793

DISSERTATION: Managerial Accounting and Finance Students' Experiences of Learning in a Writing Intensive Tutorial Programme

I am registered for a PhD in Education and will be undertaking the data collection from the beginning of April 2011. To necessitate data gathering by questionnaires, interviews and participant tutorials, permission is requested for students in Managerial Accounting and Finance III (MAF) to volunteer to participate.

Your assistance in permitting access to the MAF students for purposes of this research is most appreciated. Please be assured that all information gained from the research will be treated with the utmost circumspection. I will strictly adhere to confidentiality and anonymity.

If permission is granted, it is required to be in writing on a letterhead and signed by you.

Thank you for your assistance in this regard.

Yours sincerely

K. Bargate

KAREN BARGATE
Senior Lecturer: Managerial Accounting and Finance
Faculty of Management Studies
School of Accounting, Managerial Accounting and Finance Section
Westville Campus

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 7366   Facsimile: +27 (0)31 260 3282   Website: www.ukzn.ac.za

ANNEXURE II – Permission from the Dean

FACULTY OF
MANAGEMENT STUDIES

UNIVERSITY OF
KWAZULU-NATAL

8 March 2011

Mrs K Bargate
School of Accounting

Dear Karen

PERMISSION TO CONDUCT RESEARCH

Thank you for your letter dated 7 March 2011. Permission is granted for you to conduct research in the School of Accounting, specifically in Managerial Accounting and Finance III.

Yours sincerely

L J Stainbank (Professor)
Dean : Faculty of Management Studies

Dean's Suite - Faculty of Management Studies - Westville Campus

Postal Address: Private Bag X54001, Durban, 4000, South Africa

ANNEXURE III – Ethical clearance

UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

Research Office, Govan (Mbeki Centre Westville Campus)
Private Bag x54001
DURBAN, 4000
Tel No: +27 31 260 3587
Fax No: +27 31 260 4609
ximbap@ukzn.ac.za

16 May 2011

Mrs. K Bargate (771770793)
School of Accounting

Dear Mrs Bargate

PROTOCOL REFERENCE NUMBER: HSS/0222/011D
PROJECT TITLE: Managerial Accounting and Finance Students' Experiences of Learning in a Writing Intensive Tutorial Programme

In response to your application dated 13 May 2011, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.
PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Professor Steven Collings (Chair)
HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

cc. Supervisor – Dr. S Maistry
cc. Mrs. C Haddon

1919 - 2010
100 YEARS OF ACADEMIC EXCELLENCE
Founding Campuses: ▪ Edgewood ▪ Howard College · Medical School ▪ Pietermaritzburg ▪ Westville

ANNEXURE IV – Informed Consent Document

Dear Student,

I am conducting research into using a Writing Intensive Tutorial Programme in a third year Managerial Accounting and Finance course at the University of KwaZulu-Natal.

The research is being undertaken by me, Mrs K Bargate, Senior Lecturer in the School of Accounting, to fulfil the requirements of a Doctor of Philosophy in Education. My contact details are: M Block, Rm 235 on the Westville campus of the University of KwaZulu-Natal. My office number is (031) 260-2217. Further information on the project may be obtained from Dr S Maistry, Edgewood campus. Office telephone number (031) 260-3457.

I wish to obtain your consent to conduct three interviews with you to consolidate my study. The interview will be about your experiences in a writing intensive tutorial programme. The duration of the interview will be approximately 30 minutes. An audio and video recording will be made of the interviews. Interviews transcripts will be transcribed and coded for study. Your transcribed interview will remain confidential at all times and your anonymity is guaranteed. This will be achieved through the use of codes and/or pseudonyms for both yourself and the institution. The transcribed interviews will be kept in a safe place within the Faculty of Education as per research requirements. At the end of five years the transcribed interview will be destroyed by shredding.

Please note that your participation in the study is voluntary and a decision not to participate will not result in any form of disadvantage to you. You are free to withdraw at any stage and for any reason.

I, ………………………………………………………………., (full name of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

…………………………………………….   ………………………….
SIGNATURE OF PARTICIPANT   **DATE**

ANNEXURE V – Participants' reflection on their experience of the WIT programme, arising from silent brainstorming

Monday group (9 participants)	Thursday group (7 participants)
• Ability to relate	• All tutorials should be this interactive
• All of the tasks have been effective	• Challenging at times but totally worth it
• Answering theory type questions	• Could be bettered and improved for understandability
• Attending these tutorials have helped me develop "out of the box" thinking	• Engaging different ideas
• Attending these tutorials have helped me express myself and thoughts more easily as well as helping transfer my thoughts onto paper	• Free structure allowing us to ask what we are not sure of
• Being motivated by the written tasks to pass the course	• Fun learning environment
• Communication with people	• Got to know new people, made new friends and the group discussions, presentations, etc were fun
• Due to joining this tutorial I have went through a few experiences, one of which been staying more focused in tutorials and also learnt to communicate well	• Groupwork
• Empowering	• Have also encourage about some students who work very hard for MAF. To me I found MAF very difficult but after 2nd test seeing my class mates passed MAF! Told myself nothing I can't do
• Enjoy what you are doing	• Have experience a lot from the WIT programme like chatting with other students about problems concerning tut homework
• Experience in working in groups with different personalities but with on goal to pass MAF 300	
• Fun	• Have knew a lot of people in this tut and students to ask questions to not necessary during tut even in library or lecture rooms
• Fun, humourous, entertaining	
• Group learning	• Helpful. I got quite a better understanding of topics covered in lectures
• I can now apply what I'm reading into the real world events. Basically I have grown into a man	
• I can clearly read a question out to myself and try to understand what it requires of me	• I able to do questions in different ways as I discuss with group members. I'm able

- I feel more confident in giving answers and asking for help
- I find that being in the WIT tutorial, I am able to ask questions which I would not have the courage to do in a normal tutorial
- I found the question that integrated relevant costing with other topics difficult
- I have enjoyed the tutorials as they are different every week
- I have learnt to work with other people
- I learnt how to solve problems and arrive at the solutions using more than one method by looking at thing from other peoples perspectives
- I'm slowly but surely trying to manage my time when writing tests
- I really approve and enjoy the structuring of the tutorials as it is very effective and efficient
- I struggled with being able to teach other people particular concepts and now I have found out that the way in which I learn these concepts, I interupt the concepts in the wrong way
- I think I have learnt to write and set-out my work alot better thanks to the programme
- Interaction skills
- Interesting
- It is manageable groups
- It is very effective as it teaches on how to express your thoughts in written and gives

- to expand my thinking ability now and think in a more objective manner
- I enjoy writing out, I remember better when we write down and it gives me a feel of how to approach the tests and exams in written format
- I have learnt time management skills and more importantly, exam technique which helped me complete a lot more in the test than I usually would have!!
- I need to assign more attention/effort into them
- Intellectually stimulating, informative, well-structured, relaxed yet challenging
- Interacting skills
- Interesting
- It could never have of done without them
- It was interesting because I met new people
- It should also be tested for its effectiveness in other disciplines
- I thought I will pass my second test but relevant costing let me down and end up failing it
- Learning from peers
- More hands on
- More understanding and relaxed every week as they require us to go through the work
- My communication skills, my ability to interact with people, working in groups that are diversified (i.t.o. race, gender, etc.)

you a structure on how to tackle theory based type of questions

- It helped me grasp the concepts of MAF much more easily
- It helps me to see how MAF fits into everyday life (my life)
- It sort of forces me to know my work in a natural way
- It taught me how to study MAF
- It taught me how to work with people in a group thanks to the programme
- Learning MAF or any subject without cramming
- Learnt to open up and express my views
- My experiences thus far have been nothing but positive especially the fact that I got to interact on a different level with many different people, making me more outgoing and confident
- My WIT experience has been outstanding
- My understanding of topics has improved. Its helped in skills needed to work in groups –specially when it comes to explaining
- Organized
- People skills are vital!
- Really think I've grown in terms of understanding and doing MAF
- Reviewing reasons to why my test 2 mark differs to my set goal and finding possible ideas to improve
- Solid structure in how to think
- Some task were simple but most of them

- My mark has increased by 9% and it's certainly due to the WIT programme
- My presentation skills have improved significantly!
- Not not really but I believe it would the only way to improve in MAF
- Organised and not monotonous!!
- Other students should be given the opportunity to experience this kind of structure
- Participation with a common goal
- Personally I would prefer it if Mrs Bargate first gave a brief understanding of what the topic is trying to achieve sometimes I know how to calc something but I don't know why
- Possibily more could be done in the future
- Promotes student interaction and 'peer' learning
- Relative to the curriculum
- Relevant costing!
- Relevant costing was challenging: I even battle with in the 2nd test
- Since the WIT program started, the most challenging task was the relevant costing question combined with process costing was the most challenging
- Study techniques, answering guides to tests, review procedures
- Tasks are always effective given that one supplements them by studying. To me they've been effective

- were challenging
- Speaking in front of the crowd
- Standard cost and relevant costing... but after doing some revision and some reading it got much better
- Structure of the WIT tutorials very good as focuses on the areas where we are battling the most and gives us individual attention
- Structured very well, nice to go through examples extensively in a group (even better when someone in the group knows how to solve the problem)
- Tasks requiring you to argue specific points
- The budgeting slacks written tasks but helps you to understand the section very well in order to write about it
- The structure is good
- The written tasks helped me understand the basic concepts
- The WIT tutorials have been challenging because they force you to think 'out the box'
- Teaching is fun it helps you understand!
- The structure is excellent, group work works much more effectively than doing the work individually
- The structure of the tuts is great because it's always something new – never the same
- The summary on std costing
- The written tasks have been effective in

- Tasks I have already done were challenging but funny enough after tut, I go out knowing everything I battle with
- The experiences were fun, innovative and creative
- The structure of the tut is okay. How we conduct question as a group find a chance to ask question and gain allot of understanding
- The WIT tutorials are highly superior to the normal tut process
- The written amounts help understand the logic behind the calculations i.e. no repetitive learning of calculations only!
- They were challenging and educational
- Useful tool for reviews and revision purposes, assists in studying the topic and (in certain) weeks provides insight to real world application.
- Well structured
- Working in groups helps identify problems and speak about them without feeling embarrassed
- Yes as summaries provide for understanding the topic prior to reducing it to one page (or a few)
- Yes, considering that when I've done them I had not learnt
- Yes! Identifying important aspects of section
- Yes, written tasks are effective, infor stays longer in the brain
- Yes written tasks helped me learning

helping me learn MAF as they make you think from another perspective	MAF
• The written tasks have held me as I am now summarising key aspects of every concept taught, not only in MAF but for the other subjects	
• The written tasks have been relatively ok so far (except for the relevant costing extra question)	
• The written tasks I most enjoyed were those tasks that required self-reflection	
• This helped me to know that the past does not determine the future	
• Those tasks that were informal helped me to express my grief about failing MAF last year	
• Time management in tests improved (x2)	
• Totally, at first I used to rush into a question without thinking about it but now I'm a changed man	
• Tutorials should be performed in the same manner in which the WIT tutorials were structured as I personally feel that one learns more from a peer rather than a tutor explaining the work	
• Well structured	
• Writing can be annoying sometimes when the answer is straight forward	
• Writing down regurgetated information achieves nothing in my mind	
• Writing down something is always nice if you understand what your writing	
• Writing is expressing your mind i.e. it	

facilitates freedom of the mind • Writing is learning • Writing is thinking on your piece of paper • Written is also a form of studing, hence the written tasks is something I enjoy as it helps in equipming me for tests • Written tasks have helped me to able to apply different concepts in different ways, not just in the conventional calculation way • Yes we summarised chapters, answered theory based questions. This will help us be prepared for theory type of questions • Yes, writing helps with remembering for tests	

ANNEXURE VI - Tutorial Writing Assignments

Week no	Date	Topic	Work
Term 2 – Managerial Accounting			
1	29.03.11	Cost-volume-profit analysis (CVP)	In pairs spend about 10 minutes getting to know the other person then tell the group about your new friend. In groups discuss questions P18.42 and E18.32-33 then a member for each group will present to the class. Presenter selected by myself. Last 10 minutes of the tutorial period write what you know about CVP and what you still do not understand. **Homework** – write ½ to 1 page reflecting on the tutorial.
2	05.04.11	Activity based costing (ABC)	Write down one question you do not understand about ABC. Class discussion of ABC. Attempt to write an answer to your question. DL question in groups and then class discussion. **Homework** – write a one page summary of ABC which you could use later for revision purposes.
3	12.04.11	Relevant costing	Write for 10 minutes on your understanding of relevant costing. Class discussion on relevant costing. From a review of tut work handed in, I decided to work on P19.47 as the students were struggling with the question. **Homework** – write a memo to a client who makes cakes for special occasions advising the client on the benefits and limitations of implementing a standard costing system.
4	19.04.11	Standard costing	Write a set of steps/rules for calculating a material price and usage variance.

			Swop steps/rules and then answer E10.29 using the rules provided. Group and class discussion Pecan Co. **Homework** – reflect on tut programme to date. Write about a page on **your** understanding of standard costing.
5	03.05.11	Standard costing	In groups, spend 20 minutes writing a dialogue between you and your gogo explaining process costing to your gogo using a practical example that you're gogo can relate to. Remember gogo gets tired quickly so keep it to the point, less than 5 minutes. Two students per group to present their dialogue. Group and class discussion Glitter Guitars. **Homework** – spend some time thinking about and then write down what you think is a realistic mark for you to achieve in test 2. Provide reasons for mark and what steps you intend to follow to obtain the mark. Next week's lecture is budgeting. One of the budgets is a cash budget. Write how you can use cash budgets in your own life.
6	10.05.11	Process costing	Q2 and unseen question done in groups and class discussion. **Homework** – answer question E9.27. Write a memo on budgetary slack and bonus system.
7	17.05.11	Budgets	In groups and class discussion on past exam question. I noticed from marking the work handed in the question was poorly answered. **Homework** – none allocated as test week and mid-year vacation.
Term 3 – Financial Management			
8	26.07.11	Time value of money (TVM)	Class and group discussion 2-25; 26; 50. **Homework** – reflect on mark obtained in test 2. Prepare information on various capital budgeting

			techniques. Each student given a technique to research.
9	02.08.11	Capital budgeting	Each group use about 15 minutes collating information on capital budgeting technique to prepare for a debate. Present a strong argument why your technique is superior to other techniques. **Homework** – write summary of capital budgeting which can be used later for revision purposes.
10	08.08.11	Capital budgeting	Write a mock test on capital budgeting WSI 14.11 45 minutes. Swop work with person next to you and mark each other's. **Homework** – write what you understand/do not understand about joint and by-products. Reflect on the first 3 weeks of the third term.
11	16.08.11	Joint and by-products	Students read out what they wrote on understand/do not understand and had a group discussion on the issues. Class and group discussion 19.55. **Homework** – write on experiences of IQA focus groups.
12	23.08.11	Portfolio management	Write your understanding of portfolio management. Class and group discussion DL question. **Homework** – none allocated however suggest that students make their own summary notes of topics.
13	30.08.11	Risk and return	Write a mock test on risk and return, portfolio management 30 minutes. Swop work and mark each other's. Class discussion on test 2 solutions and DL question. **Homework** – write your understanding of WACC.
14	06.09.11	Weighted average cost of capital (WACC)	Group and class discussion Q4 DL 2008. Reading *Beta and beyond* from "What They Teach you at Harvard Business School: my two year in the cauldron of capitalism" (Delves Broughton, 2008)

			Homework – Q13.1; Q7.2. Consider what you think will be a realistic mark for test 3.
15	13.09.11	Working capital management	Group and class discussion on Pelican and another question. **Homework** – immediately after the test, write a reflective piece on how you found the test.
Term 4 – Financial Management			
16	03.10.11	Financial statement analysis	Group and class discussion of DL Q3 (2008) and Shadeport. **Homework** – describe a learning experience where you had an 'ah ha' moment.
17	10.10.11	Valuations	Group and class discussion Q4 year-end 2008. **Homework** – none allocated as next week is last week. Suggest they keep their summaries up to date.
18	18.10.11	Valuations	No serious work done as last tut and had a party and prize giving.

ANNEXURE VII - Affinity Relationships

Below is a list of the affinities (themes) you are required to consider. Please also refer to the list of affinity descriptions for completing the table below. Remember that an arrow can go either left or right, but not in both directions.

Example

Affinity

1   good preparation
2   improved quality of answers
3   negative feelings

Affinity pair			Give an example in natural language using an IF/THEN statement to explain the relationship according to your personal experience
1		2	
1		3	
2		3	

If Affinity 1 influences Affinity 2 then 1 → 2

If Affinity 3 influences Affinity 1 then 1 ← 3

If no relationship between Affinities then 2 < > 3

Note Affinity 2 cannot influence Affinity 1 and Affinity 1 cannot influence Affinity 3

AFFITINITES FOR WIT PROGRAMME

1. Positive structure
2. Understanding
3. Specific written tasks
4. Challenging
5. Studying techniques and preparation for tests
6. Enjoyable, fun, interesting
7. Personal confidence
8. Interactive
9. Criticisms

AFFINITY RELATIONSHIP TABLE

Affinity pair			Give an example in natural language using an IF/THEN statement to explain the relationship according to your personal experience
1 Structure		2 Understanding	
1		3 Written tasks	
1		4 Challenging	
1		5 Study techniques	
1		6 Enjoyable, fun	
1		7 Confidence	
1		8 Interactive	
1		9 Criticisms	
2 Understanding		3	
2		4	
2		5	
2		6	
2		7	
2		8	
2		9	

3 Written tasks		4	
3		5	
3		6	
3		7	
3		8	
3		9	
4 Challenging		5	
4		6	
4		7	
4		8	
4		9	
5		6	
5 Studying tech		7	
5		8	
5		9	
6 Enjoyable fun		7	
6		8	
6		9	

7 Confidence		8	
7		9	
8 Interactive		9	

Examples of comments from each affinity

Positive structure

Organised and not monotonous   the structure is good

Well structured   organised

The structure is excellent. Group work works much more effectively than doing the work individually

The structure was great because it was always something new each week

Understanding

Really think I have grown in term of understanding and doing MAF

It helped me grasp the concepts of MAF much more easily

My understanding of MAF has improved

Attending these tutorials has helped me develop "out of the box" thinking

Specific written tasks

Tasks requiring you to argue specific points

The summary of standard costing

Standard costing and relevant costing but after doing some revision and reading it got much better

Writing is thinking on your piece of paper

Challenging

Intellectually, stimulating, informative, well-structured, relaxed but challenging

Tasks already done were challenging but funny enough after tut I go out knowing everything I battle with

Challenging at times but totally worth it

Studying technique and test preparation

Written tasks helped me with learning MAF

I have learnt time management skills and more importantly exam technique which helped me complete a lot more of the test than I usually would have

Written is also a form of studing, hence the written tasks is something I enjoy as it helps equipming me for tests

Enjoyable, fun, interesting

Fun, humourous, entertaining   enjoy what you do

Interesting   fun learning environment

Personal confidence

My communication skills, my ability to interact with people, working in groups that are diversified (i.t.o race, gender, etc.)

I feel more confident in giving answers and asking for help thanks to the programme

I got to interact on a different level with many different people make me more outgoing and confident

Empowering

Interactive

Engaging different ideas   interacting skills

Got to know new people, made new friends and the group discussions, presentations, etc. were fun

Free flowing structure allowing us to ask what we are not sure of

Learning for peers

Criticisms

Could be bettered and improved for understandability

Possibly more could be done in the future

Personally I would prefer it if Mrs Bargate gave a brief understanding of what the topic is trying to achieve sometimes I know how to calc something but I don't know why

ANNEXURE VIII - Detailed Affinity Relationship Table

Affinity pair relationship	Frequency	Comments

1 → 2	**10**	If there is a good structure then the understand is enhanced
		If structured well leads to understanding
		Something structured well leads to better understanding
		The group structure helps us address issues that we are struggling with, and work through them together
		The group structure works if we don't understand a topic and we ask a group member
		If structure is good then it is easy to understand your work
		If everything is structured well it makes it easier to understand
		If tasks are well structured (or lectures) then it improves understanding of the topic
		If the tut structure is well prepared then my understanding will increase
		Good or bad structure will have influence on the understanding of the work or assignment to do or studies
		If something is well structured it then facilitates systematic and logical understanding
		If something is well structured it creates an environment for someone to understand
1 ← 2	**2**	If I understand what I am doing then it is easier to structure answers
		Similarly to when one makes a summary (structure) usually this is based on what the individual understands. If one understands, then he is more likely to structure work better
1 < > 2	**0**	
1 → 3	**9**	If it is well structured written task are more efficient
		If I understand what I am doing then it is easier to structure answers
		If there is a structure then you shall get written tasks
		Written tasks should be structured well to make more sense
		If there is structure (which there was) in the program then written tasks become easier to complete
		If structure is good then we more likely to improve in written tasks especially given that the WIT program was mainly about learning how to write appropriately to max marks
		Good structured – when tutorials have to be written its gave us more written practice contribute to good written skills
		If you don't understand the structure of something you won't be able to write about it
1 ← 3	**0**	
1 < > 3	**3**	
1 → 4	**9**	For example – capital budgeting test and group debate
		If structure is not clear at first then you will find it challenging
		If there isn't structure then topics become more challenging
		If the work is not structured well then, the work becomes more challenging
		A positive structure of the module and the tut challenges me to work hard because the tuts are inclusive of challenging questions
		Well-structured tutorials/asking etc. will be challenging and as well stimulate your intelligently
		If there is a solid structure it gives you a good foundation to tackle a challenge
1 ← 4	**1**	If it is challenging the structure will need to be strong
1 < > 4	**2**	
1 → 5	**9**	Good structure will enhance study techniques

		If you structure your work well then you will improve your study techniques
		When organized, better techniques are created
		As part of our written tasks we are required to make summaries of certain sections which helps us identify our problems and write our own notes
		The written task summaries help our studying by helping us understand better
		If topic material and summaries are well-structured then study techniques are refined and improved
		This is just what I have noticed through all the tut groups that I have been in
		Good structure with written tasks
		A good structure gives the direction in which to study
1 ← 5	**3**	If you have good study techniques then you understand the structure
		Your study techniques should be well structured to get the best marks possible
		If there are good study techniques, the structure of the work is irrelevant, you just find it easy to understand work regardless of structure if study techniques are good
1 < > 5	**0**	
1 → 6	**9**	When organized you enjoy what you do
		If your task is well organized will enjoy more
		Group work is fun – e.g. the capital budgeting debate, group interview
		If the structure is understood then one can find it fun and enjoyable
		If structure is reasonable and fun then the program/topic becomes fun as well
		If the tut is structured well (groups, interactive etc) then we able to participate more and enjoy the tut
		Depending upon the way a tutor leads a tut it can either be interesting or just plain boring
		A good structure makes for easier understanding and thus greater enjoyment
		If well structured you will understand it and enjoy it
1 ← 6	**0**	
1 < > 6	**3**	
1 → 7	**7**	Bad structure leads to chaos then leads to no confidence
		Bad structure leads to chaos and low confidence
		Reporting back to the tut group on tasks done in groups
		Going up in front of the class and speaking
		If the structure is easily understood then one's confidence is boosted
		Good structure will lead you to be more confident in the work you have to do
		If aspects are structured in a manner understandable to me then this improves my confidence a lot
		The manner in which you structure your work makes you feel confident about what you are writing and to some extent when you are not sure about how to structure the work you panic
		A solid structure facilitates a solid understanding and thus greater confidence is achieved
1 ← 7	**1**	If you are confident in a particular section then structure should come naturally
1 < > 7	**4**	I believe that the personal confidence of a individual is dependent upon the persons background
1 → 8	**11**	If the structure of something is good then interaction will follow
		Group work, group interviews
		If the structure of the work is hard then you'll have to interact with the lecturer or student to understand
		Structure of how tuts were run allowed us to become more interactive

		If the structure was made out to be interactive then interactivity improves (which it has) The manner in which the tut was structured (group work) definitely made us more interactive A good structure facilitates a common understanding which results in more interaction
1 ← 8	**0**	
1 < > 8	**1**	
1 → 9	**3**	Always offered opportunities to ask questions which help us understand certain topics better If the structure is not well "structured" then it's easy to criticise If something is not well structured it leaves room for criticism
1 ← 9	**6**	If you are criticised then your structure may improve Criticism will improve structure If criticisms facilitate improvements then structure improves Criticism can improve the structure because we don't always think alike and perhaps through criticism one can express their concern with the existing structure Critical enquiries/analysis help with challenging structure
1 < > 9	**3**	Criticism is always there whether the structure positive or not criticism is independent of the structure of the tut
2 → 3	**10**	If you have good understanding then it will show in your written skills If you have a good understanding, then you can complete written tasks with ease Can only do your task if you understand it We need to understand before attempting the written tasks Instead of concentrating only on how we calculate the figures, the written task help us understand the theory behind it Making our own summaries, the group debate all help us understand because we go back and review our work and do extra research If I understanding the topic then written tasks are a joy If I understand my work my writing improves It help you complete the test or any written task with confidence If you understand something then you can write about it
2 ← 3	**2**	If one does his written tasks well, then his understanding improves If one writes something down, one can get some understanding as one learns how to go about addressing the question through written tasks
2 < > 3	**0**	
2 → 4	**3**	Understanding can be challenging when you just cannot get a concept If you understand the work, it becomes less challenging. If you don't understand, it could become more challenging
2 ← 4	**9**	If you battle to understand then challenge yourself to work until you do understand If the task is challenging, it requires more effort to understand Challenging improves your understanding Improves your understanding If the work is challenging, then its a bit hard to understand it The challenges we were given helped us to understand concepts better The written challenges helped us better understand the sections in MAF If topics are challenging then I needed to improve my understanding

		Challenging task help you to understand things and make one work harder
		A challenge can challenge/test ones understanding of something
2 < > 4	**0**	
2 → 5	**6**	If you understand your work, then developing study techniques would be easier
		If you have better understand you have good technique
		With better understanding good techniques are created
		You cannot possibly work on study technique unless you understand the work
		If there is understanding of topics then study techniques are improved/refined
		Similarly to prereading, its more difficult to have good study techniques (summary) if you don't understand work but once you know and understand it would be easier to summarize
		If you understand something you will come up with good study techniques
		Understanding sets you on a positive direction on how to study
2 ← 5	**4**	If your study techniques are good then understanding is easier
		If one's study techniques are bad, then understanding is low
		The written tasks i.e. writing as a study technique helped us understand better
		Writing as one of our primary study techniques help us identify challenges and study better
		Only after you study you would understand
		If my study technique is good then I begin to understand the work better
2 < > 5	**0**	
2 → 6	**11**	If you understand what you doing then it is more enjoyable
		If you understand your work, then you will enjoy it
		If you understand, you enjoy your work
		You need to understand before it becomes fun. When you don't understand I certainly wont find it fun
		If one understand his work, then he'll find it enjoyable & fun
		If there is understanding (for me) then the topic is fun (since its what I want to do)
		Understanding something, makes it more enjoyable to study it e.g. the 4 modules, you are most likely to spend more time on the module you don't understand
		If you understand something then its easier and more fun to do
		If you understand thing better when you enjoy, have fun and interesting in work
		Understanding something results in more enjoyment
		If you understand something you will enjoy doing it
2 ← 6	**0**	
2 < > 6	**1**	
2 → 7	**10**	If you understand your personal confidence will grow
		If you have a greater understanding then you will have more confidence
		Understanding gives you confidence to be able to teach others and remember the work
		Understanding a concept boosts our confidence when writing test and exams
		If I understand the topics then I'm more confident
		If you understand something, you become more confidence
		It give you personal confidence which is good for exam and test
		If you understand something you will be confident on answering it or talking about it
		Understanding something gives you confidence with that topic
2 ← 7	**2**	Your understanding builds on your confidence

		If you understand something you more confident If one has confidence, then chances of understanding higher
2 < > 7	**0**	
2 → 8	**7**	The more you understand something, the more interactive you are Only interact when you understand Once understood you can be more interactive and discuss the work and teach it to others If there's understanding then interactivity increase (new ideas etc) If one understands the work, he is more likely to want to be interactive because its easier to elaborate or explain the work If interactive make you understand task better communicate to lecturer or knowledgeable student A greater common understanding facilitates more interaction If you understand something you will be able to interact about it
2 ← 8	**3**	If you interact then you will understand If one interacts with people, he can easily understand what is required Being able to ask the lecturer as opposed to a tutor helps us understand the concepts better Working in groups helps us understand section we may not, as well as being to interact with our lecturer (in terms of course materials and difficult sections) helps a lot
2 < > 8	**2**	
2 → 9	**7**	The more you understand something, the more open you are to criticism You must understand the topic before you able to criticize the topic If understanding is not as expected then criticism comes through If you don't understand then you criticize the lecturers If I don't understand the work I tend to criticize more, because I always find something that is wrong If you understand something is allows for constructive criticism
2 ← 9	**1**	If you are criticised then you will learn and understand more
2 < > 9	**4**	If there's understanding then there shouldn't be related criticisms If you understand something, then you happy and unlikely to criticize
3 → 4	**8**	The difficult written tasks (e.g. debate) made it a bit challenging in terms of gathering information The difficult written tasks made the programme challenging e.g. group debate (IRR) If the written tasks are not clearly done then the work will be challenging Written tasks can be challenging if they are not well understood If you are unsure about what you writing then it can be challenging
3 ← 4	**2**	If the task is challenging it requires more intensive writing By challenging it can allow you to write about your opinions and thoughts
3 < > 4	**2**	
3 → 5	**8**	If I do more written tasks prior to tests then I know I have prepared myself for the test If your written tasks are good (summary etc) this serves as good study material and improves studying technique If written tasks are completed properly then it serves as study techniques (summaries) The written tasks helped improve our study techniques Written tasks such as summarising sections help us to understand and learn

		better
		If the written tasks are well done, then clearly the study techniques are good
		Written tasks help in preparing for exams
		If you are able to complete written tasks your study techniques will improve
		Written tasks gives you good practice in how to study/applying your studying
3 ← 5	**3**	If you studying is effective then you could do well at written tasks converse is not so
		If you prepare well then written tasks are easier
		Good study techniques will help you improve on your written task – completing on time, exam technique, skills sure high
3 < > 5	**1**	
3 → 6	**9**	Written tasks are interesting, enjoyable and fun because you learn something new each time and I express my point better
		If written task is suitable, it becomes enjoyable
		If written tasks are suitable then they become enjoyable
		In certain cases only, such as debate the other tasks were for personal development
		If one understands his work, then he can find it enjoyable
		Tasks are unique and give a different angel to the content
		Written task – understandable, practice makes you enjoy, fun, interesting
		Writing gives rise to an enjoyment
3 ← 6	**0**	
3 < > 6	**3**	
3 → 7	**9**	If written tasks are well drafted (summaries) then those facilitate my confidence
		The written tasks helps us understand better which improves our confidence in the sections
		If one does his written tasks well then confidence is enhanced
		If you able to do written tasks it will improve understanding and increase confidence
		Gain a better understanding of the work
		It give more confidence writing ..... stakeholders, help me express myself
		The more you write the better you get and the more confident you get
3 ← 7	**3**	With confidents, one tends to want to write as much as possible (essays)
		If you are confident then you will present written tasks better
		If your confidence is high, you tend to be better at written tasks
3 < > 7	**0**	
3 → 8	**3**	A lot of the time it is groupwork, so it involves interaction
		If one finds the written tasks had, then he can interact with students or the lecturer for understanding
		They can be an interactive thing and writing up notes all together puts all different ideas together
3 ← 8	**1**	If you learn through interaction then your written tasks will be of better quality
3 < > 8	**8**	Written tasks written differently by people can create different opinions
3 → 9	**4**	If written tasks are not written/inadequate then criticisms will be useful for improvement
		If one does his written work incompletely then his going to find it easy to criticize
		If written work can be criticized it can only improve
		People can criticise your writing
3 ← 9	**3**	If you get criticism (through e.g. reviews) you more likely to improve in written

		tasks (following tests)
		If your written work is criticised then it will improve
		If you are criticised too much it could affect your method of writing
3 < > 9	**5**	
4 → 5	**9**	If you find something challenging your study techniques would need to be more aggressive
		If you are challenged then it will improve your study techniques
		If I attempt challenging questions then my study technique improves then my preparation for tests improves
		If a topic matter is challenging then study techniques need adaptation to render it easier
		If study techniques are not effective that will affect you (challenging)
		Study techniques are useful with different challenges
		The challenging tasks help us prepare better for studying, and also test our knowledge at that point in time e.g. capital budgeting test
		The capital budgeting test, if practised a lot, can help our study technique
		It gives you the edge to go for by doing research, study harder consult
		It gives you practice on how to tackle challenging questions
4 ← 5	**3**	Study techniques can be challenging if not well understood
		If the study techniques are bad, then the work will be challenging
		If the study technique is good, challenging work can become less challenging
4 < > 5	**0**	
4 → 6	**7**	If the work is challenging then one can find it enjoyable and fun
		If tasks are challenging the I have more fun solving them
		Some of the tasks were interesting and caused us to think
		You will end up enjoy, the task at hand if complete a challenging task
		A challenge can create a fun environment
4 ← 6	**2**	If you enjoy a challenge then you'll find it fun
		If you enjoy challenges it is fun
4 < > 6	**3**	
4 → 7	**8**	If you have personal confidence then you will find tasks less challenging
		Once you overcome challenging topics you will be more confident in the topic
		If the work is too challenging, one's confidence can drop
		If I attempt challenging questions and I at least get 60% and above then my confidence about my knowledge of the work increases
		Confidence is directly influenced by a challenging task
		If you don't understand the concept, your confidence goes down (less confident)
		If accomplished a challenging task you earned personal confidence
		To overcome a challenge can derive a great confidence
4 ← 7	**0**	
4 < > 7	**4**	If an aspect is challenging then one wouldn't be confident about it
4 → 8	**9**	If you do not like interaction then you will find it challenging
		Some people find it challenging to interact with others
		If the work is challenging, then interacting with other people can help
		If a task is challenging the more interactiveness is required to complete it
		Engaged to different ideas and get more information and explanation
		Engaging in different ideas
		Challenging task equipped with the power to interact with knowledgeable people

		A common challenge will facilitate interaction amongst people
4 ← 8	**1**	If people work in groups to tackle a challenging task; it becomes less challenging due to shared ideas
4 <> 8	**2**	
4 → 9	**7**	It is sometimes challenging to deal with criticisms If the work is challenging, then criticism come early If tasks/aspects are posing challenges then criticisms can uncover weak spots and suggest improvement Challenging tasks help us identify our criticisms Challenging task it help you critically analyse a topic or statement or application
4 ← 9	**3**	The more people criticise you the more challenging you find every tasks Criticism is challenging, it needs to be corrected Only criticise challenges
4 <> 9	**2**	
5 → 6	**6**	If the work is challenging, then one cannot find it enjoyable If study techniques are well planned/laid out then they can be fun and enjoyable Study techniques affects your emotions Challenge can be interesting to solve which could facilitate some fun learning
5 ← 6	**3**	If study techniques are good, then the work can become enjoyable to study The programme is enjoyable therefore improving our thirst for knowledge therefore improving our study techniques If have fun, or enjoyable environment will influence your study technique
5 <> 6	**3**	
5 → 7	**6**	If your preparation is good then you will be confident in yourself If one has good study techniques, then confidence will be boosted If study techniques are good, then you become more confident in what you studying If study techniques are sound then confidence is heightened They affect each other. Lack of confidence leads to poor study technique. Good study technique builds confidence Good study technique can result in confidence
5 ← 7	**3**	If you are confident, your studying technique will tend to be more relaxed You need confidence to be able to work on your study techniques Personal confidence give edge over studying technique and even to the exam
5 <> 7	**3**	
5 → 8	**6**	If one has good techniques, then its easy for him to share them If assignments are very interactive (different views) then study technique can be positively adjusted Studying technique – e.g. Group discussion learning peers, presentation
5 ← 8	**3**	If you interact then your study techniques will improve Being interactive about your different study techniques could improve the way of understanding
5 <> 8	**4**	
5 → 9	**3**	Studying technique experience help you to be more critical
5 ← 9	**6**	If your method of studying or doing tasks are criticised, your technique will have to change If you learn from criticisms then your study technique will improve Criticism of your study techniques will lead to even better study techniques Criticism can assist you in developing better study techniques

		Criticisms leads to poor studying tech If you criticises that will affect your study techniques Criticisms can alter your study technique
5 < > 9	3	
6 → 7	6	If you enjoy something it boosts your confidence If you find something enjoyable then it will grow your personal confidence If the work is enjoyable, then his confidence can be boosted If I am confident then I have more fun doing tasks If you enjoy your task that builds on your confidence if you less confident that will effect yr enjoy They affect each other. Lack of confidence leads to no fun. Enjoyable fun builds confidence Enjoyment facilitates confidence
6 ← 7	2	Once you confident in a topic it becomes fun If you confident about the work, you bound to enjoy studying the work
6 < > 7	4	
6 → 8	7	If something is enjoyable then you will interact more It is fun to interact with other students discussing different topics When the work is enjoyable, you bound to interact easier in a group and express your view If the tut is interesting and fun I tend to find it easy to interact during the tut Interaction is enjoyable
6 ← 8	4	The more interactive a task is the more fun it is Through working in groups, the work can be enjoyable If the interactive environment is suited to members then it becomes fun and enjoyable The group interaction and group tasks make the programme fun Working in groups with the lecturer is lots of fun!
6 < > 8	0	
6 → 9	3	
6 ← 9	3	Criticism isn't always fun, but it is helpful in the end If I criticize a person then I tend to not enjoy the persons company, likewise if I criticize my tutor I will not find the tut interesting
6 < > 9	9	
7 → 8	8	If your confidence levels are high it tends to make you interact more It takes confidence on a certain topic to be able to interact and explain to others If the confidence is high, then it easy to interact with people If one is confident in the material the interactivity in groups increases Only interact when feeling confident You wont interact if you don't have confidence If you are confident it help with interaction with any person
7 ← 8	3	If you interact then your confidence will grow Interacting with the rest of our group boosts our personal confidence Interacting and breaking out of your shell by talking and working with others helps increase our own confidence Interaction between people can result in confidence
7 < > 8	1	
7 → 9	3	If the confidence is low, then its easy to criticize Only criticise when confident You wont criticises something if you'r not confident

		Confidence is something can allow to constructively criticise
7 ← 9	**3**	If you learn from criticism then your self confidence will grow
		Criticism will only improve knowledge on a topic and therefore improve your confidence
		If criticisms encourage change then confidence is lifted by knowing where one went wrong
7 < > 9	**6**	
8 → 9	**6**	If we interact with the wrong crowd, then its easy to criticize
		We can criticize the concepts by interacting in groups
		Our group interview (interactive) helped us identify our criticisms collectively
		Interactiveness will create more discussions which can lead to criticisms of different opinion
		Interaction facilitates criticism negatively or positively
8 ← 9	**3**	If you are criticised, you want to defend yourself therefore you interact more
		If you are criticised too much then you will interact less
8 < > 9	**4**	

ANNEXURE IX - Description of the participants

Anne

Anne matriculated from an 'Indian' school south of Durban. Anne is an only child and her parents are divorced. There is pressure on her to provide for her parents in the future and it is perceived that a degree in accounting is assurance of well remunerated employment. Anne studied accounting at school and did well in it. Her success in school accounting was a factor in her decision to study accountancy at university: "I was good in school accounting so everyone was like no, you should be an accountant, go for it" (155, 156, 2011), but she realised at a later stage that accountancy was not for her. "That was, what was my issue, I really don't want to be doing accounting or going the CA route or CIMA, but now it's too far to change and I'm on financial aid so I can't like change and be funded for something else" (143 – 145, 2011). Anne passed first year comfortably, in second year failed Financial Accounting II and then passed it in the following year. In 2011 she registered in MAF and Financial Accounting III, but sadly failed both subjects. Her DP mark for MAF was below the subminimum (40%) required to gain entrance to the final examination, however she appealed the decision and her appeal was upheld. Anne missed only one tutorial session and was an enthusiastic participant on the WIT programme.

Ben

Ben is from Durban and attended a school that was poorly resourced but "amazingly even though we had so many challenges in our school we had like a 100% pass rate" (100 – 101: 2011). With regard to the WIT programme he never once submitted his reflective journal or any of the additional tasks I asked the students to complete. Ben was a bright student who did well in all of his subjects and comfortably met the entrance requirements to PGDA.

Edward

Edward comes from an upper middle class background and attended a leading boys' high school in Durban. He was repeating MAF in 2011 having failed it the previous year, the first time he had failed a subject resulting in his confidence taking a knock. He was also repeating Financial Accounting III which he had passed in 2010, but did not attain the subminimum of 55% required for acceptance into PGDA. Edward decided to repeat both subjects as his intention is ultimately to qualify as a Chartered Accountant. In his first interview he said "my first love is accounting" (15, 2011). Edward suffers from a learning disability which made him eligible for an extra time concession in tests and examinations. He, however, had

previously never taken advantage of the extra time concession as he did not want to be perceived to be different from his friends (extra time candidates sit in a separate venue for tests and examinations). The nature of the disability is such that it is life-long and he had to accept it as part of his life. As a result of participating in this study, Edward took advantage of the extra time concession. He passed MAF with a solid 60% and Financial Accounting with 73%, qualifying him for entry into PGDA and a concomitant increase in his confidence.

Greg

Greg started his high school in Cape Town and moved to Durban midway through Grade 11 as his parents divorced. Both high schools he attended are leading boys' high schools in the respective cities. He came to Durban with his Dad who is an academic at UKZN. To help him cope with the divorce, Greg's councillor encouraged him to write and he wrote lyrics which he performed with a band. After school he worked for a year doing telesales for a large media company and then administrative work at a suburban newspaper. Greg did not study accounting at school. He did art and wanted to go into the film industry and study at one of the private colleges which offer courses in creative arts. Instead he choose to study accounting "according to my Dad, those kind of things [creative arts] don't pay the bills" (352, 2011) and with his Dad employed at the university "the whole fee remission thing" (355, 2011) as the private colleges were considered too expensive. Greg started MAF very poorly as he obtained 27% for Test 1. He went on to increase his mark with every test, Test 2 – 46% and Test 3 – 53% and passed with a final mark of 50%, a prodigious effort considering his Test 1 mark. As he failed Auditing he is not eligible for PGDA and he is not certain that his future lies in the accounting field. He commented as such "I'm not even sure if I want to do PGDA … or even be here still" (602 – 605, 2011) and "I don't wanna lie and say I wanna be a CA honestly, I don't know where my life is going right now, but I just pray for the best" (619 – 620, 2011).

Hannah

Hannah was in her fifth year of B. Comm. Accounting and in her words "struggling to get the grasp of B. Comm. Accounting" (2, 2011). Hannah attended a leading girls' school in Durban and matriculated with six A's. Her first choice of study was not accounting, but medicine however she failed to gain admission to medical school at UKZN. "I wanted to get into something in the medical field, always been my dream before that and I think that disappointment took me so long to get over and I was so angry with the quota system that I

wasted so much time in my B. Comm. Accounting field and didn't progress" (33 – 38, 2011). Hannah decided "I would rather try to learn to love this career" (13, 2011) but failed all the subjects for which she was registered. Hannah was not one of the students I originally selected to participate in the WIT programme. She sent me numerous emails asking if someone did not take their place would I consider her which is how she came to be on the programme. For someone who was eager to participate in the programme, her attendance was erratic, attending the least number of tutorials out of all the participants. Despite her purported good intentions, "I want to excel at my work, not just pass" (interest questionnaire, 2011), Hannah failed all her subjects in 2011 and will not be permitted to register in 2012.

Ingé

Ingé matriculated from a large township school near Port Shepstone and "being CA has been my dream since high school" (reflective journal, 168, 2011). On campus she lives in residence and when she was at school, the thought of going to university was a daunting prospect. In her words, "when I was still in high school, me and my friends used to sit and talk about how varsity is like. I for one had no idea of how its like because I had no sibling or friend I know from university. But my friends, they seemed to know a whole lot" (reflective journal, 210 – 213, 2011). Ingé is repeating MAF which left her with some uncertainty regarding her academic ability "I'm not very bright but I do try my best" (reflective journal, 172, 2011). She has a bursary from one of the large CA firms and this, she feels, places her under additional pressure to perform well academically. Despite the self-doubt over her academic ability, Ingé obtained the second highest mark in Test 2, and the highest DP mark and a final mark of 71% placing her in the top 10 students. Ingé reflected on her results – "I was sort of disappointed that I did not make the distinction (certificate of merit) but never the less I am pleased that I finally made it to PGDA" (email correspondence, 30.12.2011). Ingé has also started making adjustments to her study technique moving away from rote learning, the study method favoured during her schooling, to understanding the principles and she remarked "yes my studying techniques have changed, they have changed a lot" (583, 2011).

Nola

Nola matriculated from a large former Model C school in Richards Bay. Nola was actively involved in school life and was a prefect and Representative Council of Learners (RCL) member. Nola's DP was 51% and her test marks were consistently around 50%: Test 1 – 51%, Test 2 – 52% and Test 3 – 50%. Nola failed the year-end examination with a final mark

of 46% but was able to pass on the supplementary examination with 50%. Nola's attendance on the WIT programme was 100% and she worked hard in her own quiet way. She felt that with the tutorials "I have improved my exam technique as well as my study techniques" and "I become more confident in tackling challenging questions". Nola performed well in the other three of the 'big 4' subjects and has gained entrance to PGDA.

Sam

Sam was born in Durban and then his family moved to East London where he completed his schooling at a former 'Indian' school. Sam worked for two years after school in the IT industry during which time his family relocated to Durban. Sam proved to be a prolific writer. Each student on the WIT programme was requested to maintain a reflective journal and his journal surpassed all the other students in terms of quantity and quality of reflection. Sam felt that he missed the money now that he was a full-time student, but the work experience "gave me like a lot of insights as in when it came to first year, I practically flew through economics, management". He also said "accounting was always a passion so it made first year a whole lot easier, the only adaption was going from primarily working which is just application to going back to studying which is more learning theory and putting in extra hours". Sam was registered for the 'big 4' in 2011 which he passed and obtained entrance to PGDA.

Sean

Sean attended a leading boys' high school in Durban. Sean is in his fifth year of study and when he failed at the end of 2010 "I was really upset about the whole thing and he [Dad] said if this is what you want to do then just plod along" (65 – 67: 2011) which aptly sums up Sean. A reason he gave for wanting to participate on the WIT programme was that he wanted a change from the typically 'boring' tutorials. At the end of the programme he said "I really enjoyed it [WIT programme] because the structure of the programme it was different each week … be alert and all the group participation as well was good" (558 – 563: 2011). Accounting was not his first choice career "what I really wanted to do was psychology" (101: 2011). He had done well in accounting at school and his teacher was very persuasive and family pressure made him decide to do B. Comm. Accounting. The perception being that becoming a chartered accountant is a guarantee of high income employment. Sean's test marks and his final mark were in the low 50's. He has since decided not to continue with the CA route.

Shannon

Shannon is from Durban and commenced the programme as a quiet, shy student. During the first interview, Shannon said she had not signed a training contract and felt that "it's just the fact that I am repeating I feel like why would they want me?" (209, 210: 2011). Over the course of the programme her confidence increased – "it [confidence] has this is like one of the best things that I've actually got out this tutorial" (407, 408: 2011). After a tentative start, she participated enthusiastically in the tutorials. Shannon was repeating MAF. She was also registered for auditing and financial accounting III for the first time. Shannon's marks for MAF showed a substantial improvement from the previous year. She told me that her mark for test 3, 75%, was the highest that she had received at university. She passed the year end examination comfortably and gained admission to PGDA.

Tara

Tara is an 'older' student as she worked in the horse racing industry before starting at university. After three years in the horse racing she decided "it's a tough industry so it's best I get an education" (1: 2011) and decided to pursue the CA route. She is repeating MAF after failing it in the previous year. Further she is also repeating tax and financial accounting III in an attempt to improve her marks for entry to PGDA. Tara is not from Durban and no-one from her high school is in the same course so she had to make new friends. Tara is very close to her family and talks to her mother daily. She intends returning to East London on completion of her studies. Tara is of a slightly nervous disposition and lacks self-confidence. Her work tends to be untidy and unstructured which she acknowledges "the tax tutor always moans because I've got little bits squeezed in at the top … as things come to your head you try to like squeeze in the top and it looks all untidy" (351 – 354: 2011).

Trevor

Trevor is from the Free State and wants to be a farmer after completing his studies. In grades 8 and 9 he went to a well-resourced school. His father passed away then he had to move to another school to complete is schooling, which was an agricultural school and not well resourced. He did not study accounting at school as he did science subjects which had been his father's wish – "my father wanted me to do some science … then accounting I came here at first it is bad" (95 – 97: 2011). Trevor is repeating MAF and tax. He feels that his studies in

accounting and economics will provide him with the business/commercial knowledge he will require to run a business.

Travis

Travis was from Barberton in Mpumalanga. He had decided to study at UKZN after a school trip to KZN where he attended a university an open day. His first study option (with the CAO) was actuarial science and B. Comm. accounting was his fourth option. His decision regarding actuarial science was based on the fact that "were told in high school just like the teachers, do actuarial science as because now you were now intelligent and you good at maths" (80 – 83: 2011) and "your friends are like okay whose gonna earn more and that, so we make some research, okay actuarial science earn much more money (laughing)" (93 – 95: 2011). During first year he developed an interest in accounting and decided to pursue the CIMA route. He secured a traineeship with Toyota and has started working there.

Duncan

Duncan was from a small township in Limpopo and had attended a well-resourced school in the area. He was never fully committed to the programme and this is evidenced by his tutorial attendance where he missed 5 out of the 17 tutorials. Duncan had a tendency to rely on past papers for learning purposes and he alluded to this more than once "you go over the tutorials more and more you end up knowing the answers" (585 – 586: 2011) and "you have been going over this over and over again then you end up memorising it" (647 – 648: 2011). One of his criticisms of the WIT programme was that I did not provide the students with enough past papers "maybe if we could get more tutorial [past papers] questions" (611 – 612: 2011) this is despite the fact that the majority of the prescribed tutorial questions were from past papers. He failed the year end examination but then passed the supplementary examination.

Zola

Zola was from the Eastern Cape and had a B. Comm. (Accounting) degree from a non-accredited SAICA university. She was repeating the big four at UKZN with the intention of gaining admittance to PGDA. Zola was a weak student and by her own admission her English was poor "you know like my English so like poor … only speak English when we talking to the lecturers so how can I improve my English?" (265 – 269: 2011). Zola missed only one tutorial session and was an enthusiastic participant who wanted to learn. Despite the fact that she was repeating the big 4, Zola did not meet the minimum DP requirements for MAF and

Financial Accounting III, wrote the examinations for Auditing and Taxation but failed both subjects.