

Taking ownership:

the relationship between self-representation and writing development in a science Extended Curriculum Programme at the Cape Peninsula University of Technology.

By

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Declaration

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

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Abstract

This study challenges the prevalence of the literacy deficit views of student writing at Cape Peninsula University of Technology where I teach. The study is located in an Extended Curriculum Programme in the Applied Sciences and stretches across the Analytical Chemistry and Horticulture disciplines. It argues that writing is an act of identity and thus it is imperative to engage with the nuances of identity in text. I focus on the notion of the self and how this is represented in student writing. Students often view writing as difficult because they do not identify with the 'me' in their writing as dominant university discourses and practices often overpower them.

The theoretical resources drawn on are situated in the academic literacies field which emphasizes the contested nature of academic meaning making practices (Lea and Street 1998, Lillis and Scott 2007). In particular, I use Clark and Ivanic's 'clover-leaf' model (1997) that identifies three aspects to research writer identity in a text: the autobiographical self which writers bring with them to the act of writing. This is shaped by their life histories and the social group with which they identify; the discursal self, which is how writers represent themselves in the text, based on the discourse choices they make as they write, and the authorial self, which is how writers assert themselves in their writing. In addition, the three aspects above are all affected by the socio-culturally available subject-positions and patterns of privileging among them that exist in the socio-cultural context. My research extends Ivanic's research on the contested nature of writing by shifting the focus from academic writing of mature students in higher education, to explore academic and journal writing of first year students in an extended programme at a University of Technology in South Africa in a time of rapid transition.

In order to explore these aspects of identity in student text in the Applied Sciences, I ask how students represent themselves in a text and whether there are any shifts or changes within an academic year. I also ask what these self-representations mean for teaching in an extended curriculum programme. The methodology used is an interpretive qualitative study that lightly draws from the critical discourse analysis of Fairclough. The research explores the writing of four first year students in the disciplines of Analytical Chemistry and Horticulture in an extended curriculum programme which are located in the Applied Sciences. As we will see, the different disciplines enable different self-representations for these students.

My results indicate that writers construct a self that is constantly shifting and changing according to the subject positions they find themselves in. Ivanic (1998) says that these subject positions exist in the socio-cultural context of writing, which is society and the institution, and can constrain the choices students make when they write. Students are often at the 'mercy' of these societal and institutional conventions. This is not new, but it adds a grounding that firmly locates student writing as a creative combination and re-combination of the discursal resources that surround them. This implies that there is a unique self in every piece of writing which students present. My research indicates that the autobiographical self is dominant in early first semester writing as students draw

from what they know and have learnt from prior experiences. There is evidence of a developing discorsal self as writers imitate new sources. This is often seen as plagiarism. The authorial self is not salient at this stage as writers are learning to position themselves appropriately. In the second semester, the discorsal self becomes more significant as students learn what works and what does not work. This is very dependent on institutional discourse. The autobiographical self is still present, but in a more subtle form.

The authorial self becomes more developed as students gain confidence. The journal writing is a further indicator that students have a strong sense of self in their writing. The key implication is that there is always 'voice' in writing and self-representation in writing should be foregrounded in teaching and learning.

This is a challenge to the deficit view prevalent as commonly expressed by subject-specific lecturers at CPUT as there is a lot of strategy and decision making when students write, based on the contexts in which they find themselves. Students are not only part of a particular disciplinary and university context, but also part of a wider social context that plays many roles in how students position themselves in writing. This suggests a complex multilayered context and it is necessary to accommodate and recognize this when mediating student literacy practices.

Table of Contents

Title page

Acknowledgement

Abstract

Chapter 1- Introduction	1
Context of the study	2
<i>The Cape Peninsula University of Technology</i>	
<i>The merger- from technikon to University of Technology</i>	
<i>The throughput rate</i>	
<i>The Extended Curriculum Programme</i>	
The motivation for the research	6
Aims of the dissertation	8
Chapter 2- Theoretical Framework	9
Introduction	9
The New Literacy Studies	10
<i>Academic literacies approach</i>	
<i>Writing and identity</i>	
<i>South African studies: academic literacy and identity</i>	
Intertextuality	18
Genre and the sciences	18
Conclusion	22
Chapter 3- Research Design	22
The qualitative approach	22
Critical discourse analysis	22

Research process and methods	23
<i>Sampling</i>	
<i>Data gathering and methods</i>	
<i>Documents</i>	
<i>Interviews</i>	
<i>Observations</i>	
Data Analysis	26
<i>The autobiographical self</i>	
<i>Discoursal self</i>	
<i>Authorial self</i>	
My researcher role vs. my teacher role	28
Ethical considerations	29
Conclusion	29
Chapter 4- Analysis of self-representation in writing	30
Introduction	30
The autobiographical self	31
<i>Sabrina</i>	
<i>Mel</i>	
<i>Thandi</i>	
<i>Anele</i>	
<i>Conclusion</i>	
<i>First semester writing</i>	34
The discoursal self	34
<i>The assignment topics</i>	

Self-representation in the introductory texts

The academic community

The sciences

The horticulture and analytical chemistry identity

The role of the reader

The personal identity

Owned/disowned identities

Conclusion

The authorial self 46

***Second semester writing* 52**

The discoursal self 53

The horticulture students- Sabrina and Mel

The assignment topic

Sabrina

Mel

The analytical chemistry students- Thandi and Anele

The assignment topic

Thandi

Anele

The authorial self 62

Conclusion 64

Journal writing 65

Introduction

Self-representation in Sabrina's journal writing

Conclusion

Chapter 5- The educational implications of this study 69

Introduction	69
Findings of my research	71
Implications and recommendations for ECP	71
<i>Teaching within an academic literacies framework</i>	
<i>Raising an awareness of prior literacies</i>	
<i>Developing a relationship with the student writer</i>	
<i>Making visible the 'hidden curriculum' in institutional and disciplinary practices</i>	
A personal reflection	72
Conclusion	73

Bibliography 74

Appendices

<i>Appendix 1:</i>	<i>Ethics consent form</i>
<i>Appendix 2:</i>	<i>1st and 2nd semester assignment topics and student writing assignments</i>

Introduction

To take part in the African revolution, it is not enough to write a revolutionary song; you must fashion the revolution with the people.

And if you fashion it with the people, the songs will come by themselves and of themselves.

(Sekou Toure in *Biko*, 1978:34)

The true measure of South Africa's progress as a nation lies not with the 'knowledge', but rather with the manner in which that knowledge is imparted. Biko (1978) says that in order to achieve real action, you must yourself be a living part of Africa and of her thought and there is no place for the intellectual, teacher or academic who is not concerned with and completely at one with the people of Africa and of suffering humanity. My study is aligned to this philosophy, as it seeks to recognise that students have different ways of doing, valuing, speaking and writing and it is through recognizing these differences that we will come to realize the need for a change in the way we think about our students. And, as a consequence, how critical that change is to a complex, vibrant, emerging and changing South African society.

My research site is a University of Technology in Cape Town, South Africa. Universities of Technology provide career directed technology programmes in Engineering, Business, Health Sciences, Applied Sciences and Art and Design. I teach an accredited subject called Communication Skills at the Cape Peninsula University of Technology (CPUT) in the Applied Science Faculty in a mainstream and an Extended Curriculum Programme (ECP). My research takes place within an ECP which is described later in this chapter. The Communication Skills course is an English language course attached to a first semester curriculum which is compulsory for most first year students in the Applied Sciences.

I initially started my study as an attempt to find answers to why some students succeeded and others do not. In my ten years as a language academic staff member in higher education, I noticed that poor Grade 12 results (final school leaving year or matriculation year) did not automatically predict failure. There were many students who flourished despite poor results and on the other hand some students with good results, could not succeed. In South Africa, academic lecturers often blamed poor writing performance on language problems. This perception is that most black students¹ are from historically disadvantaged backgrounds, come from under-resourced schools and speak English (the institutional language) as an additional language. Institutions often develop a generic language skills course in a mainstream curriculum with the idea to 'remedy' these language problems. This is how the Communication Skills course that I teach in the Applied Sciences is regarded by most subject lecturers in my faculty. In most cases, the language remedial intervention does not work as most students' still 'battle' with writing after the completion of the course.

It is interesting to note that students perceived their difficulties with language issues differently. It appeared that they attributed their 'problems' more to ignorance in the discipline than to a lack

¹ The term black is used to refer to students classified as either African or Coloured during Apartheid years.

of English skills. These notions were reflected in an annual language in-house conference ('Indaba') with combined CPUT academic staff and students.

My research will investigate this disparity between student self-representation in text (which will be discussed in my next chapter) and writing development in relation to the deficit view of literacy commonly expressed at institutional level. Writing is significant to a greater or lesser extent for studying identity construction or self-representation as written text is planned and used for assessment of academic achievement. My findings will provide insight into how students use familiar resources based on their identities to build new resources to create a unique discursive self in text. The study will focus on student texts, the social interaction which surrounds the production of these texts and the socio-cultural context within which this interaction takes place. This is aligned to Fairclough's framework (1989) (see figure 2.2) that was designed to analyse the relationship between linguistic text and the wider social processes. My approach will thus examine the relationship between writing and self-representation from theoretical perspectives based on the New Literacy Studies which encompass the literacy-as-social practice approach rather than seeing writing as an individual act (Street 1984, 1993; Gee 1996; Clark and Ivanic 1997; Ivanic 1998) to explore my research topic. The context surrounding this study is important to understand how self-representation is constructed in text.

Context of this study

Ivanic (1998) argues that writers' identities are socially constructed through the socially available possibilities for self-hood and this availability is socially constrained. However, students can conform to or contest social constraints. There is thus room for creativity. The implication is that writing is not neutral, but political and ideological and does not take place in isolation under socio-political processes. There is tension between freedom of choice in identifying with particular available subject positions and the socially determined restrictions on those choices. Subject positions are explained by Clark and Ivanic (1997) as possibilities for self-hood that exist in the socio-cultural context of writing, both in the wider context of society and the immediate institutional context of an instance of writing. These subject positions can be conscious or unconscious which can restrict writers or challenge them. Clark and Ivanic (1997:137) say that subject positioning are 'identities that are set up for people by the conventions for all types of action, of which writing is one.' Conventions are practices that are endorsed by the social, cultural and institutional contexts. This can also be described as intertextuality as defined in chapter 2 where the interplay of many voices position writers in certain ways. Writing is thus located within the wider socio-cultural-political contexts and both shapes and reflects ideology and social structures. This study of writing in the ECP is embedded within the contexts of the discipline, the institution, and of South Africa in a globalized world. These contexts all interact with each other which influence self-representation in writing.

The Cape Peninsula University of Technology (CPUT)

In 2005, CPUT officially emerged as a University of Technology (CPUT website 2009) after being known as a technikon. Today CPUT has 5 campuses: Bellville, Cape Town, Mowbray, Granger Bay and Wellington. CPUT has six faculties: Applied Sciences, Business, Education and Social Sciences, Engineering, Health and Wellness Sciences, Informatics and Design.

The merger- from technikon to University of Technology

CPUT is a post-Apartheid merged higher education institution. The transformed nature of education in post- Apartheid South Africa has seen many changes in the higher education landscape. One of these changes is the mergers of higher institutions. The ideal of becoming a

non-racial society has meant that institutions had to become racially desegregated. CPUT was formerly known as the Cape Technikon (Cape Tech) and the Peninsula Technikon (Pentech). The Cape Tech was situated in central Cape Town and is known as a historically white advantaged institution and the Pentech was situated in Bellville and is known as a historically black disadvantaged institution. The Cape Tech and Pentech merger was approved by the then Minister of Education, Kader Asmal in 2003 to form CPUT (CPUT website 2009). The merger must thus be seen against the background of the above political and ideological changes in South Africa. However, despite these mergers and policy changes in South Africa, historical conditions are still affecting the demographic profile and cultural, political and curriculum agendas at CPUT. Coleman (2006:10) says that a 'particular political and cultural agenda that defined Pentech and strongly informed its academic practices continues to embed itself'. Pentech still draws students from previously disadvantaged black schools and Cape Tech still draws students from previously advantaged 'white' schools. Winberg's (2005) research on how the history of technikons influences present day Universities of Technologies reveals that many technikon lecturers still identify with vocational training and see themselves as practitioners in their particular field. The implication is that curriculums are still loaded with content subjects from a vocational technikon era and little time is allocated to student and staff research. Winberg says that 'students were told in the technikon era what they needed to know in the lecture hall, the workshop, the laboratory and the workplace' (2005:192) and these pedagogical implications are still pervasive in the University of Technology setup today.

Jansen (2004) further states that despite all the policy changes and mergers for democracy in institutions of learning, democratic practices are still not taking place. He says that 'policy is not practice, and while an impressive architecture exists for democratic education, South Africa has a long way to go to make ideals concrete and achievable within educational institutions' (Jansen, 2004: 126). Jansen reflects that mergers were not only a political move, but a practical move that aimed to change pedagogic and content choices in curriculums. Mergers offered to change the nature of the old style technikon-framed education, but currently it is struggling to deliver.

The Council of Higher Education (CHE, 2004) in South Africa defines a technikon as the 'practical application of technology' and the Department of Education (DoE, 1995) describes technikons as the application of scientific principles on practical problems and technology. Technikons offer experiential learning and the main qualification is often a diploma. Degrees in technology are also offered (CPUT website 2009). The admission requirements are lower compared to admission criteria at an academic university in South Africa. For example the University of the Western Cape (UWC) and the University of Cape Town (UCT) require a matriculation endorsement for admission whereas CPUT does not. In South African higher education, a matriculation endorsement is required for the study of university degrees, with a minimum of four subjects passed with at least a "C" symbol, although some universities set additional academic requirements. A standard school-leaving South African senior certificate is sufficient for technical qualifications and diplomas (DoE 2006). The CHE (2004) indicates that a merger and a new name would mean that technikons would be in a better position to respond to the needs of industry for technically infused programmes at undergraduate and postgraduate levels. This would raise the admission benchmark and the quality of the programmes offered. It would also attract funding for research and experts from the industries. The new name would emphasize scholarship, innovation and development. This would then result in a new generation of highly skilled knowledge workers which was needed and valued in the industry.

There has been significant change at CPUT. CPUT has formed strong links to technology, innovation and working in close partnerships with industry and the community in South Africa. The current mission of CPUT is to 'develop and sustain an empowering environment where through teaching, learning, research and scholarship, our students and staff, in partnership with

the community and industry, are able to create and apply knowledge that contributes to development.' (CPUT official mission statement, 2009). This mission statement is especially important in the South African context, where one of the many challenges facing higher education is to redress the past inequalities and contribute to meeting the needs of a changing nation, especially the needs of all industries. Researchers such as McKenna and Sutherland (2006) and Winberg (2005) say that modern workplaces require employees with high level technical skills with an awareness of social and ethical concerns, individual creativity and the ability to reflect and evaluate their own actions. The challenge is for Universities of Technologies to meet those needs. As noted by Coleman (2006) the legacy of Apartheid is still affecting the merged CPUT as it attracts many black students from low income backgrounds with a disadvantaged educational background. Currently CPUT has an 82% black enrolment figure (Management Information Service CPUT, 2009). Most students are from a historically disadvantaged background and from ex-DET² schools. In many cases English is an additional language. The CPUT language policy (2008:5) states that 'English is the default language of teaching, however, where determined by department, site, discipline and market context, isiXhosa and Afrikaans could also be used as the language of teaching, provided that such usage does not limit access, or promote marginalisation of any language community.' I use the phrase English as an additional language (EAL) as many students speak more than one language at CPUT. The EAL students struggle with academic text, especially writing as they might not necessarily have the background knowledge to critically engage and interpret English texts. This background still strongly defines CPUT.

The throughput rate

The University of Technology like many other higher education institutions in South Africa have shifted demographically as noted and this has meant that certain curriculum and cultural changes had to take place to accommodate this diversity. There has been a lot of media attention and debate about the changing face of South African universities. In the Sunday Times, Bloch (2009) writes that in 1993 there were 190 000 black students at South African universities and today there are 450 000 more black students at universities and despite all these changes, universities are still not producing a good throughput rate of black graduates. He adds that for every 83 'white' students who get through in 5 years, there are about 33 black students and the merger of universities and technikons has 'mostly been an administrative, technical process that has nonetheless not necessarily improved the management and certainly has not improved the ability of the universities and technical universities to position themselves and understand their niche' (Bloch, 2009:13). The 2006 graduation figures released by the DoE for South African universities of Technology show that 58% of students who started as first years in 2000 had dropped out by 2004 and only 32% had graduated (DoE, 2006). The rest had not completed the qualification. A recent study (CHE, 2007) found that 45% percent of students leave university without graduating and at University of Technologies 66% leave without graduating. In addition the National Benchmark Tests Project (NBTP) shows that only 47% of first year university students are proficient in academic literacy (Yeld, 2009). Jansen (2004) says that a reason for low black student throughput rate could be that little effort has been made towards social integration on campuses despite racial desegregation. He advocates for racial, staffing, curriculum and institutional culture integration in order for proper transformation to take place.

Despite the policy shifts at CPUT and a strong need to facilitate academic access to students via curriculum and pedagogic strategies, there are few signs of pedagogic and content changes within

² The term DET was used in the Apartheid South African government to refer to black schools listed under the Department of Education and Training and these schools were deliberately under-resourced.

the curriculum. Winberg's research (2005) reveal that many technikon lecturers still prescribe to a practical vocational skills approach (see page 3) and in very few cases have shifted to a more conceptual and analytical approach.

The above background is an indication that higher education is failing to educate a much needed professional workforce. They are not meeting the needs of the South African democracy as throughput rates are low. Universities are under pressure to reassess their academic development initiatives. The introduction of foundational provision in the form of Extended Curriculum Programmes (ECP) is one of the ways to give students the time and the opportunity to develop themselves educationally and socially in a nurturing, empowering environment in order to improve throughput rates.

The Extended Curriculum Programme (ECP)

The DoE (2006) states that foundational provision is commonly intended to facilitate the academic development of students whose prior learning has been adversely affected by educational or social inequalities. As already noted, many students at CPUT fit the above description.

The DoE has made funding available to higher educational institutions to build foundation work into accredited academic programmes in order to improve the graduation and retention figures. The DoE policy (DoE 2006) describes the ECP as

a first degree or diploma programme that incorporates substantial foundational provision that is additional to coursework prescribed for the standard programme. The foundational provision incorporated must be (a) equivalent to one or two semesters of full-time study, (b) designed to articulate effectively with regular elements of the programme and (c) formally planned, scheduled and regulated as an integral part of the programme.

These ECP's are based on the hypothesis that some students need more time and need more guidance in order to realize their potential to succeed in higher education. This stems from the inequalities of the past where educational resources were distributed unfairly among schools. The ECP is currently offered in all faculties at CPUT with the exception of the Business Faculty. The ECP programmes at CPUT are administered by the Fundani Centre for Higher Education (Fundani CHED). Fundani CHED is a unit of CPUT whose main role is to strategically facilitate higher education development. Fundani CHED describes the ECP as being strategic in raising throughput rates at CPUT. The Fundani CHED describes the ECP as follows on their website:

- The aim of the Extended Curriculum Programme is to increase the throughput rate of disadvantaged students.
- Entry is for students who are identified as at risk or who do not meet the minimum requirements for programme entry, but who show motivation and/or potential to learn at the university.
- Extended Curriculum Programmes involve the extension of existing regular year 1 subjects to two years with the inclusion of extensive support for learning within those subjects.
- All modules taught are credit bearing.

- Extended programme students are ultimately the responsibility of the programme leader of the mainstream programme the students are registered for.
- Staff in each programme is expected to attend development workshops and to plan and deliver curricula co-operatively

(CPUT, Fundani CHED website 2009).

As seen from the above quote, ECP is aimed at improving access and success rates. The ECP meets the needs of students who would not have normally been admitted into higher institutions because of poor matriculation results. The assumption made by the DoE is that students identified as ECP students are often not adequately prepared to deal with the demands and the pace of higher institution learning, large classes, independent work and perhaps issues with English as an institutional language. Also, the increase in numbers of black students as reflected in the earlier statistics given, implies that the linguistic, social and cultural diversity of student profiles have changed at universities. Academic development has come into the spotlight as interventions are developed. Student writing has become an important issue as this is the most visible assessment in student performance. There have been public debates at CPUT as we will discuss in the next section about 'poor standards' of writing. This is seen by many as playing a significant role in student failure. Lillis and Scott (2007:9) say that the nature of the 'problem' in writing must be properly defined and articulated in exploring writing 'problems'. They put the following questions to us for research: 'What does it mean to the participants to do academic writing? How is identity bound up with communicative practices in the institution? How do prevailing conventions and practices enable and constrain meaning? What opportunities exist for drawing a range of theoretical and semiotic resources into academic meaning-making?' My research is aligned to these types of questions as I try to answer how students represent themselves in academic writing and explore what role the socio-culturally shaped subject positionings (like the dominant practices of the institution) play in their self-representation.

The next section will describe my personal journey in developing my research questions.

The motivation for the study

As said before I have the vantage point of being a language staff member at CPUT. One of the reasons for my study on the relationship between self-representation and writing development stems from grievances expressed by subject-specific academic staff in a language colloquium or Indaba in 2006 at CPUT. This Indaba is an annual gathering of all interested academic staff members to discuss language related issues at CPUT. At this meeting many academic staff members complained about the poor English skills of their students and how these skills connected to poor performance. An academic staff member explained in detail how she paraphrased academic text for her students who do not speak English as a home language. She added that this did not help - as her students were still performing poorly. I noted that many academic staff members' perceptions about student failure were related to poor English skills. The common assumption was that student writing 'problem' was an indication of falling standards at CPUT.

In 2007, at the next language Indaba students were invited to speak about their own experiences in language development. All the students were black and approaching the end of their academic paths at CPUT. It was interesting that both staff and students saw language as an issue when it came to academic achievement but the students' descriptions of themselves and their struggles with language and academia were very different from academic staff members' perspectives.

For example, students felt that academic staff members were not taking into account their EAL background when it came to explaining subject specific terms. Students felt that academic staff members were more concerned about the technicalities of writing than the content of their writing. They felt that this produced inequalities, as English was not their first language. Some students said that it was unfair not to be able to write in their home language. Others felt that English was 'okay', but the struggle was in the 'accuracy' required of them in their writing. The common feelings were that the conceptual understanding of that task should be more important than the 'accuracy' expected in written assignments. Some students said that academic staff members confuse them as there are often different assessment criteria for each assessment. An interesting point made by a student was that before you can succeed in academia, you have to become a part of the academic world. When I asked the student to explain what he meant, he said that he became a better student once he understood what a particular assignments requirement was. He added that all lecturers did not make this clear. Students felt that understanding concepts were more important than language 'correctness'.

Most of the students I teach are black students who do not have English as a home language. There are many reasons for poor conceptual understanding in their field of study. There is usually an unavailability of science textbooks and no internet access in their homes. These textbooks and websites are not written in their home language. There is very little support at home, as often they are the only ones studying at university. By their own admission, some students are in the wrong field, as they were not empowered by their schools to make the right career choice. The university environment confronts them with a range of foreign experiences, for example, a new city, away from home and the diversity of student population and new lecturers who often have a different cultural background. The students have the daunting task of unraveling and making sense of this new environment. My perceptions are that students who struggle are often misunderstood academically and culturally by many subject lecturers who reduce everything to a language deficit. These misconceptions have serious implications for learners. The interaction with the learner is based on a preconceived notion that the learner cannot think logically and the word 'slow' is often said. The dominant conventions at university support this notion as students are often assessed according to how skillfully they can manipulate text. My concerns are that most lecturers are concerned with surface skills such as issues of standards and correctness in student writing and this is often to blame for 'falling' standards at CPUT. This attitude ignores diversity in students and limits the many other talents that students bring with them into writing.

While gathering data for my analysis, students often spoke about the difficulty in understanding scientific language. Halliday and Martin (1993) argue that it is not an English language problem as perceived by most educators, but the science language or discourse that can alienate students. They add that the experience of science language difficulty is not so much in the poor understanding of the English language but in the lexicogrammar of the scientific text. The lexicogrammar is the meaning of the text as constructed by syntax, vocabulary and discourse. This will be discussed further in the literature review.

My motivation thus stems from my work as a language lecturer in ECP. My aim is thus to explore how student writing can be seen as less of a skills activity than as an act of self-representation that is constructed from the available subject positions (explained below) which can be conscious or subconscious.

Aims of the dissertation

The nature of writer identity is shaped by what Clark and Ivanic (1997) call 'subject positions' as touched on earlier in my introductory paragraph on the context of this study. As said 'subject positions' are possibilities for selfhood that exist in the socio-cultural context of writing, both in

the broader context of society and the more specific institutional context. For example, students writing in an academic context may find that they want to align themselves with dominant institutional conventions of writing as it makes them part of a specific academic community or they want to resist or they are just confused. This is explained in more detail in the next chapter. Clark and Ivanic (1997:137) defines conventions as 'abstract rules of behaviour or prototypical ways of doing things: practices that are ratified by the social, institutional, cultural context we find ourselves in'. The conventions that students experience at university often position them in certain ways. Students do have the choice of conforming or contesting dominant conventions.

My aim is to explore how different students draw on these different conventions to represent themselves in writing. I bear in mind that institutional conventions are powerful and could alienate students initially as they are unfamiliar to the students and many students engage with the dominant conventions of the institution as it is often an indicator of success.

My research questions will explore how students engage with these conventions to represent themselves in writing. I suggest that writing is not only about content or the writing/language system, but also a representation of the self. This self-representation is reliant on socio-culturally shaped subject positions. I hope to contribute to an understanding of the importance of recognizing the impact of these subject positions on writing development. My questions are:

1. How do first year students represent themselves in writing assignments?
2. How do these self-representations in their writing change over time?
3. What are the implications of this study for academic development in the science ECP at CPUT?

In the literature review chapter I explore the issue of self-representation in writing from an 'academic literacies' (Lea and Street 1998) perspective. This approach views writing as embedded in social context which is ideologically inscribed rather than being autonomous and decontextualised.

Chapter 2

Theoretical framework

Introduction

As seen from the context of my study in the previous chapter, the era of democracy and equality in post apartheid South Africa is seeking a changing identity for its entire people. Labelling and stigmatisation and homogenising people because of past inequalities have stripped many students of self worth by the time they enter university. Students who enter university are bringing a variety of knowledge and skills with them which in many ways are not acknowledged in the dominant conventions set up for them at university. This situation can create identity confusion for many South African students who are still experiencing the legacies of the past inequalities. The ex-South African President, Thabo Mbeki has supported the concept of identity as being an important tool for self development. In Mbeki's speech of 'I am an African' (1996:1) he says that 'being an African recognises the fact that the dignity of the individual is both an objective which society must pursue, and is a goal which cannot be separated from the material well-being of that individual.' In his speech Mbeki implies that being an African is not a homogenous identity that is rooted in its origins. Cronin in a short story called 'Creole Cape Town' (2006:52) comments on Mbeki's concept of a heterogeneous African identity - 'a new kind of South African identity, identity as a process not an origin, identity as heterogeneity, and not some univocal root, identity as mixed-ness'. My research relates to these comments on identity as being varied as I see writing as a process, where students build on what they already have by drawing consciously or unconsciously on the available range of subject positions. The implication is that subject positions evolve all the time as the act of writing differs from one task to the next and students learn what works and what does not work in a particular context.

I draw from Clark and Ivanic (1997) who foreground various aspects of identity in writing. They say that 'none of the aspects of identity in writing can be thought of as the unique property of the individual, since they are instantiations and recombination of possibilities for self-hood which are available in the wider social context in which they are writing' (Clark and Ivanic 1997:30).

The main thrust of Ivanic's argument (1998) is that writing is not only about the content but a representation of the self. This self is constructed in relation to the socially available subject positions. This construction of the self as implied above is always a work in progress. As noted in my first chapter, the opinions expressed by academic staff are that students 'cannot write' and this was blamed on the lack of English skills such as poor grammar, spelling, and vocabulary. The assumption is that once students master these skills, they become better writers. And 'better writers' imply more successful students. The implication is also that these skills are generic and can be transferred from one subject to another. This view implies that students are homogenous and a set of rules can be applied to 'remedy' shortcomings in writing. As said in the previous chapter, I argue in line with an academic literacies approach that students are diverse and identity is multiple and varied, and embedded in social context.

In this chapter, I suggest that we need to know more about what students bring with them into writing to create spaces that embrace this variety in writing. In this way we allow students to express their creativities in a non-threatening way. My research seeks to answer questions related to how students present themselves in writing. I am concerned with the way identity is

constructed through socio-cultural and discursive aspects surrounding writers. My theoretical framework is located within the New Literacies Studies (NLS) field which advocates that the possibilities for the self in writing are endless and not fixed, but open to challenge and change (Ivanic 1998) as opposed to an autonomous view that writing is fixed and decontextualised. Discourse is seen as the 'mediating mechanism' (Ivanic 1998:12) in the social construction of this writing identity. This research takes on an academic literacies approach where Gee's notion of Discourses (1996), Ivanic's research on writing and identity (1997, 1998) Street's concepts of the autonomous and ideological view of literacy (1993), Bourdieu's notion of habitus and capital (1991) as well as other local social theorists who see literacy (writing) as related to context. Lillis and Scott (2007:10) say that what makes an academic literacies approach different to other approaches is the 'extent to which practice is privileged above text'. My research is aligned to this stance as I see writing as a discursive construction of the self which is rooted in practice and therefore a process rather than a set of perfectly constructed sentences within a rigid format which is commonly perceived by most science lecturers as a dominant genre in the sciences.

New Literacy Studies

The NLS tradition studies literacy as a set of social practices embedded in specific contexts and discourses. It argues for a multiple view of literacies. This emanates from the work of Street (1993) and Gee (1990, 1996) which suggests that literacy practices cannot be separated from social identities and power dynamics in specific places where literacy is practiced. These literacies are developed in relation to the contexts that uphold them. Street identified and developed the concepts of ideological and autonomous literacy. The autonomous concept describes literacy as a set of skills that is separate to the context it is in and relates literacy to individual cognitive processes. The ideological concept favoured by Street and which my study is aligned to stresses that literacy cannot be separated from the social context it is in, as it is related to power structures within institutions for example universities. First year students often arrive on campus and are confronted with a range of foreign conventions that belong to an already established academic community and feel almost compelled to conform in order to become a member. This could possibly be in conflict with their prior identities. Students often say that they feel a sense of alienation when they write. An investigation by De Kadt and Mathonsi (2003) at the University of Kwazulu-Natal, on whether African language speakers identify with English academic writing suggests that few students claim 'ownership' to English academic writing. Scott (2008) says in his keynote address on first year experience at university that 'the traditional image of a first year student at a university is one of exciting intellectual and personal discoveries, independence in thought and behavior, widening horizons and 'a growth in confidence'. Scott laments that many students' first year is 'marred by failure, loss of confidence and perhaps disillusionment'. This he attributes to the fact that improving learning experiences in the academic community are under-prioritised. This, can be avoided if more acknowledgement is given to Street's ideological view of literacy as it opens up doors to explore the socio-culturally embedded nature of literacy and the role that dominant institutional conventions play in literacies.

Academic literacies approach

Lea and Street (1998) posit different and overlapping models of student writing in higher education. They suggest that in the past research has been focused on two models of writing in higher education: the first model is concerned with acquiring study skills which views writing as 'technical and instrumental' and a second model that is concerned with academic socialization which views writing as 'a transparent medium of representation'. The first model enacts a deficit approach to student writing where spelling and grammar is emphasized. The second model

implies that institutional practices cannot be contested or changed and students should conform to the dominant conventions through apprenticeships. Lea and Street recommend a third model which is the academic literacies approach that is concerned with literacy as a social practice which views student writing as 'constitutive and contested'. This academic literacies approach acknowledges that student writing is embedded in social practice and emphasises identity. This reminds me of Ivanic's comment (1998) that a student's personal identity may be challenged by the type of writing required in the discipline which leads to a sense of not owning what you write.

Lillis and Scott (2007) argue that academic literacies research is a field of enquiry with a specific epistemological and ideological stance towards the study of academic communication and particularly writing. They add that researchers have placed their research within a specific geo-historical context and as said before the research has shifted away from studying text and moved toward practices, drawing on the traditions of the NLS. The theories developed from the NLS argue that written texts are not decontextualised, but related to what people do in the world. This implies that observations regarding the production and processes of text, as well as perceptions of text have been foregrounded by an academic literacies approach. This type of research challenges the dominant conventions that writers are expected to conform to (Lillis and Scott 2007).

The importance of this type of research in student writing is relevant to this study, which has identified that student opinions and lecturers' expectations about language were in conflict. The views that writing was an autonomous system acquired by individuals was dominant in the language Indabas discussed in my introductory chapter. As noted above, the academic literacies approach challenges this view as it views writing as socially situated discourse practices. The implication of this approach is that it is possible for writing practices to lean towards contesting official discourses of the institution and bringing in other discourses. As writers write, they draw on all the experiences in their lives but are connected to the university through particular disciplinary practices. Institutions are sites of discourse and power that can influence self-representation in writing. I have also indicated the discourse clash within the CPUT itself. This type of engagement with writing, identity and discourse is allied to the Gee's (1990) definition on Discourse with a capital 'D'. My study will show that students draw on many discourses from all parts of their lives as they construct a writer identity.

Gee (1990) examines the relationship between literacy practices, written language and the construction of identity in relation to Discourse. Discourse plays a mediating role in identity construction. Gee uses Discourse with a capital letter to emphasise that Discourse is not only about language, but 'saying-doing-valuing-believing combinations' so that Discourses are 'ways of being in the world, or forms of life which integrate words, acts, values, beliefs, attitudes, social identities, as well as gestures, glances, body positions and clothes' (Gee, 1990: 142). Gee compares Discourse to a type of 'identity kit' one develops. Discourse is defined by Gee (1990:43) as

... a socially accepted association among ways of using language, of thinking, feeling, believing, valuing, and of acting that can be used to identify oneself as a member of a socially meaningful group or 'social network' or to signal a socially meaningful 'role'.

Discourse is a signifier of how a group operates and exists in relation to other Discourses. Gee sees literacy as 'mastery or fluency over a secondary Discourse'. He (1990, 1996) distinguishes between primary and secondary Discourses. These concepts are used widely to explore writing. Our primary Discourses come from our early life (usually from family and community). Gee defines primary Discourses as our 'initial taken-for-granted understanding of who we are, who people like us are, as well as what sort of things we do, value and believe when we are not in

public' (Gee, 1996:137). The implication is that these primary Discourses are not formally learnt, but acquired through early socialisation. These primary Discourses set up a framework for acquiring other Discourses. Secondary Discourses are those that people learn as part of participation in communities and institutions such as school and church, beyond the Discourse that comes 'free' with early socialization. Secondary Discourses are thus more public. Secondary Discourse thus extends primary Discourse. No Discourse can thus be learned in an entirely academic or formal way as Discourses are experienced and constantly being re-shaped by other Discourses.

Discourse can also be seen to play a 'gatekeeper' role in that it will shut out people who do not become familiar with a particular Discourse. Gee (1990) says that in many instances mastering dominant Discourses at university usually equals success to students. This could imply that Discourses can play a powerful role in identity construction. Students' difficulties with writing in their first year can be explained in terms of them being 'aliens' to the dominant Discourses of university. As stated earlier by Gee (1990), literacy is mastery of secondary Discourse. This challenges the deficit view of student writing which is associated with surface language 'problems'.

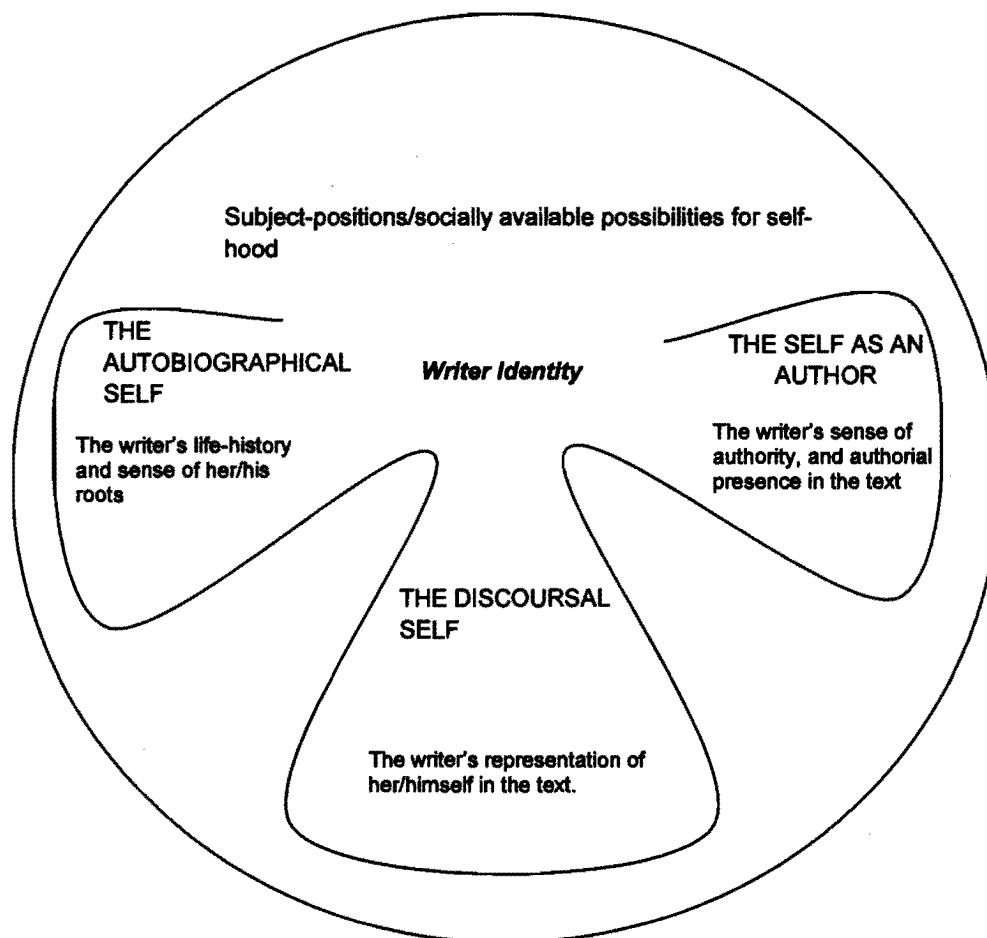
Gee's notion of primary Discourse and how subsequent discourses are layered on to it is also compatible with Bourdieu's concept of 'habitus' which is related to the various forms of 'capital' students bring with them into university (1990). Alborough (2004:10) defines habitus as a 'set of dispositions or tendencies, which incline individuals to act in certain ways'. These dispositions are learnt from early childhood and form part of a personal identity that becomes part of that individual. It is an embodied history which reproduces the social world people encounter. Habitus, has a strong influence on the way people view the world. For example, a student living in a household where Xhosa traditions are upheld will be inclined to bring values and practices from these discourses into her/his academic writing. Bourdieu would say that because individuals always act in a social setting, their actions are not solely reliant on their habitus, but on the relations between the habitus and the particular social fields in which the individual acts (Alborough 2004). Bourdieu's concept of field and habitus are relevant for my study as habitus often interacts with the institutional field in the act of writing which can cause conflict.

Bourdieu's notion of the various types of capital, especially cultural capital, which affects an individual's relative status, helps me to understand how my students position themselves within their fields. The self-worth of the student is often undermined as university structures often do not recognize certain student capital. Bourdieu's overarching concept of symbolic capital distinguishes between cultural capital, economic capital and social capital. Cultural capital is subdivided into embodied capital, objectified capital and institutional capital. Embodied capital describes the skills, knowledge, practices and inherent inclinations of an individual. Objectified capital describes material objects, such as books. Institutional capital describes the credentials offered by social institutions like a university (Carrington and Luke 1997). Alborough (2004) says that different fields place value on different things. Capital is thus dependant on the context in which the individual is in. For example institutional capital in western society regards a university degree as prestigious whereas a university degree is not necessarily prestigious in an environment where survival skills like growing one's own food would be valued. Kramsch (2008) in unpacking capital say that capital is only recognised if it is aligned to ideologies of power structures. For example the capital students bring with them into university is often undermined by the institution and this often causes students to feel undervalued. Carrington and Luke (1997) say that all forms of symbolic capital (cultural, economic and social) must be officially ratified or authorized in order for it to be of value. 'Capital is not capital unless it is recognized as such authoritatively in a particular social field' (103). The individual agency and the dominant structures in place are in tension with each other.

Writing and identity

As writing is my primary focus, I mainly use Ivanic's (1998) three aspects of the self in writing for my conceptual framework: the autobiographical self, the discursual self and the authorial self. The central theme in Ivanic's framework is that writing is not only about content, but also a representation of the self. She portrays three ways of thinking about identity in a clover-leaf illustration (See Figure 2.1). The three aspects of identity are reliant on a fourth aspect which she calls subject positions or possibilities for self-hood. These subject positions are found in the context surrounding the writer.

Figure 2.1: Student identities in a text (Clark and Ivanic, 1997)



The autobiographical self is the self that writers bring into the act of writing, for example, the writer's life history, experiences, values and beliefs. These prior experiences all shape identity in writing. The discursual self is the writer's representation of the self through the discursual choices they make as they write. This is the impression they create which is constructed by the discourse characteristics of the text. It can be a conscious or unconscious portrayal of the self in a particular text. The authorial self or the self as an author is the writer's 'voice'. The 'voice' is the writer's position, opinion and beliefs. This is how a writer establishes an authorial presence, confidence and authority in a text. This is represented by the writer as having something to say. All these identities are bound up with the available subject positions surrounding the student. Ivanic says that the three aspects of identity can change from one piece of writing to the next. The autobiographical self develops all the time as the writer experiences life and circumstantial changes. The discursual self will also evolve depending on changes in the autobiographical self and the different demands of the current piece of writing. The authorial self can also change according to the different genre required in the type of writing and also in response to the content or subject matter. Students can also 'sound' more authorial as they develop confidence in writing.

However, Ivanic says that the socially available possibilities for self-hood which can be found in the wider social context in which students are writing change very slowly over time. The implication as stated in my introduction is that self-representation in writing is never unique or actually owned as writing is instantiations and recombinations of possibilities for self-hood.

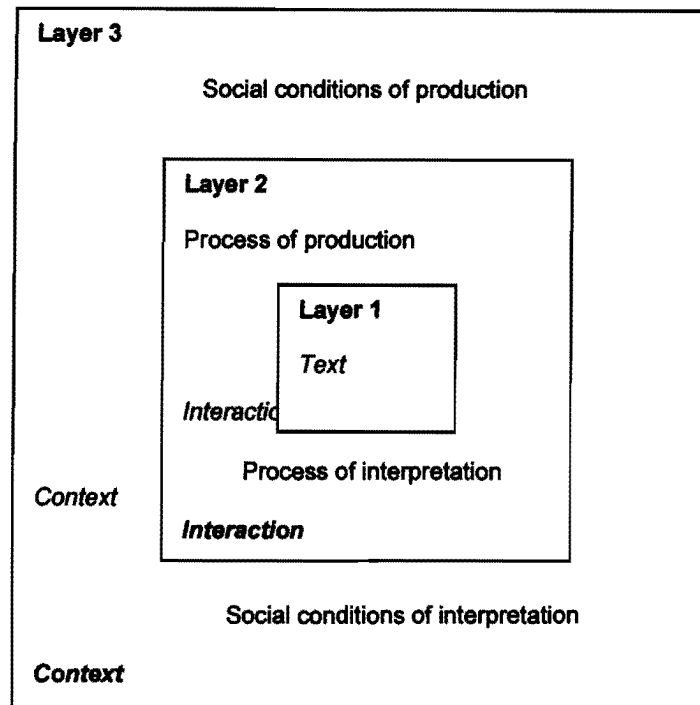
Ivanic argues that writing is an act of identity (1998). She says that individuals try to take ownership of their identities by aligning themselves with 'socio-culturally shaped subject positions' which can be conscious or subconscious (Ivanic 1998:32). This implies that there are many ways in which one can approach a task or an assignment. Students leave traces of their identity in their writing based on many 'voices' from their past, present and future. Ivanic uses a combination of Halliday (1994) and Fairclough (1989) to trace these identities in student writing. The three identity aspects are closely intertwined as seen in the clover leaf diagram in Figure 2.1 above. In the next chapter I will be returning to this model when I discuss my conceptual design in more detail, for the purposes of data analysis.

The way writers represent themselves is often based on discourse and linguistic choices they make in their text. Ivanic's view on language draws from both Halliday and Fairclough to illustrate her identities in writing as discussed above.

Halliday (1994) developed a theory of language based on how the structure of language expresses three macro-functions: the ideational, the interpersonal and the textual. These macro-functions are illustrated in figure 2.3 under the heading 'Science and genre'. Each macro-function is concerned with different aspects of the world and the, 'modes of meaning', that are identifiable in language in social contexts (Halliday, 1994:27). The ideational function focuses on the natural world and events, including our own consciousness. Halliday describes this as the 'content function of language' (Halliday, 1994:27). The interpersonal function focuses on the social world which expresses attitudes, judgments and relationships. This is referred to as the 'participatory function of language' (Halliday, 1994:27). The textual function focuses on the organization of text. It enables language to be 'operational in a context of situation' (Halliday, 1994:27). Each macro-function, therefore, has a different concern and uses particular elements to analyse the clause. Halliday divides these macro-functions into 'the context of situation' and 'the context of culture'. The context of situation is reliant on the current discourses students find themselves which can be related to the discursal self of Ivanic and the secondary Discourses of Gee, the context of culture relates to the prior discourses that students have encountered. This corresponds to the autobiographical identity of Ivanic and the primary Discourses of Gee. Halliday's three functions thus construct identity in writing which is central to my study. These macro-functions are connected to the social context and Fairclough provides a useful framework for studying language in relation to context.

The following framework (Figure 2.2) illustrates Fairclough's (1992) three dimensional conception of discourse.

Figure 2.2: Discourse as text, interaction and context (Fairclough 1989 in Ivanic 1997)



Fairclough views all text (Layer 1) as having multiple kinds of meaning. This is aligned to ideational and interpersonal meaning of Halliday. Layer 2 represents the processes of production and interpretation of texts. Ivanic says that this refers to the mental, social, physical processes, practices and procedures involved in creating text. Layer 3 is the social context which shapes the discourse production, discourse interpretation and the discourse characteristics in the text. This can be seen as Halliday's context of culture. I will return to this illustration to discuss discourse analysis as a method for analysing text in the next chapter. All the layers represented construct an identity which I will seek to explore.

Fairclough and Halliday show how language is socially meaningful and constructed. They provide tools for linking discourse to identity issues in writing. Their view of language as text, interaction and context implies that language reflects and constructs context.

In the next section, I discuss how some studies relating to academic literacies research in South Africa has informed my research.

South African studies: academic literacies and identity

The increase in the diversity of students in higher education following the end of the apartheid era in 1994 (as discussed in the context of this study) meant a changing student profile and this saw an increase in language and literacy based research specifically questioning the value of dominant academic practices. The research below is similar to mine as it places identity issues in the centre of exploring literacies.

Prinsloo and Breier (1996) developed one of the first research projects surrounding the social uses of literacy. Twelve case studies were undertaken in various contexts. They were not academic literacy theorists, but their research was aligned to the New Literacy Studies and identity issues were central in their findings which said that literacy practices cannot be separated from social identities and power dynamics in specific places where literacy is practiced. The study indicated that the providers of literacy instruction need to address the gap between literacy taught in adult classes and the literacies that are part of people's lives outside of the night

school and learning centres. This speaks to my study as I argue that identity issues are embedded in writing.

The local research implications of this project supports the NLS claims that literacy is closely linked to social practices implying that the wider world of interaction is integrated with our literacy actions. The project questioned the notion that literacy is singular and static as mine does. It revealed that there are multiple literacies which were embedded in social practices. The way people related to literacy was dependent on their social positions and the discursive resources they drew on to construct a social identity. This implied that illiteracy was not a social problem that when addressed could lead to empowerment. This implication is pertinent to my study as it refutes the deficit view of literacy as commonly expressed by the institution. It supports the view that literacy is not a set of decontextualised skills but a set of social practices that is embedded in specific contexts, discourses.

My research is also informed by a literacy project was undertaken by Jacobs' (2005) at CPUT which argues that academic literacy courses should not be seen as decontextualised or generic as is common in South Africa. Her project integrated language and content in various disciplines. She saw an integrated approach as an embedding of teaching reading and writing within the ways that academic disciplines use language. This project examined the role of academic literacies in the disciplines and what this meant for the teaching of academic literacy in higher education. The aim was to develop a strong connection between academic literacy and knowledge construction within the discipline.

Jacobs' study (2005) involves 20 academic literacy staff members and disciplinary specialists over a period of three years to explore how the teaching of language or academic literacy can be integrated into academic disciplines. The language lecturer and the subject/disciplinary lecturer have to find common understandings within the curriculum to explore the discursive practices within that particular discipline. The findings of the Jacobs' study suggest that the partnership between academic literacy educators and disciplinary specialists must 'create discursive spaces' to aid the embedding of academic literacy into the subject-specific disciplines of study (2005:1). For instance, the language lecturer can help the subject lecturer with an understanding of the 'problems' that students face and because they too are novices to the discipline, they can recognize and inform the subject lecturer when s/he is getting lost in the embedded knowledge of the discipline. The project created a platform to share ideas and teaching strategies. Language lecturers experienced an 'illumination of the darkness of the unknown' (Jacobs; 2005:483) and subject/disciplinary lecturers praised the supportive and developmental nature of the project. This study also argues for the importance of the relationship between language and disciplinary expertise.

Bouhey (2005, 2008) asks for a change in actual mainstream teaching which sees language as a separate almost remedial course. Her research suggest, as does Jacobs, that the role of a language practitioner should rather be one that supports both lecturer and students in the mainstream class. Her research speaks to mine as she calls for change at a deeper, more affective level. She foregrounds in her research that students need to feel at home with the academic discourse to feel accepted.

Bouhey is an academic language practitioner from Rhodes University, South Africa who resists the assumption that second language black students have deficit problems. This is based on her research at the University of Zululand which is a historically black institution. She says that academic literacy 'is knowing' how to speak or act in academic discourses. She challenges the dominant views that the problems students have are because of 'lack of study skills' or problems with proficiency in reading or writing that can be solved by teaching a generic academic literacy

course in a semester. She suggests that 'people become literate by observing and interacting with other members of the discourse until the ways of speaking, acting, feeling and valuing common to that discourse becomes natural to them.' (2005:4) which is parallel to Gee's view (1990) on the necessity of literacy acquisition, rather than formal learning.

Nomdo (2006) has been a great inspiration to my research as he investigates the worthiness of students' agency and how this affects their self-representations. He traces the self-representations of two successful black students at the University of Cape Town (UCT). He says that students represent a wide range of academic, socio-cultural, language backgrounds. This means that students bring with them into the university an individual diversity. This challenges the notion that conflates black students with homogenous labels such as 'disadvantaged' by the institution. He uses Bourdieu's notion of capital (see page 12) to illustrate the diversity of the students. The suggestion is that the university should make spaces for the recognition of the various capital that students bring with them into the university. Nomdo (204) says that the 'recognition of the worthiness of this capital signals the worthiness of the student.'

Another UCT researcher that informed my study on how self-representation is constructed in text is Angelil-Carter (2000), who questions the assumptions that plagiarism is deliberate 'stealing' for which students should be severely penalised and that once the skills of correct citation are taught students would be empowered and the problem would go away. It uses data from written assignments as well as interviews with first and third year students to investigate the reasons for plagiarism in student writing. She argues that plagiarism is the 'manifestation of complex learning difficulties which relate to the educational environment, the nature of academic discourse and the nature of language' (2000:14). This means that plagiarism is part of the development of becoming an academic writer. She says that students are 'trying on discourses' in the beginning. Students do not own the discourse yet and it is thus 'alien' to them. It is a natural process to copy words from others in order to become familiar with academic discourse. In other words one needs to gain confidence and experience to own any discourse. Once these discourses are mastered, students develop their own voice. Angelil-Carter explains that that old and new discourse can also 'mingle', which can be intentional or unintentional in student writing. Students thus bring with them into writing many prior identities which mix with the new identities. There are times when these identities overlap. This notion is related to Ivanic's three aspects of identity (1997) as illustrated in Figure 2.1 when she explores the writing identities that students bring with them into writing as discussed earlier. Angelil-Carter shows how novice students use familiar practices of school writing when they construct an essay. School writing, as we will see in the profiles of my research students in chapter 4, is often dominated by factual constructions of knowledge that can be memorised. This seems to be a common trend in South African education, as is shown in Kapp's research (2004).

In the same social studies arena as Street (1993) and Gee (1990, 1996), Kapp (2006) studies literacy practices as seen in South African township schools. Her research took place between 1997 and 1999 at a former DET school. Her research reveals that the school discourses do not adequately prepare students for university writing. The focus in written text was based on facts and students were not taught to critically analyse these texts. Students often summarised texts instead of analysing and understanding the text. Kapp (2006:48) concludes that the 'legacy of DET education is evident in student's struggle to move from rote learning mode, their difficulties in engaging in close analysis of text and in analysing and synthesising multiple points of view'. Her research highlights the importance of taking into account the prior identities that students bring with them into university which is important for my research on how identity is discursively constructed in academic writing. Fairclough offers a way to explore how prior discourses inform student writing at university.

Intertextuality

Fairclough (1992) used intertextuality as a term to refer to all the ways in which specific text relates to other text in any way. Intertextuality is defined by Bakhtin (1986:94) 'as any utterance that is related not only to preceding but to subsequent links in the chain of speech communication'.

These prior discourses that students bring with them in order to build new discourses were researched by Paxton (2006). She uses intertextual analysis to uncover the writer's 'emerging meanings' (2006:84). Her research corresponds to mine in that we both analyse student writing to uncover meaning but her focus is on learning and mine is on identity construction.

Angelil-Carter (2000) uses a form of intertextuality to trace the line between plagiarism and taking on the discourse of an institution. My research relates to this as I explore how subject positions can lead to certain choices made in text. Intertextuality in student writing is central to my study as it recognises that student differences should be used as a resource to make education more meaningful and relevant. Paxton's studies provide academics with a tool that can be used to study the resources that students bring with them as well as the processes by which they acquire new discourse. Paxton analyses first and final coursework assignments in the Economics field at the University of Cape Town. She explores the shifts and changes that take place within an academic year. Similarly, I explore the shifts and changes that take place as I analyse student first and second semester writing. Her research reveals that students build on prior discourses to develop new ones. These discourses are also not necessarily dominated by the dominant discourses of the university. She gives evidence that students can adapt their prior discourses and interweave this with the current discourses. Her research has also revealed that lecturers make assumptions about students that can be wrong. For example lecturers often assume that students know concepts, but often this is not the case. Paxton recommends that lecturers get to know their students well in order to use the resources they bring with them appropriately. Paxton concludes that students are 'contributing to a changing discourse, and allowing us to see dominant discourses as not simply fixed and immutable, but as permeable and situated in history' (100).

Even though the above theorists investigate different aspects of academic literacies, identity is central in each study. Also common to all the studies is that academic literacies work can empower students to become members of their specific discourses. In the next section I investigate the genre of the sciences, because my research students are in the sciences and as my analysis will show, the science disciplinary practices position my student writers in a significant way.

Genre and the sciences

The framing of this study points to the importance of disciplinary practices for students who wish to become insiders to their disciplines. Writers convey messages about themselves according to the task that is assigned to them. This task is situated in the discourses of the discipline they are in. As discussed, a social view of academic writing implies that in most cases an individual takes on or attempts to take on an identity of the relevant communities they come into contact with.

Part of my analysis in chapter 4 will explore the role that disciplinary practices play in how students want to be represented in a text. Knain (2005) says that students are influenced by social norms of how they are expected to behave and textual norms of how they are expected to write. My study and work are based in the sciences and therefore it is necessary to discuss the genres of science. My analyses will reveal that my students attempt to write in a technical and scientific way in order to become members of the scientific discourses.

There is much debate around the role that genre and discourse plays in giving students access to the discipline. Ivanic (1998) says there is no typology of discipline-specific discourses and genres characteristics to match data, as discourse and genres are open to change and contestations. In other words there is no template to match certain characteristics but she suggests that certain discourse characteristics in a text can be traced to particular disciplines, and in this way position the writer as being a participant in the interests, values, beliefs and practices of that discipline.

The terms discourse and genre can become confusing. Kress defines genres as 'conventionalised forms of texts', which 'derive from and encode the functions, purposes and meanings of social occasions' (1985:19) and discourse as a 'systematically-organized sets of statements which give expression to the meanings and values of an institution' (1985: 7). For example the laboratory report or academic essay in the discourse of the Applied Sciences can be regarded as a genre. And of course those genres in turn can contain various discourses. For example, the academic essay can take on the discourses that students bring with them as they engage in the writing of the essay.

Similar to Kress, genre is defined by Cope and Kalantzis (1993:67) as 'conventional structures which have come to be accepted as pragmatic schemes for making certain type of meaning and to achieve distinctive personal goals, in specific settings by particular linguistic means', for example a research report, an academic essay, and a business letter. Cope and Kalantzis view knowledge of the social conventions of genres as weapons of power. They argue that genres must be taught explicitly in order not to disadvantage those who have not been taught the genre.

But this theory has been refuted by Street (1993) and Ivanic (1997) who say that teaching explicit genres to a student would imply that there is only 'one way' of doing things and students should be conforming to these dominant conventions of writing in a particular genre. This ignores the prior discourses (autobiographical self) that students bring with them into the institution. This could also make students feel as if they do not 'own' their writing and create identity confusion. I would lean towards this view as the theme of my research is about taking ownership of who you are and this means critically examining dominant discourses.

The Applied Sciences is the application of knowledge from the sciences to solve technical and practical problems. My first year students often complain that the science language is difficult. They say that there is a new terminology that they have to learn. Halliday and Martin (1993) argue that these difficulties are not an English language problem as perceived by most educators, but a science language problem that has evolved in particular ways to serve particular interests that can alienate students. This discourse of science is new to all students as it is not a home language to anyone, but it is noted from my experience with teaching first year students and in this study that it is more easily taken on by some students than by others. Halliday and Martin (1993) say that the experience of science language difficulty is not so much in the poor understanding of the English language, but in the lexicogrammar of the text. Lexicogrammar is described as the meaning of the text as constructed by the syntax, vocabulary and discourse.

As said, Halliday identifies three types of macro-functions: ideational, interpersonal and textual. Camps and Ivanic (2001) use these macro-functions to show how students position themselves in the genres of science writing. I have placed this table (figure 2.3) in this section as it is specifically designed to refer to the difficulties students have when positioning themselves in science writing. For example, in my study, students positioned themselves ideationally by taking on the identity of a horticulturist or an analytical chemist in certain lexical choices they made. For example a student in analytical chemistry would use subject specific terminology to refer to certain concepts.

academics recognising what practices students bring with them into writing and also making the practices of the discipline more accessible to students.

My theoretical perspectives can be placed within this academic literacies framework which views identity construction as part of a wider social context and not only an individual act of a person's mind and intentions. My conceptual framework uses Ivanic's three aspects of writer identities. These identities are all socially constructed by 'possibilities for self-hood' which exist in a writer's socio-cultural context (Ivanic 1998:24). Students occupy different subject positions related to this context, which in my study is the university context. Ivanic suggests in her research that student writing is more than conveying content, but includes conflicts of identity as students struggle with the dominant discourses and practices of the different socio-cultural settings of the university. These conflicting identities raise new research questions and methodologies as pointed out by Ivanic. In the next section, I identify the methodologies associated with seeing writing in its social context.

Chapter 3

Research Design

The design is an interpretive, qualitative study and draws from discursive and linguistic analysis of student writing to illustrate how students represent themselves in first year writing. This qualitative study is complemented by interviews to gain first hand understanding of how students view their writing activities. Qualitative research is defined by Denzin and Lincoln (2000: 3) as 'a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including interviews, conversations and memos to the self. The qualitative approach also allows for 'the exploration of meanings of social phenomena as experienced by individuals themselves, in their natural context' (Malterud 2001:283). My study is aligned to the qualitative research method as I trace how students discursively construct identity in their writing assignments. These writing assignments take place in an existing curriculum.

In the next section I discuss this qualitative approach to my research design.

The qualitative approach

My main method is a form of discourse analysis derived from Fairclough (1989, 1992) which I discuss later in this chapter. My focus is on representation and the emphasis is on collection and interpretation of data and is not based on experimental methods in a fixed setting. My research subjects' subjective perceptions and beliefs about themselves and others are an integral part of my research process and this leads me to my findings. This lends itself to a qualitative research method.

There are four tasks relevant to my study for a strong qualitative research design (Maxwell 1992).

1. Understanding the meaning, this means that one tries to understand how the participants in the research act the way they do, and how they make sense of the world.
2. Understanding the context within which the participants act and the influences that this context has on their actions.
3. Identifying unanticipated phenomena and influences.
4. Understanding the process by which events and actions take place.

My research is thus aligned to a strong qualitative tradition as opposed to quantitative research which is known for its experimental research in controlled conditions. Denzil and Lincoln (2000) reflect that qualitative research is often criticised for being unscientific, exploratory and subjective and there is often a problem with reliability in qualitative research. Hammersley (1992:67) says that 'reliability refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions'. The traditional positivist research makes use of the quantitative approach. The positivists suggest that qualitative researchers are fiction writers and have no truth for verifying their statements (Denzil and Lincoln 2000). On the other hand quantitative research has been treated with skepticism in many Western countries because of the contradictory nature of

statistics (Silverman 2006). It is also suggested by some that quantitative research ignores the differences between nature and nurture and how meaning is attached to social contexts (Silverman 2006). Silverman argues that both types of research can be reliable based on the nature and method of the research and the one can complement the other.

My research does not need numbers for analysis or have a hypothesis to prove. It has a preference for meaning and sets out to explore an existing context. It attempts to understand the relationship between writing and identity and how this is perceived by all the participants. I draw on Fairclough's critical discourse analysis which is derived from Halliday's macro-functions of language (see page 19) to trace how students construct identity in writing as discussed in the previous chapter.

Critical Discourse analysis (CDA)

As stated in Chapter 2, this method of research is described by Fairclough as being three dimensional (See figure 2.2). Writers represent themselves by the discursal choices they make and are sometimes limited by the choices available as discourses are shaped by social context and power (Ivanic 1998). CDA analysis involves looking at how and why writers make these discursal choices in order to identify taken for granted practices. Ivanic uses a combination of Fairclough's view on discourse, intertextuality and identity and Halliday's view on the macro-functions of language. CDA fits in with my research because it asserts that language is shaped socially and does not reside in individual cognition. My research questions are related to how students own or disown text and how texts are socially constructed. The ways students represent themselves are embedded in social practices. CDA is thus useful in answering my questions as the implication of doing CDA is that language is not static, but is shaped by the world we move in and we represent this world accordingly. Fairclough (1992: 72) argues that in 'producing their world, members' practices are shaped in ways of which they are usually unaware, by social structures and relations of power.' CDA posits an interest in the 'properties of text, the production, distribution and consumption of text, the socio cognitive ways of producing and interpreting this text, social practice in institutions, the relationship of social practice to power relations and the wider societal world' (226). Figure 2.2 on page 15 illustrates this three dimensional concept of discourse and discourse analysis: the text, discursive practice and social practice. The text deals with my analysis of the language of the text, which is the vocabulary, grammar, cohesion, text structure. Halliday's macro-functions (1993) of language are helpful to aid this kind of analysis to trace the authorial self in the text (refer to page 28 for an explanation). The discursive practices layer refers to the processes involved in how the text was produced and interpreted. In this case, I traced how the subject positions of students shaped the discursal self in writing. The social practice outer layer focused on the institution and the wider aspects that positioned students. The textual inside layer concentrates on the linguistically realised aspects of the text whereas the outer two layers concentrated on the discursal aspects. All the layers overlap, so all aspects of text simultaneously work at the discursive and social levels as well.

Research Process and Methods

Sampling

A group of four students was purposively selected as research subjects. Purposive selection is described as non-probability sampling (Robson 1993) or non-random sampling (Durheim 1999). This means that the researcher decides who would be the most suitable participants for the research purposes.

My main aim was to trace self-representation in student writing. The sampling did not have to be representative of the larger group, but this consideration did play a small role as my sample consisted of two black females, one white female and one black male.

At the beginning of 2008, I informed the Analytical Chemistry ECP class that I was researching identity issues in writing. There were 16 students in this class of which 10 were female and 6 were male. All the students were black and the ages ranged from 19-25. All the students were EAL students with isiXhosa, isiZulu, Afrikaans, and French as their first language. I outlined my research project to them, and explained that I would choose a few students to help me with my research. There was a general buzz of excitement in the class. I decided to choose my research subjects after I learnt of their backgrounds via their autobiographical and their self-reflection activities in class. In addition to the sample being representative of class demographics, another factor that contributed to my selection was the high motivation levels of the students displayed when discussing their writing. I was aware that it would be difficult to comment on the writing of 'quiet' or 'disillusioned' students. I chose two candidates, a male and female, from this class.

The Horticulture ECP class I informed in the first semester as I had only started to teach them later that semester. I followed the same procedure as for the above selection in discussing my research with the whole class. I also asked them to write biographies and self-reflection paragraphs. There were 18 students in this class. 17 students were black and 1 student was white. The ages ranged from 18- 29. There were 11 females and 7 males. I chose the white female for my research for various reasons. Firstly she was the only white person in my class, secondly she was 'mature' (29 years old) and thirdly I felt that this would enrich my research as it added another angle. The other student I chose was a highly motivated black female from an underprivileged background. Her energy impressed me, and I asked her to join. This is an example of purposive sampling as the main aim was not only to have a representative group, but a group that was willing to talk about their experiences.

Data gathering and methods

My data sources involved collecting written documents, unstructured interviews and observations.

Documents

Autobiographical information

The first two data sources involved all the students writing autobiographies and doing self reflection activities in the classroom. The aim was to get to know all my students so I could select a representative sample for my research and to trace their autobiographical selves as explained on page 31. In addition to helping me choose a meaningful sample and getting to know student background, the information could also be used for later analysis to trace the origins of discursal identity in student writing. The self reflection exercise required students to think about their life and career aspirations and what motivated them. The aim was to back up the autobiographical information. These two documents assisted me in choosing my sample. The advantage of this type of informal text is that it also provided a richness to my research as I could do close analysis which revealed subtleties that I may have missed in questionnaires or interviews.

Academic assignments

My third and most important source was the writing assignments in the Communications Skills course of first year students that I teach. These sources also counted as an assessment required in the Communications course and a content subject within the respective disciplines of

Horticulture and Analytical Chemistry which I will elaborate on in my next chapter. I selected four students based on the autobiographical data sources and reflection activities data sources described above. I then collected first and second semester writing assignments³ for analysis from the four students.

I chose two key moments in a first year student's life:

- The first semester science research report written at the start of the semester. This will be used to analyse all three aspects of writer identity as explained in my conceptual framework and data analysis in the next chapter.
- The second semester research report written at the end of the semester which will also be used to analyse all three aspects of writer identity, but this time to compare to first semester writing to trace changes in student writing.

With the above data collection I was able to trace self-representation in students' writing and explore whether these representations change over time.

The following table is a summary of the nine assignment writing samples that I will analyse. I have included one journal sample with the permission of the student.

S T U D E N T	Writing samples		
		First semester	Second semester
Thandi	x	x	
Anele	x	x	
Mel	x	x	
Sabrina	x	x	x

Table 3.1: Data sources

In Ivanic's study of identity with mature students she suggests that the self-representation of the writer is affected by the immediate social context, for example the university and disciplinary environments help to construct writer identity. I use the students' academic assignments to do a light discourse analysis to gain insights into how writers use their social contexts to construct academic text and to show how they own or disown parts of their writing. Ivanic suggests that the discursal choices writers make in text are representative of their identities. Ivanic's clover leaf design (see figure 2.1) was useful to trace this self-representation in written texts.

Journal writing

The journal writing became a secondary source to my data as it was used in addition to the writing discussed above to help trace the discursal self in academic writing. The journals gave me a rich source for insight into students' perspectives on writing. It was also valuable as I could draw comparisons between academic and informal language in writing. It was also useful to trace whether students represent themselves differently in different genres. This was not one of my

³ The writing assignments were collected at the time of the assessment. The topics and assignments are in Appendix 2.

research questions, but it became an area of interest when I read student journals which were part of my writing activities in my communications course. The limited scope of this study did not allow me to look at this interesting aspect in more depth. I have not included the journals in the Appendices as it would have revealed my students' identity.

Interviews

The interview is a popular form of research in many qualitative studies (Silverman 2006). However, Silverman is also very skeptical in using the interview as a topic for analytical attention. He suggests that the sense of interview data should be less contrived and offer more authentic expressions of personal experience and feelings. The interviews in my research leaned towards a more natural approach as it was unstructured and unscheduled. It was used to supplement or complement my writing data sources. I kept a record of all my interviews in a journal format. It is not included in my Appendices for ethical reasons as I recorded many personal experiences of my students. They were an interesting part of my data as they gave my students a chance to interact with their own writing. This gave a degree of validity and reliability to my research as I could get 'first hand' information of how students felt about their writing and explain why they made certain choices in their writing. This is an essential characteristic of qualitative analysis. This gave me some direction in addressing the questions in my research. My role as their language lecturer was an advantage and a disadvantage. I discuss this dual role of lecturer vs. researcher in more detail on page 28. The advantage is that I could develop a friendly, open atmosphere in the discussion type interviews with my research subjects. All the interviews were done in English as I do not speak isiXhosa which is the first language of three of my research students. Thandi and Anele's sessions were held on the Bellville campus of CPUT and Mel and Sabrina's sessions took place on the Cape Town campus, according to where they were based. The students, with the exception of Mel, do not have English as their first language. A disadvantage was that the English was often a barrier as students did not feel as comfortable as they would have felt with their home language. Another downside of these interviews was that students were often intimidated by me as their lecturer. I often had to create a relaxed atmosphere – for example having tea and cake available or allowing them to listen to their choice of background music. Initially students were tense, but as time passed they became more relaxed. In the second semester they were more comfortable with me.

Observations

As an insider to my course, I could observe my research subjects in the academic context of the course. I could also observe them in their respective fields of study (Analytical Chemistry and Horticulture). This gave me an opportunity to monitor any changes (positive or negative) in an academic sense and a personal one. This was valuable and useful for my analyses as it made it easier for me to identify discursive choices in student writing. I recorded all my observations in the same journal I used to record the interviews discussed above.

Data Analysis

In order to explore self-representation in student writing, I used Ivanić's model of the clover-leaf design illustrating the three aspects of writer identity (Refer to the model of Ivanić in figure 2.1 in the Chapter 2). The three parts are inseparable and are all affected by the socio-culturally available subject positions that exist in the socio-cultural context.

The Autobiographical self

The autobiographical self implies that each student has a history that they bring to a text. This is similar to Bourdieu's habitus as discussed in the theory chapter. This aspect is related to the socio-culturally available subject positions in that people are positioned by socio-economic conditions, discourse conventions and literacy practices that they have encountered. This history is not a static one as students are constantly changing. The implication is that a writer takes on the same subject positions of people whom s/he identifies with in her/his previous encounters. S/he takes on their interests, values, beliefs and practices of those previous encounters. These are the voices that I look for when I analyse student text. The life history shapes the self esteem and status and this in turn affects the writing.

Ivanic (1998: 25) recommends that one asks the following questions when researching this aspect of writer identity

- a. *What aspects of people's lives might have led them to write in the way that they do?*
- b. *How has their access to discourses and associated positions been socially enabled or constrained?*

This aspect of identity involved theorizing and exemplifying students past histories by exploring their personal writing activities. I have tried to get to know my students very well. This I have done through unstructured interviews, autobiographical writing and observations in class and journal writing.

The Discoursal self

The discoursal self is the impression writers give of themselves in a written text. It is constructed by the social context they find themselves in. This self is discoursal as it is constructed by the discourse characteristics that which is aligned to the values, interests, beliefs and power relations of the current social context of the writer. Students thus construct an image of the self suited to the academic and disciplinary environment.

Ivanic (1998:25-26) poses three questions to research the discoursal identity:

- a. *What are the discourse characteristics of particular pieces of writing?*
- b. *What are the social and ideological consequences of these characteristics for the writer's identities?*
- c. *What characteristics of the social interaction surrounding these texts led the writer to position themselves in these ways?*

Ivanic recommends using Fairclough's CDA to answer the above questions. I discuss CDA earlier in this chapter on page 23. As also said I draw lightly from discourse analysis to answer the questions. The unstructured interviews help to answer question (c) as writers could explain why they write as they do.

In order to trace the academic identity, I explore textual features of academic writing such as clause structure which involves looking closely at lexical density as described by Halliday (1989) as the average number of lexical words in a clause. A lexical word is a 'meaning carrying word' as opposed to a 'functional word' like 'the'. Lexical density involves counting the number of lexical words in an extract (a) and then counting the number of clauses in it (b), then dividing (a) by (b).

I also look at lexis. Lexis is defined as words that identify with a particular academic community and writers vary in how they use it (Ivanic 1998).

I also explore some lexico-syntactic features such as use of numbers, expressions of quantity, specialised lexis and passive mental processes features as suggested by Ivanic (1998) to explore how writers position themselves as science writers.

The Authorial self

This aspect of identity traces the authorial identity of the writer. It can range from an assertive, confident voice to a feeble, unsure voice.

The self as an author depends on what is important to the writer at the current moment in her/his life. It is concerned with the writer's authorial voice in relation to his position, opinions and beliefs. The actual text is important in analysing this aspect of writer identity. In order to examine this aspect of the writer's identity, Ivanic (1998: 27) has suggested addressing the following questions:

a. How do people establish authority in written text?

b. To what extent do they present themselves or others as authoritative?

I identify this aspect of identity by exploring the textual choices writers make as they write.

Ivanic and Camps (2001) suggest a number of textual features drawn from Halliday (1985) associated with writers establishing authorial presence in a text: the use of the first person pronoun, the degree of modalisation used, the extent to which authority is claimed for personal experience, the type of reporting verbs used with sources and how these sources are used in the text (refer to page 47, 61 for more detail).

My researcher role vs. my teacher role

My role as a researcher and a teacher is a challenging one. I do not see these as being separate. Having done the research, I am of the opinion that researching should be a strong part of being a teacher. I was constantly reminded that the learning environment was shaped by so many factors. The factors involved the lecturers and the students' autobiographical backgrounds, learning or teaching methodologies, pedagogic approaches. Other broader social environmental factors such as the curriculum, CPUT, national policy directives (like ECP) all played a role in how students learn. The researcher role influenced my own teaching methodology as I became a more empathetic teacher in terms of designing classroom activities, and giving feedback to students in assessments. This was an unexpected gain for me as a professional. My teaching became more interactive and enabling for my students. I could sense that most of my students were achieving and developing in all spheres of university life as the year progressed. I am fortunate enough to see my participants on a daily basis and have access to their results which gave me insight into their academic development. My role as researcher became an intimate one and thus to be fair to my research subjects, I asked my internal moderator to assess their course work.

An unintended consequence of my design was that my students became so involved in their development that at times I regarded them as my co-researchers. They worked with me on tracing their own self-representations in their text. I made sure that I gave constructive feedback and allowed them to give me good reasons for their writing choices. The discussions were fruitful as it gave them some insight on how their writing is assessed in the academic field. They were obviously aware that I was researching language and identity issues at the university and this was

my research. In my discussions with them, I explained how my research could develop their own learning. They were involved in discussing and analysing their own writing which gave them an empowering role.

Ethical considerations

I asked students for their permission at the beginning of my research to use their written assignments. As said before, my research subjects filled in a consent form (See Appendix 1). It was also important to me that the students were assured that this research study did not affect their academic performance in any way. This is the reason why I used a moderator to assess their work. These issues were explained carefully to the students and were addressed in the consent forms as well. The subject lecturers involved were very co-operative and gave me their permission to use our joint assignments for my research. Consideration and confidentiality towards the students was my utmost concern during this research. For these reasons I have protected student identities by changing their names and I have not included my journal on tracking student interviews and observations as well as the students' personal journals.

Limitations of this study

The requirements for a minor dissertation did not allow me to explore Fairclough's model and Hallidayan theory in more detail in relation to my analysis. I thus chose to focus on Ivanić in more detail as it included a lot of Faircloughan and Hallidayan theory. For the same reason as the above, I did not have the scope to analyse the full writing reports of the four students. My initial attempt at analysing their full reports resulted in a rather bulky thesis that was not suitable for a minor dissertation.

It would have been ideal to analyse all the journals or attach it in an Appendix, but that would have been unethical. Not only did the journal writing help me to understand students better, it also added an interesting addition in exploring how students write differently when given different tasks.

Conclusion

My main aim is to look at the nature of self-representation in writing and to show its relation to writing development. My research enables me to use Ivanić's analytical framework using the three identity aspects portrayed above and is complemented by observing my research subjects in class and discussing feedback from their writing assignments. The conversations were significant as they gave my students a sense of importance in my research process and prevented them from seeing my study as an invasion of their privacy.

Chapter 4

Analysis of self-representation in student writing

Introduction

In this chapter I use Ivanic's three aspects of writer identity to analyse how writers represent themselves in writing: the autobiographical self, the discorsal self and the authorial self. The illustration of Clark and Ivanic's (1997) clover-leaf design (see Figure 2.2) implies that these selves cannot be separated and weave together to discorsally construct writer identity. For the purpose of a structured analysis, I separate the identities. I will return to this point in my conclusion.

In the first section of this analysis, I will discuss the autobiographical self (the first leaf in the clover) which is the personal history of the writer. For this section, I provide a personal profile of each of my four writers in order to answer life-history questions that affect the discorsal construction of student writing. In the next section I analyse first semester writing where I explore the discorsal self (the second leaf in the clover). This self is characterised by the discourse characteristics in the text and is concerned with how the writer wants to 'sound' in the text. For analysing the discourse characteristics of the text, I draw from Fairclough's (1992) interpretation of discourse analysis with specific reference to intertextuality and some linguistic analysis. In this section, I also explore the authorial self (the third leaf in the clover). This self explores how writers show authority in their text. This self is closely associated with the above selves as showing authority in a text can be based on the life-history of the writer which is the autobiographical self and showing authority in writing can be discorsally constructed which is a characteristic of the discorsal self. The 3 aspects of writer identity are all affected by the 'socio culturally available subject positions' (Clark and Ivanic 1997:136) which I have explained in Chapter 1 as possibilities for self-hood that exist in the socio-cultural context of writing, both in the wider context of society and the immediate institutional context of an instance of writing. This can be compared to Fairclough's view of discourse as text, interaction and context as illustrated in Figure 2.1. The subject positions can be conscious or unconscious which can restrict writers or challenge them. A typical example of a subject position in my findings is how my students drew on their past literacy practices to construct identity in their text. This can also be described as intertextuality as defined in Chapter 2 where the interplay of many voices position writers in certain ways. In the third section I analyse second semester student writing using the same framework as the above. The purpose in this is to see whether there are changes in self-representation over time. The final section deals with journal writing. I add this section to explore how the self-representations of students change when writing in another genre with different institutional demands.

The autobiographical self

Table 4.1 Personal data of students

	Sabrina	Mel	Thandi	Ancle
Gender	F	F	F	M
Race	Black	White	Black	Black
Age	21	29	20	19
Course	Horticulture	Horticulture	Analytical Chemistry	Analytical Chemistry
Secondary School	Khanyolwethu in Eastern Cape	Grenville in Rustenberg	Holy Cross Centre in Eastern Cape	Solomon Mahlangu in Eastern Cape
Previous writing experiences	<ul style="list-style-type: none"> • Factual writing using school textbook • Comprehension • Creative writing using no sources 	<ul style="list-style-type: none"> • Factual writing using many sources • Comprehension • Creative writing using many sources 	<ul style="list-style-type: none"> • Factual writing using school textbook • Comprehension • Creative writing using no sources 	<ul style="list-style-type: none"> • Factual writing using notes from the teacher • Comprehension • Creative writing using no sources

This aspect of identity implies that people are positioned by the opportunities made available to them in their past. Clark and Ivancic (1997) says that the discourse conventions and literacy practices that people have encountered in their past shape all aspects of life, including writing. As said before this is very similar to Bourdieu's habitus (1991) which is a person's tendencies to think and act in certain ways that is inculcated and structured by family and school. In order to illustrate this, I have tried to get to know my students very well as said in Chapter 3. This I have done through unstructured interviews, autobiographical writing and observations in class and journal writing. The following table provides a summary of some personal data of my four research students. The previous educational writing experiences were taken from interview data. Students were responding to a question on the kind of writing they did at high school level.

Sabrina

Sabrina is a 21 year old black female studying Horticulture on the Cape Town campus of CPUT. She attended Khanyolwethu High in the Eastern Cape. This was a poorly resourced public school which was part of the DET schools in the apartheid era. She was taught mainly in her home language which is isiXhosa. She did English as a second language at school and passed it with a 'D' symbol. She says that her spoken English is fluent as she spoke some English at school with teachers and peers. At school they often reproduced texts for subjects like History and Economics. Sabrina said that they used the given subject textbook for the 'factual' essays or studied ready-made essays given by the teachers for reproduction in the examination. In the English class they did comprehensions, letters, narrative and descriptive essays. She was not asked to acknowledge any sources for her writing.

She had a strong desire to study in Cape Town and after completing her schooling, she moved to study at a private college in Cape Town called Boston House to improve her matriculation results. According to Sabrina, the whole family pitched in to fund her education as they believed that she could succeed. At this college, her English improved as she was taught in English. The writing experiences were similar to the experience at school. Her written English as assessed by herself is a struggle and she says in an interview: 'I would like to improve my writing as I am not happy with it. I am nervous when I get an assignment as I have difficulty in using the information I have'. Her journal reveals that she is religious and dedicated to her family. In an interview she says that most young people are unsuccessful because they are not motivated enough to work hard. Sabrina's autobiographical writing indicates that she is determined to succeed at university. She shows self confidence as she reflects on herself in her autobiographical writing. As we will see in the discursal self, these identities- the literacy practices of her past schooling, the religious sensitivities, the caring daughter, the hard working self confident person all shape identity in her writing.

Mel

Mel is a 29 year old mature white student studying Horticulture on the Cape Town campus. She attended Grenville High School in Rustenberg in the North-West province. The school is a previously advantaged Model C⁴ school with good resources. After matriculation, she did some waitressing and then worked in the advertising industry. She moved to the Western Cape with her family in order to fulfill a dream of working in the plant production industry, hence her enrolment in Horticulture studies. She works part-time in a Nursery in Cape Town. Mel wants to get into the business side of plant production as she feels that is her niche.

English is Mel's home language and she regards herself as being fluent in both written and spoken English. Her writing experience is varied. She did factual writing at school in assignments using more than one source, but was not required to acknowledge her sources. She spent time working on creative assignments as well using other sources, but as before was not required to acknowledge her sources. Her autobiography and my interviews with her, indicate a high self-esteem and a positive outlook on life. On the other hand, Mel's frank comments in class about her 'good' work and other fellow students 'bad' work were often regarded as arrogant by others in class. She based this opinion on the amount of spelling and grammatical errors students made in their writing which is interestingly very similar to the study skills approach of the staff regarding writing as suggested in Chapter 1. Mel was eager to help and give advice, but was impatient with the feedback she received from her fellow students. Mel tended to forget that students often did not understand her accent or vocabulary. When she became aware that others felt this way, Mel made an effort to change her attitude which resulted in a positive outcome for all.

Mel's journal reveals an anxious personality. Her parents are divorced and she has a troubled relationship with her mother. She is financially dependent on her current boyfriend and this affects her moods. She writes in her autobiographical writing that she is a dreamer as this takes her away from her present life and troubles. She says the following about herself as writer in an autobiographical piece: 'I love any writing. I see myself as a character in my writing, venturing off in to unknown places, being able to witness miraculous things'. As we will see in the discursal self, these identities discussed above will influence Mel's writing.

⁴ Formerly whites-only school that opened its doors to other races in the early nineties

Thandi

Thandi is a 20 year old black female studying Analytical Chemistry on the Bellville campus. She attended a private school in the Eastern Cape called the Holy Cross Educational Centre. She received poor matriculation results and decided to improve her results at Headstart College in Cape Town. Headstart College offers second chances to students who want to improve their matriculation results. Her results improved slightly, but it allowed her to enrol at CPUT in an ECP science stream. At both institutions, Thandi was not required to acknowledge sources. The sources were given to her and she used them to write essays. She was also required to write formal and informal letters, descriptive and narrative essays in her English classes.

Thandi writes in her autobiography that she did not work hard at school as she allowed her personal life to interfere with her studies. Her autobiographical writing indicates that she has a supportive family, but she is of the opinion that they think that she cannot make wise decisions for herself and she is determined to prove them wrong. She writes that things will be different at CPUT as she is going to work hard. She says in an interview that the aim is 'to separate my personal life from my professional life by making time for both so that they can balance'. Her journal writing says the following about a chemistry test that she failed: 'I failed the test and I'm so frustrated where did I go wrong but I don't want to dwell on this because if I think of this I will want to give up I want to think positive I will fix this I don't know how but I will'. Her journal often reflects her determination to succeed despite hardships in her life. The journal also reveals that her mother had a serious accident when she was in her final year of schooling and this affected her results.

Thandi was taught in English at secondary level at school with Afrikaans as a second language, yet her home language is isiXhosa. She received an 'E' symbol for English in her matriculation examination. Despite her poor results, she says in an interview that she is fluent in spoken English but doubts her own writing ability: 'I am good at talking English to my friends. They admire the English I use. I prefer talking in English to Xhosa. But my academic writing is not good. I always got low marks for writing assignments at school.'

As with Sabrina and Mel these identities above will all help to shape Thandi's discorsal self.

Anele

Anele is a 19 year old black male studying Analytical chemistry on the Bellville campus. He attended Solomon Mahlangu High, a public school in the Eastern Cape. He writes in his autobiography that there was a lot of violence at his school. The school appears on a list that identifies the top ten crime schools in the Eastern Cape (Makgato 2007). He also writes that the school had poor resources and no equipment in the laboratories. The computers at the school were only used by the administrative staff. He also writes that the teachers were dedicated and always pushing him to succeed. But despite that, his results were poor and he did not receive a matriculation exemption to study at university. This was disappointing as he desperately wanted to study further. He was unemployed for a year and then an ex-teacher recommended CPUT as the institution did not require a matriculation exemption as a criterion for entrance.

As with the other three research students, Anele displayed a determination to do well. This is reflected in his journal writing where he clearly displays a hardworking nature as the pages are filled with his daily academic activities depicting images of a hardworking student. In one entry he writes the following: 'I knew today because I've practice it with my friend, we've got common things in the way we attack questions in Kinematics.' In another entry he writes: 'I do need more tutorials because some of the stuff in class I don't understand'.

Like Sabrina, Anele was taught in his home language at school. He did English as a second language at school and received an 'E' symbol. He says in an interview that he is not a bad writer when it comes to writing songs and poetry in English but struggles when it comes to writing academic assignments. They did not receive textbooks at his school and were often given essays to study for an examination. He was not aware of the importance of referencing until he came to CPUT. We will explore the above identities later in the analyses of his discursal self.

Conclusion

In the above section, I focus on the characteristics of my students past lives in an attempt to show later how they brought this into their writing. Fairclough's diagram as seen in Figure 2.1 shows how text cannot be separated from the processes and the social forces that produce them. The outer layer of his diagram illustrates how the social context which includes the socio-historical conditions of my research students is part of language use which includes writing. Ivanic (1998) agrees that the act of writing cannot be separated from the socio-cultural context of the individual which implies that writers experiences with people (direct or indirect) influence writing. These experiences are indicated by elements such as interests, ideas, voices, sense of self worth, practices including literacy practices. My four students' life history affected the process of writing their assignments. For example, the practices of past schooling all position my research subjects in particular ways. Anele and Sabrina felt disempowered when writing in English for assignment purposes because of their inexperience in writing in English at school. In addition their poor English matriculation results gave them a perception that they were not good at English, whereas Mel felt confident because she perceived herself as being a competent English speaker and writer. The different interests of each student also positioned them in different ways in their writing: Sabrina's religious and family interest, Mel's creative background, Thandi's determination to prove herself academically and Anele's determination to succeed all affected the discursal choices made in their writing. In the next section we use this discursal self to explore how the writing extracts from students' assignments complemented with interviews consciously or unconsciously constructed writer identities.

First semester writing

Copies of the original writing can be found in Appendix 2.

The discursal self

This is the second leaf in the clover design of Ivanic (as seen in Figure 2.1). This is the self-representation of the writer in the particular kind of text in which they are writing. It is a message that the writer conveys to the reader through the conscious or unconscious choices s/he makes through the discourses they draw from. The main questions asked to examine this aspect of writer identity (as said in the previous chapter) are: What are the discursal characteristics in the text, what processes are involved in the construction of this discursal self, and what influences shape discursal identities?

I illustrate the above by discussing the discourse types that my students were drawing on as they wrote, and reflect on the identities they were setting up for them. I draw lightly on Fairclough's model (1992) of critical discourse analysis as described in chapter 2 and 3 to explore the social aspects embedded in student writing which set up their identities. The model has three layers that explore the language of the text (first layer), its discursive practices (the second layer) and a social analysis of the institutional conventions that shape the discursive practices. The discursal self is found in the second layer where the processes of 'text production, distribution and consumption' take place. Fairclough (1992) argues that the production and consumption of any

Figure 2.3: Halliday's positionings as identified by Camps and Ivanic (2001:11)

Types of positioning	In relation to	Linguistic realisations
Ideational positioning	Different interests, objects of study, methodologies	Lexical choices
	Different stances towards topics: values, beliefs and preferences	Lexis, generic reference, syntactic choice
	Different views of knowledge making	Verbs, tense, first person reference
Interpersonal positioning	Different degrees of self assurance and certainty	Evaluation, modality, first person reference
	Different power relations between the reader and the writer	Mood, first person reference
Textual positioning	Different views on how written text should be constructed	Lexical density, linking devices, semiotic modes

It is suggested that the above positionings make it difficult for students to 'own' scientific or academic text. In order to make scientific language 'friendlier' it is important for educators to adjust their teaching in relation to these positionings. Knain's findings (2005) in his study on identity and genre literacy reveal that sensitivity to subject positionings in student writing may open up an understanding of how students construct their writing. It is also suggested that academic lecturers make it easier for students by making the discipline more accessible. One way of doing this is in designing new accessible approaches to teaching and learning in the classroom.

Conclusion

The theory discussed above shows that there is so much complexity in understanding why students write the way they do. It is even more difficult in the South African context of higher education where we have an enormous shift in student profile and a challenge in transforming places of learning. Students are no longer seen as a homogenous group and in this respect, I have found that the academic literacies approach has been helpful in unveiling the fact that students are all different and that they bring a variety of resources with them into the university. This approach also questioned the value of dominant academic practices and challenges us as lecturers and researchers to find new ways of viewing our students. Jacobs' project on integrating language and content is particularly important, as it advocates a change in the way language is commonly regarded as a separate isolated add-on subject in the curriculum to cater for the deficit view.

The New Literacy Studies is the broad theoretical framework used in my study of which the special focus of academic literacies play a significant part. Lillis and Scott say that it is 'a critical field of inquiry with a specific epistemological and ideological stance. The epistemology sees literacy as a social practice and the ideology is that of transformation' (2007:7). The above quote speaks to my research as I argue that taking ownership of writing depends on how comfortable students are with the representation of themselves in their writing. This is dependent on

text are particular to the contexts in which they are located. As the analysis will show, the students were drawing on the many discursive practices derived from their autobiographical identities as described above and on the immediate and wider socio-cultural environment they were engaged in at the time. Part of this socio-cultural environment were the courses the students were in which were determined by the faculty demands placed on it- for example the type of topics set, the feedback from the assessors and the given criteria for the assignments.

The assignment topics

The following written assignment was given in the Plant Materials Study 1 class, which is part of the Horticulture course on the Cape Town campus. It was interesting to note that very little guidance was given to the students in the design of the assignment. The Plant Material Study lecturer was quite keen on accepting my offer for language support after the assignment was given. She saw my role as an academic literacy specialist, as an opportunity to teach the language skills necessary to write the assignment. In a discussion with me about student writing, she commented that students were poor writers and this had an impact on their academic success. The following assignment is the authentic assignment given to the students. It is noted that very little information is given to the student. The topic demands factual scientific information, yet the students are asked to use their own words which is a difficult task as the language of science demands specific science terminology that is difficult to say 'in your own words' as the topic asks.

The assignment topic

Write a scientific research report on the medicinal, herbal and domestic use of the plant assigned to you. The report must be two typed pages. All information must be referenced. All the writing must be in your own words. Your report must have an introduction, the report and then a conclusion. A bibliography must be given at the end. [Assignment 1: Plant Production 1, 2008]

Sabrina and Mel are in the Horticulture 1 Extended Curriculum Programme (ECP) on the Cape Town Campus. As said the assignment was given by the plant production lecturer early in the first semester and was handed in for assessment. Most of the students failed this assignment. This class was being taught communication skills by someone other than me when this assignment was handed out. When I took over the language programme, the subject and language lecturer complained of plagiarism and the poor writing skills of this class. The language lecturer explained that most of the students struggled with English skills and fluency which was aligned to the deficit view that I discuss in my introductory chapter.

I asked the subject lecturer to give the students an opportunity to redo the assignment so that I could teach them some basic knowledge in answering assignment questions. It was granted. What I am analysing in this section is a second attempt.

The next writing task below was given as an integrated Chemistry 1 and English Communications assignment, which is part of the Analytical Chemistry course on the Bellville campus. The full original assignment can be viewed in Appendix 2. An integrated assignment means that students will be assessed for the same task using different criteria from the subject lecturers. In this task, the Chemistry lecturer assessed the content and the Communications lecturer (which is me) assessed the structure, style, language and presentation. The topic required the students to research any nuclear disaster that occurred in the last hundred years.

The assignment topic

Write a 340-400 word report on the nuclear accident that you researched. Your report must have headings and subheadings. You must include a title page, a content page, reference page. A draft can be submitted before the due date.

Integrated Assignment 1: Chemistry 1, Communications 1, 2008

Thandi and Anele are in the Analytical Chemistry Extended Curriculum Programme (ECP) on the Bellville campus. The above assignment was given early in the first semester. The students were introduced to science report writing in the Communications class with a particular focus on paraphrasing and referencing. Both students had no prior experience in writing a research report. The earlier autobiographical information also reflects that the students perceived themselves to be poor academic writers.

Self-representation in the introductory texts

Students convey an impression of the self to others in the form of social interaction. I examine how the discursive characteristics are related to the discourse conventions within the wider socio-cultural context in which they are writing, and how this positioned the writers. I use the introductory extracts of each student to engage with particular subject positions in the academic community that shaped self-representation in text. I look at how students write with an 'institutional voice' and how students take on the values, interests, beliefs and knowledge making practices of this particular institution.

Extract 4.1, Sabrina – Horticulture (Introduction)

Populus simonii is a genus of trees which include the Cotton wood, Poplars and Aspens which are known as Poplars. It is a deciduous tree. The leaves are turning bright gold to yellow before they fall during autumn. It grows about 30 m at a fast rate. It is flowering from April to June and ripens from May to July. In order to grow well, it needs light and well-drained soils. It can also establish well in the shade. The leaves are simple usually alternate and have an attractive growth form (Carrière 2004). In this report I will focus on Populus simonii's medicinal, herbal and the domestic use.

Extract 4.2, Mel- Horticulture (Introduction)

This research report will focus on the medicinal, herbal, and domestic uses of the Vinca Major. It is a trailing, prostrate, evergreen sub shrub, with a stem rooting at the tips with leaves that are glossy green, ovate pointed. This plant has large pale, blue, propeller-like shaped flowers of which appear on short erect flowering stems in spring- mid winter. "The Vinca Major is a native to W. Mediterranean, Europe, and N. Africa and lastly to C. Asia" (Brown:404)

Extract 4.3, Anele- Analytical Chemistry (Introduction)

The essay is about a disaster that took place in Japan, it was called Tokaimura Nuclear Disaster and it was caused by the employees. I'm going to concentrate on its ^{the} background, its occurrence and what really caused the accident.

Extract 4.4, Thandi- Analytical Chemistry (Introduction)

The three Mile Island accident was the most significant accident in the history of the American commercial nuclear power generating industry. The accident started in the 28 March 1979 (Wednesday), when the main feed water pump failed, & radioactive elements were released into atmosphere ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The academic community

The four students position themselves as members within a science academic community based on certain discursal choices in their text.

I explore how students move between subject positions available to them in the discourse conventions on which they draw as they write their assignments. I first discuss the nature of the academic discourse in the institutional context and then I examine how the discursal choices my students draw on shape this identity. Ivanic (1998) describes an academic discourse as the way people talk and write in higher education. This description is related to the wider social context which determines the dominant conventions of academic writing. I explore some of these conventions that writers draw from as they write and how they position the writers. Ivanic (1998) focuses on commonalities within the academic discourse community that position writers within one discourse community. She uses certain grammatical and lexical features drawn from Halliday (1994) to analyse short extracts of student writing in order to identify how students position themselves as writers in an academic community. The five linguistic features which are also discussed in chapter 3 are: clause structure; verbs; nouns; modality and lexis. Ivanic (1998) says that these characteristics are pervasive in academic writing and should not be regarded as prescriptive. The aim is to show how these characteristics position students consciously or unconsciously as academic writers. I use two of the above linguistic features, namely clause structure and lexis to show how the students were positioning themselves in the academic community.

Clause structure

This aspect is analysed by means of calculating lexical density in a text. Lexical density is described by Halliday (1989) as the average number of lexical words or item in a clause. Halliday defines a lexical word as a 'meaning carrying word' as opposed to a 'functional word' like 'the'. A lexical item is when two or more words form a phrase that gives one particular meaning, for example, a bunch of flowers. I have used lexical items and lexical words where necessary. As explained on page 27, lexical density involves counting the number of lexical words in an extract (a) and then counting the number of clauses in it (b), then dividing (a) by (b). According to Ivanic (1998) drawn from Halliday (1989) high lexical density is often a characteristic of academic text. For my purposes, there would be no accuracy in calculating lexical density as the extracts are too

short, but a brief 'lite' analysis could give us a hint whether students are taking on an academic voice. I have counted a clause as single statements in a sentence. A score of fewer than 5 is an example of low lexical density whereas over 5 depict a high lexical density (Halliday, 1989; Ivanic 1998). An illustration of Anele's lexical density is given below. The clauses are in brackets and the underlined words are lexical items.

Lexical density in Anele's introduction

[The essay is about a disaster] [that took place in Japan.] [its was called Toikamura Nuclear Disaster]and [it was caused by the employees]. [I'm going to concentrate on its background, it occurrence]and [what really caused the accident].

15 lexical items (a) and 6 clauses (b) = (a) / (b) = 2.5

Extract and writer	No. of lexical items	No. of clauses	Lexical density
4.1 Sabrina	37	15	2.46
4.2 Mel	30	6	5
4.3 Anele	15	6	2.5
4.4 Thandi	15	5	3

Figure 4.1 Lexical density

These approximate calculations reveal a low lexical density with the possible exception of Mel, but there is a hint that the students are positioning themselves as academic students. In the autobiographical identity above there is an indication from Thandi, Anele and Sabrina that they are not familiar or comfortable with this academic identity based on their past experiences. Thandi says that her 'academic writing is not good', Sabrina says that she is 'nervous' when writing an assignment as she does not know how to use the information at hand, Anele says that 'he prefers poetry and song writing' to academic writing. Thandi's lexical density is higher than Anele and Sabrina because she has copied many words from her source. Angelil-Carter's research on plagiarism in writing indicates that students had difficulty in using other people's voices in unison with their own voice. This often results in students mimicking their sources. Ivanic (1998) explains that formulating ideas into words is one of the practices that students are obliged to take on as academic students. The low lexical density is an indication that students are struggling with this aspect of identity. Mel has the highest lexical density in her introductory paragraph which suggests some experience in writing academic texts and English is her home language.

Lexis

In my interviews with the students, most of them said that they wanted to 'sound' like a scientist or a horticulturist. They felt that one of the ways in which they could do that was to use particular words suited to the relevant field. This meant learning and using the vocabulary in their writing. Lexis is defined as words that identify with the particular academic community and writers vary in how they use it (Ivanic 1997). She suggests that they position writers as part of an academic community.

Sabrina	genus of trees, deciduous, flowering, growth form
Mel	trailing, prostrate, evergreen, sub-shrub, rooting, ovate-pointed, propeller-like, erect, flowering, native
Anele	background, occurrence
Thandi	significant, generating industry, main feed water pump, radioactive elements, released, atmosphere

There is a suggestion could be that all 4 writers are trying to take on the identity of belonging to their respective fields. There is also a sense that the topic has steered them into certain lexical choices they make as they write. However, as Ivanic (1998) suggests it is high lexical density that really positions writers as part of the academic community.

The introductory paragraphs are short but useful to briefly trace the science identity in the student's initial writing. I look at whether students at this early stage are influenced by the conventions of writing in the sciences as proposed by Ivanic (1998) - use of numbers; expressions of quantity; specialised lexis and passive mental processes. This identity is further explored in the authorial self. This is related to interpersonal and textual positioning of Halliday (seen in Chapter 2) where writers identify with views on how scientific text should be structured. It is interpersonal positioning as writers write for their readers which influences the way they write. It is textual positioning as this determines how the information is organized in the text.

The Sciences

Numbers

Sabrina uses numbers in her writing.

Sabrina *grows about 30m*

Expressions of quantity

Sabrina use expressions of quantity

Sabrina *at a fast rate*

Specialised lexis

Anele use specialised terms

Anele *nuclear fission chain*

Passive mental processes

Sabrina and Thandi use passive mental processes.

Sabrina *are known, are turning, is flowering,*

Thandi *were released*

The science identity can also be split into sub identities- the horticulture identity and the analytical chemistry identity. I look at larger chunks of text to identify these identities.

The horticulture and analytical chemistry identity

The interest of the different Horticulture and Analytical Chemistry disciplines are reflected in the text of the two writers shown below. The choice of words in the extracts can be an indication of how students position themselves according to the nature of their disciplines.

Extract 4.5, Mel- Horticulture (lines 9-15)

The Vinca Major can be used as a quick groundcover, but it can soon become rampant if not controlled by cutting back, however it should rather be planted in containers. This plant mostly thrives in shade, but can also flower in sunnier positions. The Vinca Major will flourish amongst the stones of rock gardens, or on steps. The Vinca Major appears to form thick carpets of groundcover with blue or white flowers. (Brown, 1995:404)

Extract 4.6, Anele- Analytical Chemistry (lines 19-23)

The Japan's Electric Power Company rushed 880 pounds of sodium borate to the plant to absorb the radiation that was emitted, but the workers had difficulty in getting close to that processing tank. The employees then entered the facility again and they crushed

the water pipes that led to that tank where the accident was occurring

(<http://en.wikipedia.org/wiki/tokaimura-disaster>, May 2008).

Mel and Anele have positioned themselves differently because of their different fields they are studying in by making different lexical choices in their writing, for example Mel chooses words familiar to the genre of Horticulture, like 'Vinca Major', 'groundcover', 'rampant', 'cutting back', whereas Anele chooses words like 'sodium borate', 'absorb', 'radiation', 'emitted', 'processing tank' that is linked to the world of Chemistry. Both students seem to have positioned themselves according to the context of their particular study to sound like members of that particular community. This is an indication that the discursal self is being shaped by the lexis of the particular fields the writer finds her/himself in. There is some evidence that as writers come into contact with new discourses they take on the interests, desires and characteristics of that particular discourse.

Next, I focus on how writers position themselves interpersonally. This is related to Halliday's interpersonal positioning where social relations and social identities interact. Ivanic (1998) says that when writers make choices in how to represent themselves, they have to bear in mind not only their own affiliations (social identities) but also the expectations of their readers (social relations). This could cause tension especially in an academic essay as some students feel hemmed in by expected academic conventions of their readers.

The role of the reader

The power is more on the side of the reader as the reader is often the marker and in this case the designer of the academic criteria. Ivanic (1998) describes this as the effect of imbalanced power relations on self-representation in writing as it almost always positions the writer to choose

discourse characteristics that they perceive to be dominant and powerful (Ivanic 1998). Often the student perceives that the academic practices of the institution are more valuable (Journals and interviews with students).

Anele: *Ayesha you said in class that we must use our sources, but not copy them. This was hard. How do I do that? The first time I had to do that, I did that. And then the chemistry lecturer said that we must not be personal in our writing. My essay came back and I received a low mark. I was told that my essay was too short and I did not use academic words. Academic words seem to give me higher marks.*

What is important in Anele's response was the word 'hard'. As lecturers we do not realise the difficulties first year students face by the demands we place on them. We often want to challenge our students which can be good, but often we assume that they have the ability to do this on their own. Anele was confused as readers were limiting his freedom to express himself. My own learning process in this research project has been immense. I have learnt that it is important to provide contextual as well as linguistic support if I want academic success. For example, I could have shown my students a copy of a 'good' academic essay. I will return to this point when I reflect in my final chapter.

Thandi added that she only used the references to get good marks.

Thandi: *I took my readings and if it was up to me I would not have added it. I did it afterwards at the end of the paragraphs. This was for marks, because you said that we would lose marks.*

What also surfaced in the interviews that students were confused by the different expectations of subject and language lecturers. For example, in the first assignment, I told my students that it was acceptable to use personal pronouns in their writing whereas the science lecturer told them the opposite.

Mel felt that she had so much to say, but lecturer expectations toned down her style. She says the following in an interview about her writing experience.

Mel: *There is so much information out there that I want the reader to learn about it in an interesting way. But because of good marks, I have to write in the shortest way. Sometimes I have 8 pages and then I must only write 3. Hectic!*

Sabrina found referencing very confusing and also time consuming, especially when lecturers ask you to give 5 sources and you only have to write 300 words.

Sabrina: *Researching a lot of different sources, for example the Horticulture lecturer says we must have a minimum of five references and format referencing in 300 words. It is impossible to write everything you want to.*

This interpersonal positioning suggests that student writing is dependent on the institutional setting where academic writing is judged by assessors who are their lecturers in most cases. There is an imbalance of power relations at this stage as students are anxious about pleasing their assessors' demands to get good grades, before they actually understand the deeper purposes of, for example, the role of referencing in an assignment. Writers realise that it is not in their interest to represent themselves in the ways that they want to as there are other dominant and powerful conventions to adhere to in an academic institution. This creates a discursive self that they do not have complete ownership over.

There are also discourses outside the academic community that writers draw on which I will examine in the next section.

The personal identity

Sabrina's response to the medicinal aspect of the topic is of a personal and practical nature. Her caring daughter identity can be attributed to growing up with an ill mother. This information was gained from her journal writing. Below is an extract from the journal:

Extract 4.7, Sabrina- Horticulture (Journal writing)

Friday, at night I heard my mom breathing so hard bcoz of asthma. I prayed deeply, calling the word Jesus, the son of God, help me in this situation, saying that if I did something bad to you, 'Forgive me'.

This identity in her writing extract can be traced in her writing in the extract below.

Extract 4.8, Sabrina- Horticulture (lines 9-14)

2. MEDICINAL AND HERBAL USES

(Bown(1995) explains that Populus simonii treats problem such as anorexia, lower back pains, gout, and fevers. Externally, it acts as remedy for chilblains, haemorrhoids, infected wounds and sprains. It assists in the treatment of heart problems. It also plays a biggest role on the kidneys, promoting the flow of urine. It relieves coughing that leads to a disease called tuberculosis. This tree can be used in healing muscular pains and for dry skin conditions.

The use of verbs like 'treats', 'assists', 'relieves' and nouns like 'remedy', 'treatment' and the adverb 'healing' suggests this subject positioning.

The simplicity of Sabrina's writing above- she uses the simple present tense and short sentences implies an attempt to avoid grammatical errors. Again we are reminded how the autobiographical self- the ill mother, the past literacies play a part in the discursal choices we make in our writing.

Another example of how our personal interests creep into our writing is the lexical range that Mel uses in her writing.

Extract 4.9, Mel- Horticulture (lines 17-21)

THE MEDICINAL USES

Plants are cut after flowering and processed commercially for Alkoid Vincomine extraction. This plant is used by pharmaceutical industries, as a cerebral stimulant and VA solidater. However they do not contain the anti-cancer alkoides, which are found in the related Catharanthus roseus.

This is an indication of her experience with the plant profession and professional writing as indicated in her autobiographical self. The words in the extract below 'processed commercially'; 'used by pharmaceutical companies'; 'VA solidator' are examples of her work in the plant industry. She shows knowledge of other plants as well as she compares her plant to a related plant – 'However, they do not contain the anti-cancer alkoides, which are found in the related *Catharanthus roseus*.' Mel also displays an ease with using English as a medium of writing by using appropriate signalling words: 'however', 'nevertheless'. This could be an indication of her having English as a home language and having done more writing than the other three students.

Mel's advertising background is also hinted at in her writing. In her Conclusion there are some creative and dramatic word choices which suggest an advertising background.

Extract 4.10, Mel- Horticulture (lines 41-45)

CONCLUSION

I would strongly advise that if the Vinca Major is used medicinally, it is to be used under strictest supervision of a Doctor. However this plant is a treasure that would be able to transform any tricky place into brilliant carpets of colour. But more importantly, it is an excellent herbal plant.

Words such as 'strongly', 'treasure', 'transform', 'tricky', 'brilliant carpets of colour', 'excellent' are examples of Mel's creative identity gained from her advertising experience.

Owned/Disowned identities

In this section I present what my students said they owned, disowned, rejected and desired in their writing at the time of writing this first assignment. This information was difficult to find in the text and I had to rely on what students said about their writing.

Thandi said that they she did not own the content of their writing. Thandi felt that she was not happy with the way she wrote. She does not feel that she can 'write in her own words'. Her writing is evidence that she has difficulty because she mimics her sources quite often (see extract 4.11). She responds in the following way when I asked her 'why she copies so many sentences from her sources'

Thandi: *My own sentences will be filled with mistakes. I leave out words, commas and I know that I must use other work to make my work look good.*

Thandi does not feel comfortable with writing academic assignments based on her perception that she is a poor writer and other people's work 'sounds' better. In our conversations, I sense that she is keen to improve her own writing. She was aware of her language faults and her unstructured sentences. She repeatedly said that she loved oral interactions and wished she could represent herself in writing the way she represented herself orally. It would be easy to attribute this to Thandi's second language background, but one must bear in mind that Thandi studied in English at high school as noted in her autobiographical self. Cummins' research on bilingual students (1996) indicates that there is a gap between oral proficiency in a second language and academic achievement when studying in a second language. Academic writing is described as a

'context-reduced' activity and the most difficult for a second language speaker. Thandi's school language experience as indicated in her autobiographical self has mainly revolved around context-embedded written activities like narrative and descriptive writing and reproducing factual text. Extract 4.11 below is an example of how she has used phrases from her Wikipedia source in her writing. It is noted that she changed some information like the date when the accident occurred.

Extract 4.11, Thandi- Analytical Chemistry (19-28)

The three Mile Island accident was the most significant accident in the history of the American commercial nuclear power generating industry. The accident started in the 28 March 1979 (Wednesday), When the main feed water pump failed & radioactive elements were released into atmosphere ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The Wikipedia source

It was the most significant accident in the history of the American commercial nuclear power generating industry, resulting in the release of up to 481 PBq (13 million curies) of radioactive gases, but less than 740 GBq (20 curies) of the particularly hazardous iodine. The accident began at 4:00 A.M. on Thursday, March 29, 1979.

Thandi has imitated her source in the style of writing and in some cases used the same phrases. When asked why she had changed the date of the accident, she said the following:

Thandi: *I did not want to plagiarise, so I changed certain information to make it look as if I did not copy exactly from my source.*

Angelil-Carter's research on plagiarism (2000) uses a metaphor that suggests all novice writers are like dancers learning a new routine 'dependent on copying the instructor' and this is not necessarily plagiarism. Thandi was anxious about not plagiarising and she thought that if she made deliberate mistakes, she could not be accused of plagiarism.

Anele says that he cannot identify with what he has written as he feels restricted because he is limited to a word count. He says in an interview that he had nearly a thousand words in his first attempt. He had to cut it down and take out many 'things' to meet the assignment requirement of 300 words. This 'ruined' his report.

Anele: *I had a lot more words. I took it down and then my report was short and I did not like that. I struggled. I did not know what to take out. I took out most of my information from my sources. In the end, I did not like my writing as it was not scientific and did not seem right.*

In the extract below, the marker has said that Anele has left out information in the comment- 'How was it considered?' The extract below gives evidence of Anele's concerns about leaving out information. There is also no link to the two sentence paragraph below. This indicates that Anele is experiencing problems with his sentence structure and cohesion. Anele, like Thandi has taken many phrases from his source and mixed them with his own. We are reminded again of Angelil-Carter's metaphor of novice writers being like dancers learning new steps.

Extract 4.12, Anele- Analytical Chemistry (Conclusion)

This disaster left many experts with many questions about the failure of this nuclear disaster, at this stage, Japan was depending on the nuclear power for the electricity and after the disaster, the nuclear safety policy were seriously considered. Japan's most nuclear radiation accident occurred at a uranium reprocessing facility in the city in Japan. (Dickenson 1994).

The autobiographical identity of Anele shapes the way he writes. There is an awareness of the academic nature of writing as Anele cites his reference at the end of the paragraph. There is also a sense that Anele and Thandi are not confident enough at this stage to express their own style of writing.

Sabrina and Mel owned many parts of their writing. It is interesting to note that the two are on the Cape Town campus and studying horticulture and the above two (Anele and Thandi) are on the Bellville campus studying analytical chemistry. This could be coincidental or my selection of students for horticulture was different to that of analytical chemistry. I will examine this when I do a personal reflection at the end of this dissertation.

Sabrina said the following when asked about how she felt about her writing:

Sabrina: *The information I got helped me gain knowledge about the particular topic. I am able to answer many questions on horticulture.*

And Mel said the following:

Mel: *I like to draw the reader into this world of mine. I want them to be as passionate as I am. Maybe I will make a difference to this environment.*

Mel shows that she is knowledgeable on the topic as she concludes her essay. Her identities in the advertising field, her previous academic writing experiences, her mature outlook on life and her age discussed in her autobiographical self are evident in the conclusion to her assignment.

Extract 4.13, Mel- Horticulture (Conclusion)

I would strongly advise that if the Vinca Major is used medicinally, it is to be used under strictest supervision of a Doctor. However this plant is a treasure that would be able to transform any tricky place into brilliant carpets of colour. But more importantly, it is an excellent herbal plant.

Conclusion

In the above section, I have been discussing how writers construct a discorsal self in their writing based on the discorsal characteristics in the text, what processes are involved in the construction of this discorsal self, and what influences shape discorsal identities. The writers often battled to present themselves in the way they wanted to be portrayed.

The discourses the students draw from all position them differently. The one positioning is the linguistic choices writers make which identifies them as belonging to an academic community. The other positioning is when writers present themselves according to their fields of study which in this case is the sciences. The third positioning is the different ways of presenting knowledge according to what they perceive as good or bad writing based on their past experiences and readers expectations. Another positioning involves non academic contexts where most of my students felt that they had a 'real self' that they could identify with even though Clark and Ivanic say that 'the self that a writer constructs discursively is but an echo of actual voices and of abstract and prototypical voices with which they are familiar.' (1997:217). The real self is what the students really desire to be. This desire is often one of being part of the academic community. The power is in the assessor's hands and most writers write to accommodate their readers in order to get good marks. Some writers are happy to take on the identities of their readers, others rebel. This could lead to feelings of ownership or non-ownership in certain aspects of their writing which in turn causes tension. Students also position themselves consciously or unconsciously as noted in this analysis based on personal circumstances. These circumstances are mainly derived from the autobiographical self, for example, the caring nature that Sabrina portrays and the advertising 'creativity' that Mel displays in her writing.

These multiple positionings all happen simultaneously and as we will see later these positionings are not fixed or constant.

The previous section focused on the interplay of many voices in the text (the past, the present, the abstract) and how this positioned writers which is described as intertextuality in the introduction to this section. The next section will look at a different voice in the text- the authorial voice.

The authorial self

This is the third leaf in the clover-leaf model of Ivanic. It is based on how authoritative writers sound in the actual text. This is the writer having 'something to say'. As said before, we will look at how writers establish authority and to what extent they present themselves as authoritative. The actual text is important in analysing this aspect of writer identity. This is related to the other two clover leaves in that how authoritative one sounds is often based on an autobiographical identity and a discursive identity. The writers' sense of self esteem is usually derived from past experiences (autobiographic self) and current influences (discursive self).

Clark and Ivanic (1997) suggests a number of textual features associated with establishing authorial presence in a text: the use of the first person pronoun, the way modality is used, the extent to which authority is claimed for personal experience, the type of reporting verbs used in a text and how sources are used in the text. The following table gives an overview of how students presented themselves authorially in the text.

Textual features		The use first person	Modality	Personal experience	Reporting verbs	Work of others
Students	Sabrina	Yes to structure the report and for making statements of value	Modality high	Few examples of personal experience	1 neutral reporting verb used E.g. 'Bown explains that...'	Presents others' work as factual
	Mel	Yes to emphasise a belief	Modality high and low	No example of personal experience	No reporting verbs used	Presents others' work as factual
	Thandi	No	Modality high	No examples of personal experience	No reporting verbs used	Presents others' work as factual
	Anele	Yes to structure the report and making a judgment at the end	Modality high	No examples of personal experience	1 neutral reporting verb used E.g. 'According to...'	Presents others' work as factual

Table 4.1: Characteristics to establish authority in text

In the top row we have the textual features as suggested above by Clark and Ivanic (1997) to determine authorial presence in the text. The next rows show the particular textual features the students displayed in their writing.

The first textual feature illustrated is the use of the first person: I, me, my. The nature of this usage as pointed out by Ivanic (1998) is not as easy as it seems. The 'I' must be portrayed as being a powerful role in the text in order for it to carry authority. And in this case the use of 'I' has been inhibited by the discursal aspect which is the topic and the genre of the science writing as well as the dominant institutional discourses. As noted in the previous section the Chemistry and the Horticulture lecturer has asked students not to use 'I' in their writing as they perceived that science writing does not require the use of 'I'. In addition most of the scientific sources the students used did not use the first person pronoun. None of my students use personal pronouns in the main bodies of their essays.

All four students used the first person pronoun in their conclusions and two students use personal pronouns in their introductions. The following extract of Sabrina and Thandi's conclusion are examples of this.

Extract 4.14, Sabrina- Horticulture (Conclusion)

4. CONCLUSION

Through this research I have learnt interesting aspects towards the beauty of nature .It has surprised me that this tree know if this tree is multi-functional, as it has many uses in order to save people's lives .Millions of people who are suffering from diseases are being saved by the uses of this tree . All I can say is that the populus tree plays a big role in our lives.

Simon's poplar's outer appearance can have a defined objective in using it showing that it is more powerful. It is so amazing to know that it helps a lot from doctors, in our homes, and even in traditional healers. Therefore I can say that this could be brighter meaningful not to judge the book by its cover, meaning that not to look the outer appearance. I thought it is just a tree with their own physical characteristics. Moreover I can say that there's no art to find mind's construction in the face. I find out that each and every organism has the purpose in this the universe.

Extract 4.15, Thandi- Analytical Chemistry (Conclusion)

CONCLUSION

From my observation this accident was all caused by a human error. For example the (PORV) had no device on it to check if it has open or closed & the core also had no device on it to check if had water or not. Because, there were some devices which were not there, the operators shouldn't have depended on the signals they got. They knew that maybe the readings were not true. The administrative for not seeing if very thing that was there is in place after they were done with the testing, they were test if the was something wrong not to make something to wrong they are expected to 100% accurate.

The bosses of the plant were selfish by building that plant near a village (8km) because they knew that a nuclear plant is very ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The use of the 'I' is an indication that all students have 'something to say' as they use personal pronouns to summarise and state opinions. At this stage of their writing development is indicative of previous writing experiences. The use of personal pronouns, descriptive adjectives and figures of speech are examples the 'creative' writing required at high school level. In many descriptive and narrative compositions done at school level introductions and conclusions are taught as personal summaries and opinions or for structuring your composition. 'Creative' composition writing was the dominant form of writing in all schools that my students attended as

noted in the autobiographical self. Students did not require any sources when doing this type of writing. Angelil-Carter's research on plagiarism (2000) in academic writing has concluded that writing from multiple sources is an entirely new experience for most South African students irrespective of educational background. This is evident in my analysis as all my students come from different backgrounds and all of them only use the personal pronoun to shape text.

The second textual feature establishes authority by means of the certainty with which writers write or the force with which they write. This is called modality. Halliday (1985:86) says that modality is the "intermediate choice between 'yes' and 'no' in writing". His view is that a relatively low modality is a reasoned and objective argument or statement as it allows for the possibility of evidence contrary to one's claims. On the other hand a high modality appeals to emotions and is persuasive. A high modality also gives the impression that there is enough evidence to make strong claims. Science writing often portrays this high modality stance as the genre requires writers to provide evidence for their results and recommendations. It is also common for science lecturers to teach science as exact and factual and thus encourage students to present this high degree of modality in their writing. As seen from the previous autobiographical writing of my research subjects, most past writing practices were factual and this could further have influenced modality usage in writing. For example, Mel uses a mixture of high and low modality in the following paragraph.

Extract 4.16. Mel- Horticulture (lines 8-10)

The Vinca Major can be used as a quick groundcover, but it can soon be rampant if not controlled by cutting back, however it should be planted in containers

She says that the plant 'can be used' as groundcover which is a sign of low modality as it allows for the possibility that the plant can be used for other things, then she continues to say that it 'should be planted' in containers which is a degree of high modality as it gives recommendations.

Modality is dependent on how we view our subject as discussed above and it is noted in the autobiographical information that Mel has used multiple sources to write essays before. There is a sense that Mel is more at ease in her writing than the other subjects based on her past literacy practices.

Sabrina, Thandi and Anele use mainly high modality in their writing which can be seen in their introductions on page 36 and in their conclusions on page 50. The writing does not allow for evidence contrary to their statements. The autobiographical and discursive self positions students authorially in this aspect as students write based on their past experiences and also on the topic and genre provided by the institution.

The third textual feature in the table is the extent to which writer's claim authority for their personal experiences. The use of 'us', 'we', 'our' is often an indicator of a writer relating personal experience. This is an indicator of a high authorial presence in the text. Sabrina is the only student who shows a sign of using personal experience in her text.

Extract 4.17. Sabrina- Horticulture (line 35-38)

All I can say is that the populus tree plays a big role in our lives... It is so amazing to know that it helps a lot from doctors, in our homes and even in traditional healers.

The use of 'our' in Sabrina's sentences shows that she identifies with the healing properties of the tree. There is a sense that she knows more about this tree than she has researched and this establishes a hint of an authorial presence in her text.

In this aspect, the discorsal aspect of writer identity affect the authorial self as the topic of the assignment does not require a personal point of view and the genres in science do not encourage a personal opinion.

The fourth textual feature is the types of reporting verbs the writer uses when a resource is introduced. In most cases the students attached the source at the end of the paragraph without using a reporting verb as seen in the extracts below:

Extract 4.18, Anele- Analytical Chemistry (lines 36-40)

The accident took place in a small fuel preparation plant. It occurred around 10:30 (area local time) when the company that operates the plan, poured 35 pounds of uranium into a purification tank that contain nitric acid in place of 5.2 pounds that is normally used there. What followed after that, 35 pounds of uranium instead of 5.2 pound is that there was a formation of a flash of blue light inside the plant, as the result that was called a nuclear fission chain reaction (<http://en.wikipedia.org/wiki/tokaimura-disaster>, May 2008).

Extract 4.19, Thandi- Analytical Chemistry (lines 36-40)

BACKGROUND

The plant had 2 reactors TMI-1 & 2, the accident started in the TMI-2 reactor the TMI-1 reactor was shut down for refueling at the time of the accident. The accident started when plant's main feed water pump in the secondary non-cooling system failed (04:00). Then a backup system started automatically but on that backup system there were two valve which were not working because they were closed ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

Extract 4.20, Mel- Horticulture (lines 8-14)

THE DOMESTIC USES

The Vinca Major can be used as a quick groundcover, but it can soon become rampant if not controlled by cutting back, however it should rather be planted in containers. This plant mostly thrives in shade, but can also flower in sunnier positions. The Vinca Major will flourish amongst the stones of rock gardens, or on steps. The Vinca Major appears to form thick carpets of groundcover with blue or white flowers. (Brown, 1995:404)

Extract 4.21, Sabrina- Horticulture (lines 8-14)

This plant can also be used in various ways for both herbal and medicinal uses; the bark itself is used to treat rheumatoid arthritis, cystitis and diarrhea. Buds are used against chronic bronchitis and rheumatism. For external use it is used for frost bite, sun burn and used as an ointment for myalgia (Carrière 2004).

The above textual feature was not well integrated in the students' text which implies poor authorial presence in most of their text. The students said in post writing interviews that they found it difficult to represent the voices of others in their text. Mel struggled as her previous writing did not require the use of references. She worked in the advertising world which did not require one to acknowledge sources. The other three students did not have the background writing experience to indicate to the reader when they are using other sources. Sabrina said that she had a problem as all the information was from other sources. She said the following when asked about her references.

Sabrina: *The problem is that I do not know where to put my reference. This is why I place it at the end of the paragraph to show that I have read.*

As we can see from the above analysis it is difficult for all students to use their sources critically within their text as it is a relatively new concept. However, it is even more difficult for EAL students, as they have to battle with linguistic skills as well.

The last textual feature in the table examines the extent to which students commented and evaluated the works of others. All the students regarded the work of others as the truth and used this as factual evidence in their text as the above extracts show. As noted before, students learn at school that writing in a content subject is a set of facts to be constructed. This is carried over to the novice writer in first year academic writing.

Angelil-Carter suggests that students battle with referencing in essays because the authorial presence given in the readings to students is difficult to detect for the EAL student and it is also difficult for students to clearly indicate 'where the voices of others end and their own begins' (2000: 128).

She says that further research should be undertaken to ascertain what establishes authority in text. She further suggests that authorial stance is related to the wider society which is still the racially defined South Africa where there are boundaries between groups of people and the kind of education provided. These legacies created perceptions amongst black students that they were inferior to their white counterparts. Clark and Ivanic (1997) sees the writer's sense of authority as connected to power and status which is related to class, gender and ethnicity.

Conclusion

In the first semester all the students struggled with writing and received low marks. Most students battled with confidence in using English as an additional language in their assignments, using multiple sources appropriately, letting go of past writing experiences at school and a view that science is a set of facts to be learnt. These challenges were not addressed by the subject specific lecturers, for instance in setting the given topic (as noted above) lecturers perpetuated the notion that essay writing is factual writing. This was further exacerbated by the insistence in

the instruction to use 'your own words' in writing assignments. Students battled with expressing so-called factual evidence from text into 'their own words'. They were also required to perform a new task in having to reference in writing assignments. This task was further complicated by using a language that was not their own. Mel, being the only first language English speaker, struggled with her flair for the dramatic in her writing activities. There was a common perception that science writing was cold and calculating which was perpetuated by the science lecturers and this was the main reason for her low mark.

The above analysis reveals that the three selves in writing identity are intimately linked with each other. The various subject positions found in the selves affect how students represent themselves and how they reproduce or challenge dominant practices and discourses. In this first semester writing activity, there is a sense that students are trying to copy the dominant literacy practices in their institution. The authorial presence in the text is low.

In second semester writing, I trace whether students have positioned themselves differently. Do they reproduce dominant practices and discourses or do they challenge them? Do they change over time and do they represent themselves differently when writing in a different genre, like journal writing.

Second semester writing

Copies of the original writing can be found in Appendix 2.

As said in my introduction to this chapter, I focus on second semester writing to explore changes over time in the way students represent themselves in writing. I look at how students have aligned themselves with the socio-cultural subject positions made available to them in their first year of study. This focus will be on the discorsal self as this is the identity that influences self-representation. But as my analysis will show that the other two selves (the autobiographical and the authorial) will be intimately connected to the discorsal self. In this analysis, I look at the first page of each assignment to trace these changes.

The discorsal self

For a more clear and structured approach to identify and reflect on certain changes in student writing, I have separated Horticulture and Analytical Chemistry as the differences in discipline are more apparent at this stage of the year.

The horticulture students- Sabrina and Mel

The assignment topic

Integrated Assignment: Horticulture 1, Communications 1, 2008 (2nd semester)

Your task is to compile a report on one of the following topics:

Propagation of roses

Propagation of fruit trees.

Propagation of Orchids.

Propagation of vegetables.

Propagation of herbs.

Propagation of street trees.

Layering as a production technique.

Propagation of African violets.

Propagation of perennial plants.

Propagation of annual plants.

The tissue culture production of indigenous bulbs.

Propagation of grasses.

Propagation of indoor plants.

Growing conditions needed during plant propagation.

How to control pest and disease problems during propagation of plants in the green house.

Making use of old fashioned and organic propagation methods and materials to produce crops with propagation facilities.

Seed propagation of flowering crops.

Notes:

Students may only select one of the topics.

A written report needs to be compiled for handing in on the 21 October 2008.

Students need to prepare a 5 min oral presentation with visual aids on their report also for the 21 October 2008.

Student need to have enough knowledge on the topic to be able to answer questions from the floor.

All work must be referenced and in students own words. Report must be typed and include pictures that need to be referenced. A minimum of 5 references must be used.

Topic must be explained in detail with proper examples relevant to what is being discussed.

Sabrina

Sabrina has chosen the topic: '*Propagation of grasses*'.

1. Introduction

This report will be based on how to propagate grasses. I will focus on the main points that are closely related to the techniques of propagating grasses and other aspects related to it. These aspects will include grass propagation by division and seeds, fertility and important requirements on grass propagation.

2. Propagation of grasses by division

Darke (1999) reveals that division is the preferred means of vegetative propagation for grasses and is usually done when grasses are in active growth. The vegetative propagation method includes plugging, stolon, and sprigging. Each method will produce similar results but at different rates of time. It has a very wide range of variety of plant multiplication techniques.

Many grasses can be renewed by division and transplanting. Grass plants made by division are best produced from the new outer growth, which is usually the strongest, healthiest material. Firstly it is best to lift small and medium-sized grasses from the ground with a strong trowel or sharp spade and use a knife or narrow edged trowel to divide them. Secondly discard dead material from the center and thoroughly water divisions immediately following transplanting.

Thirdly, a sharp spade is essential for dividing and managing the largest grasses

The mature parts of a grass that are often too big and heavy to be lifted in one piece must be sectioned in the ground with a spade before they can be lifted.

The best spade to be used should be the one which are light but exceptionally strong. This type of tool is comfortable to use when cutting into the roots of grasses and is strong enough to be used lift heavy divisions out of the ground (See figure 1.1-1.2 pg 5).

The introductory paragraph is shorter and has a higher lexical density than the previous one. The lexical density is 4.5 compared to 2.46 in the previous assignment - there are 4 clauses and approximately 18 lexical items in the introductory paragraph. In the previous assignment, Sabrina used mainly present tense verbs and in this assignment she uses future tense verbs like 'will focus', 'will include' which is more appropriate in an introduction. This adds more structure to the assignment as it informs the reader what is coming, which is an academic skill used to introduce a topic. This aspect of identity is further revealed in the next paragraph as Sabrina introduces her sources differently than before. In the first assignment, she added most of her sources to the end of the paragraph. This time she integrates her source into her writing by using reporting verbs like 'reveals'. This is an indication of more control when using her sources. In the previous assignment she uses the pronoun 'it' as a subject many times (refer to extract 4.8) resulting in short sentences. This paragraph suggests a more developed sentence construction as she uses conjunctions effectively to avoid using 'It' as a subject, for example- 'Each method will produce similar results but at different rates of time.' This also affects her authorial self as we will

discuss later. Paxton (2006) also says that students use syntactic features in their writing reminiscent from their historical and social roots. For example, some students' familiarity with the African story-telling traditions filtered into their writing. Paxton identifies co-ordinate conjunctions and question and answer forms as syntactic features. She suggests that many students string together lengthy sentences using co-ordinate conjunctions because they write as they speak:

Sabrina- Horticulture (From extract 4.22)

Secondly discard dead material from the center and thoroughly water divisions immediately following transplanting. Thirdly a sharp spade is essential for dividing and managing the largest grasses.

The science identity which is a characteristic or a marker of a particular academic identity is very prominent in the extract 4.22 as shown by the expressions of quantity like 'division', 'wide range of variety', 'different rates of time', 'multiplication techniques'. The horticulture identity also an identity marker of an academic identity is found in the specialized lexis used on the first page for instance 'vegetative propagation', 'stolon', 'transplanting'. Passive verbs are also more evident in her writing- 'can be renewed', 'are best produced', 'to be used'. There was a hint of this identity marker in the previous assignment, but it is more explicit in this assignment.

In this later assignment, Sabrina shows more consideration for her reader as she introduces her points by using 'firstly', 'secondly' and 'thirdly' in her text. The topic in this particular horticulture assignment requires a factual investigation into how to propagate grasses. This adds to the more factual approach in this text compared to the previous text.

Despite presenting herself in a more academic fashion in this assignment, Sabrina still retains some personal religious identity which is reflected in her conclusion to this assignment as reflected in the words below. It must be added that Sabrina's subject-specific lecturer did not approve of her ending. She wrote a comment in the assessment that 'it was out of place'.

Extract 4.23- Sabrina (Horticulture lines 77-79)

I realize that God had the intention for me to choose this course, Horticulture so I can learn more brighter and interesting aspects on it.

Angelil-Carter (2000) suggests that the religious identity marker which sees the Bible as being factual added to the notion that school knowledge (textbooks and teacher's notes) are factual can lead to students seeing text as factual. This could create problems in academic writing which encourages students to compare, contrast and discuss text. In Sabrina's writing this is not the case as she has read other texts which have appropriated her into her discourse. She says that she 'has done quite a lot of reading on her subject of horticulture'. When asked about the religious references in her work, she says that her 'path in life is to thank God at the end of everything as nothing would be possible without Him.' Sabrina's religious identity is inherent in all aspects of her life and one feels that she cannot help herself as this is part of her.

Mel

Mel has chosen the topic: '*Making use of old fashioned and organic propagation methods and materials to produce crops without commercial propagation facilities*'.



MAKING USE OF OLD FASHIONED AND ORGANIC PROPAGATION METHODS AND MATERIALS USED TO PRODUCE CROPS WITHOUT PROPAGATION FACILITIES.

1. INTRODUCTION

My research is based on making use of old fashioned and organic materials and using alternative methods of propagating to produce crops without the use of propagation facilities.

2. COLD FRAMES

Cold frames (Figure 2.1) are environmentally useful, as they provide protection for crops, either temporary or long term use. Classical cold frames are low, wooden or brick framed structures, with a sloping roof, that are made from wooden frames, known as "lights". These lights can be hinged to form a lid or may slide across. Some cold frames are inexpensive, such as wooden or aluminum cold frames. Ventilation is highly essential; therefore the lights need to open to allow for proper ventilation, and eventually must be able to open all the way, when the plants need to be hardened off. (Pears.2001)

FIGURE 2.1 A wooden cold frame



Mel's introductory paragraph is shorter and less original than the previous assignment. In fact, it is noted that she repeats the title of the passage. The lexical density is thus low, but the method is generally accepted as an academic opening. Mel says in a post writing interview that she is 'happy' with her introductory line and the horticulture lecturer has 'accepted' her opening as 'good' as it says what the assignment is about. Mel's identity as an academic writer is strong in this extract. The second paragraph avoids reference to people. The sub-heading is 'cold frames' and she uses this as the subject in most of her sentences. The sentences are all related to each other. Her verb usage all imply passive mental processes- 'are useful', 'are low', 'can be hinged', 'are inexpensive'. The above characteristics found in Mel's writing suggest belonging to an

academic community. The horticulture identity is represented by the phrase 'hardened off' which is used in horticulture circles means toughening a plant against environmental hazards.

Mel puts 'lights' in quotation marks because this is not her own according to her. She does not say where this quotation comes from. It is also note that Mel is still adding her source at the end of her paragraph. This practice is repeated at the end of almost every paragraph (refer to original copy in the Appendix 2). She also does this incorrectly. There is only one example where she uses her sources correctly:

Extract 4.25, Mel- Horticulture

Relchart (1993) says, by adding to much nitrogen to plants, plants will tend to develop deep green bushy foliage, and will have slow maturing times. Research done by Ashman and Puri (2002), discovered that organic manures can have disastrous effect on the environment, in that applications of high rates of nitrate and phosphate leaching, in addition to high ammonia losses through volatilization.

This is evidence that Mel is still struggling to take complete ownership of her role as an academic writer. This is evident in the way she attaches her sources to the end of some paragraphs as seen in her authorial self. Her creative identity is hard to trace in this assignment which could be related to the nature of the assignment or it could be that Mel has been apprenticed into the scientific genre where factual information is dominant. However there still remain traces of Mel as the creative writer. She tries very hard in this assignment to be factual, but her natural tendency for having strong opinions (as expressed in her previous writing and during interviews) is inherent in her work. She starts off with a brief introduction where she repeats the topic and then one expects a factual account of alternate methods of propagation. However Mel presents a persuasive style of arguing for old methods instead of modern techniques of propagating. I think that this has a lot to do with Mel's fluency in English and her previous writing experience in dealing with multiple sources. This is her conclusion:

Extract 4.26, Mel- Horticulture

By propagating in the old fashioned ways, a great number of advantages can come out of this organic propagating, not only supporting our natural environment, but it is ecologically sound and sustainable in the long run.

Mel ends her essay with an authorial conclusion as seen in the above extract. She was 'upset' that her subject specific lecturer told her not to be judgmental in her writing as it is not required in a factual essay.

Sabrina did not do well in the previous assignment. Her marker thought that she was not 'scientific' enough and did not use her sources well. The scientific approach was generally regarded as presenting factual information and using the correct terminology. Mel on the other hand, received a good mark for her first assignment. Her marker reflected that she answered the question and presented 'scientific' information well. In this assignment, however, Sabrina received a higher mark. The same marker of the previous assignment criticized Mel's work as being too lengthy and also noted the absence and incorrect use of sources. Sabrina was praised for her good research and presentation of facts. It is interesting to note that Sabrina has successfully built on her prior discourses to learn new ways of writing. She interweaves her personal approach (the religious identity) in her conclusion to end an academic assignment in an innovative way. This implies that Sabrina is not fully conforming to the dominant discourse completely but perhaps challenging it in a small way. There are still traces of Mel's creative personality in her writing which in this assignment counted against her. She challenges the

expectation of the institution to write in a specific way which represents dominant ideology. Mel's writing has not changed as dramatically as Sabrina's. Perhaps it is because Mel is a mature student already set in certain ways and it is thus harder for her to change or that race inequities in South Africa's past has given Mel a greater sense of confidence than black students. This would imply that the sense of own authority is greater than others in the class. Once again we are reminded of the views of Clark and Ivanic (1997) that the writer's sense of authority is connected to class and ethnicity which is related to race in the South African scenario.

The analytical chemistry students- Thandi and Anele

The assignment topic (The full assignment topic can be viewed in Appendix 2)

Research the chemistry of synthetic detergents. You can choose liquid, solid or powder detergents.

You will be required to do the following:

The written assignment (theory)

Write a report of 4-5 pages where you analyse the chemicals used to make the detergent and then outline the advantages and disadvantages in using this form of detergent.

Extract 4.27, Thandi-Analytical Chemistry

1. INTRODUCTION

In this project I will focus on the making of soap, what makes it and how is it made, the processes involved in making it. I have chosen the bar soap. In my background I will discuss the nature of bar soap and what they are in terms of surfactants and the difference between a soap and a detergent (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

I will also, the ingredients which we will be used in making the bar soap, the four industrial basic rules one must follow in focus on the making of the soap(<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

Finally I will look at the advantages and disadvantages of the soap (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

2. BACKGROUND OF SOAP MAKING

Soaps are used as a cleaning agent made from the interaction of fats and oils with alkali. The alkali used in the bar soap is the sodium.

Soaps are anionic surfactant (negative charge) (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

Soaps are said to be a surfactant because they reduce the surface tension in the water by doing that they will make water to be wetter (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

Soaps are different from detergents because they only have one surfactant were as detergents have more than one surfactant. Detergents are less sensitive than soap; they perform well under a variety of conditions (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

The lexical density is less than 2 which is lower than to the previous assignment which was 3. But as I have said before Thandi has used many words ad verbatim from her sources in that earlier introduction in first semester writing. The implication is that Thandi is still battling with representing herself authorially in trying to avoid plagiarism. This raises questions regarding the role of plagiarism in hampering student writing performance. However, there is a change in the way Thandi has represented herself in second semester writing. She is more aware of the norms of academic writing and therefore one notices a more structured approach to her writing. An example of the above statement is seen in the clear headings and the more detailed explanation of the terminology in this second report. In her introduction as she uses 'I' to structure her essay as well as other indicators, for instance 'also' and 'finally' to guide the reader. This implies more

reader consideration. The same reference is added at the end of each paragraph which indicates an acute awareness of the importance of referencing. The repetitive references suggest some anxiety and once more this could be her attributed to her fear of plagiarising. Angel-Carter says that race and gender inequalities inherited from apartheid in South Africa lead to a lack of self-confidence in writing (refer to page 65) which in turn leads to an overdependence on sources.

Anele

Extract 4.28, Anele- Analytical Chemistry

INTRODUCTION

This assignment is about something that we use everyday to wash ourselves, to wash dishes and also to clean things inside our homes, As we know that there are many types of soaps so the type of soap that I'm going to talk about is the bar soap, so I'll first talk about the background of this soap that is used everyday for cleaning and bathing purposes, so I'll talk about where was this soap made, who were the people using it and why does the wash but my main focus on the soap itself. As we know that soap is made from fats and lye (NaOH). So I'll also talk about why soap washes other substances. I'll talk about how to make a bar soap etc.

Detergents and Soaps

According to Browner C.M (1998) a detergent is a substance that cleans dirty surfaces and soap is a type of detergent. Detergents & soaps are basically used for cleaning because water can't just take away oil. Soaps on the other side can remove oil quicker. Detergents allow oil & water to mix so that the 'oil stain' can be removed during the rinsing. Mainly detergents are surfactants, which can be formed simply from chemicals of petrol.

They were created because the was scarce animal and vegetable fats to make soap around World War 1 and World War 2. Like any bar soap, detergents have water-loving (hydrophobic hydrocarbons) and water-hating components (hydrophilic hydrocarbons). Those hydrophobic hydrocarbons are pushed away by water, but they become attracted by oil and grease. One end of the hydrophilic molecule will be attracted to water (Browner C.M 1998).

According to Mullin R. (1993) soaps and detergents products are produces in the form of bars, grains and tablets. People use to wash their bodies. They use shampoo for their hair and brush their teeth with soaps and detergents. Also, doctors clean sore wounds with soap to kill germs that cause infection. Detergents and soaps contain a basic cleaning agent called Surfactants. Surfactants consist of molecules that attach themselves to dirt particles. Those molecules pull these particles out of this material and hold them until they rinse away. Detergents and soaps have many different uses, in households and in industries.

Writers position themselves according to the knowledge and understanding of the discourse they are in. At this stage of the year Anele shows a growing confidence in his knowledge and understanding of the discourse he is in. In an interview he says the following:

Anele: *I learned so much while researching and writing up this assignment. This time, I knew exactly what I wanted and how to say it. The only problem was the referencing. I still find it hard to put things in my own words and to reference.*

However Anele still displays a low lexical density in this assignment. The calculation is less than 3. But, like Thandi there are traces in his writing that he has adopted a more academic voice. For example, he has a longer and more informative introduction, he uses 'we' to show that he is part of an academic community and he uses a chemical symbol for fats and lye. In the second stanza, Anele makes his source part of his knowledge making process. This reference to Bouwer (even though it is incorrectly done) in the extract signifies that Anele is becoming part of an academic discourse.

In the earlier analysis Anele used long awkward sentences to shape his text (refer to Extract 4.20). In this assignment, Anele generally uses shorter noun phrases, but there are still some long sentences. The difference is that the sentences are better constructed than the previous assignment. An example of the sentence construction can be seen in the following two sentences:

Extract 4.29

<u>Anele, lines 90-91</u>	<u>Anele, Lines 80-83</u>
Mullin R (1993) states that the natural part of soap is a negatively charged polar molecule.	According to Mullin Rick (1993) soaps contain sodium or potassium fatty acids in a chemical reaction called Saponification and each soap has a long hydrocarbon chain, with a Carboxylate head.

The first sentence (90-91) is a simple construction of two short noun phrase and short syllabic words. He uses the reporting verb 'state' to introduce his source which was not done in the previous analysis. The sentence contains a scientific phrase- 'negatively charged polar molecule'. This sentence is an indication that Anele is gaining an academic identity. The next sentence is long but not clumsy and overcrowded as in his previous assignment. The linking word does not signify a new idea but is a continuation of an explanation of 'soap'. The sentence is well constructed with few errors. His use of scientific words also signifies that Anele has developed a chemistry identity that he is comfortable with. Both sentences signify a growing ownership.

There is a significant change in how these two students represented themselves discursively in this assignment. The social environment of the university which includes the science discourse has clearly influenced student writing. There is fluidity in their writing which shows an ease with the discourse and the discipline. They are aware of their changing interests and this has influenced their writing significantly.

Table 4.2 gives an overview of how students positioned themselves authorially in their text.

Textual features		Using the first person	Modality	Personal experience	Reporting verbs used	Using work of others
Students	Sabrina	Yes to structure the report and for making statements of value	Modality high	No examples of personal experience	5 reporting verb used- 'reveals', 'according', 'adds', 'explains', 'recommends'	Presents others' work as factual
	Mel	Yes to structure the report	Modality high	No example of personal experience	3 reporting verbs used- 'says', 'discovered', 'according'	Presents others' work as factual
	Thandi	Yes to structure the report	Modality high	No examples of personal experience	No reporting verbs used	Presents others' work as factual
	Anele	Yes to structure the report and making value judgments in his conclusion	Modality high	No examples of personal experience	5 reporting verbs used- 'according'(2), 'states'(3)	Presents others' work as factual

As said before, in the top row we have the textual features as suggested by Ivanic (1998) to portray authority in writing.

The first textual feature illustrated is the use of the first person: I, me, my. Two students, Mel and Thandi portray some authority by their use of the first person as they use it to structure the report. Sabrina and Anele show signs of becoming more involved in their writing as both make value judgments with the use of the first person.

Extract 4.30, Sabrina, Horticulture	Extract 4.31, Anele, Analytical Chemistry
Based on my research I have learnt more interesting aspects towards the technique of propagating grasses.	As we know that soap is made of fats and lye (NaOH). So I'll also talk about why soap washes other substances.

In the extract 4.30 above, Sabrina's authorial presence is strong in her text as she combines her sources with her own knowledge making. Anele is identifying with group membership as he engages his reading audiences in his writing with the use of 'we' in extract 4.32 above. Both extracts hint at a developing authorial voice.

The second textual feature is the certainty in which student write which is represented by modal verbs or adverbs. All four students display high modality in their writing as indicated in the table.

In the first assignment it was discussed that science writing encourages high modality usage as the science genre requires making recommendations based as said before. In addition, the both topics set are factually orientated. These are reasons the high modality usage in these assignments as can be seen in the following extracts.

Extract 4.32, Sabrina, Horticulture (line 21)

The best spade to use should be the one which is light but exceptionally strong.

Extract 4.33, Anele, Analytical Chemistry, (Conclusion)

Now I can use soap responsibly because I know where does soap come from, who were the first people who were using soap, where does the word soap come from and what was the reason for naming it that way.

The third textual feature is the extent to which students claim authority for their personal experiences. Again as in the first and second textual feature, the students did not use many personal experiences in their writing. Once more, we can deduce that the nature of this assignment did not require the students to draw from their personal experience.

The fourth feature is the reporting verbs used in the writing to introduce sources. These verbs are more frequent in the later assignments. Students are using this to introduce factual information rather than to compare or argue with a source. Once more we are reminded that these topics do not require argument or critically engaging with text. It is noted that Sabrina is more confident in using reporting verbs. Anele shows a slight increase in using reporting verbs.

Extract 4.34, Sabrina (Horticulture)

Aldous (1999) adds that the simplest propagation technique is division.

According to Charlton and Deeming (2000) most grasses do not need chemical fertilizers.

Thandi and Mel show little confidence in using reporting verbs. They still attach references to the end of the paragraph.

Extract 4.35, Thandi (Analytical Chemistry)

It is a soluble salt of an alkali metal. Alkalis used in the past for soap making were obtained from ashes of plants. The common alkalis used in the soap making today are sodium hydroxide and potassium hydroxide (<http://www.cleaning101.com/cleaning/chemistry>, August 2008>).

The fifth textual feature is the extent to which students comment and evaluate the work of others. All the students presented others' work as factual. This could once more be attributed to the factual nature in the way science is presented to the students and the nature of the topic. The horticulture students have one textbook which they carry with them all the time. The chemistry students have a single manual that they use for their chemistry lectures. To strengthen this perception, as said in the first semester writing analysis, students have been entrenched at high school that subject specific essays are factual and can be reproduced. In addition, both subject-specific lecturers have asked me to help the students summarise chapters from these books 'as it would help them know their facts and write better.' The implication was that writing is a skills activity.

Students have developed more of an authorial voice in this assignment. This is illustrated by the confident and appropriate use of the first person pronoun and the confidence in using more reporting verbs to introduce sources. There is also a fluency in their writing that was lacking before. Sabrina, Anele and Mel to some extent seem to have developed discursively and authorially in their writing. Thandi's authorial presence is still low in her writing based on the absence of reporting verbs and overuse of sources in her writing, but as said earlier constructing an identity in writing is a process and what is uplifting is that her discursive self has developed.

Conclusion

I would like to comment that students have matured in the sense that they are more advanced linguistically and conceptually after spending almost eight months in their respective study fields. They are now aware of the literacy practices valued by their lecturers. The students have realised that it is easier to imitate the dominant discourses of their disciplines than to critically challenge discourses. Despite this imitation of the current discourses, there is a hint of a growing authorial self in Sabrina and Anele's writing.

The students in this research study are all from different backgrounds. Students like Sabrina and Anele who have had limited access to language and literacy resources, have developed so much over the academic year. These two students have shown throughout the year a determination to be successful and this motivation could be because of their personal histories as discussed in the autobiographical identities. Anele comes from a small community who is proud that he is attending university. We are reminded that in his autobiographical identity that it was a teacher in his community that recommended CPUT. Sabrina is a caring daughter who has shown great potential in her household as she is the only one who has passed matric. She is aware that her family has saved to send her to Cape Town to study as they believe in her. The above subject positionings have been a strong motivator for these students. This helped them with a positive representation of themselves. Nomdo (2006) says that this sense of 'being special' develops a feeling of self worth which provides positive affirmation of identity. He calls this 'collateral capital' and argues that this kind of collateral capital leads to a 'development of a powerful metalanguage for success' (Nomdo, 2006: 203).

Thandi is struggling to develop authorially in her writing, but there is a sense that she will get there if she overcomes her fear of plagiarism. It is difficult for Mel to change which could be related to her age and her previous literacy practices. The autobiographical self is dominant in her writer identity. It has been more difficult for Mel compared to Sabrina, who is in the same field, to learn and apply new understandings and new ways of representing herself as her prior literacy practices have always produced good results. However, there is positive change in her writing as she has learnt to use her creativity wisely in her essays. Mel's struggle is with presenting sources appropriately. She does not seem to know how to synthesise other people's information into her own style of writing. It is apparent that all the students struggle with how to represent themselves in the best possible way as these are new ways of understanding and writing to all of them. Students respond differently to these challenges. For most students it seemed easier to conform to the dominant ideologies in their disciplines as it is readily available. The writing marks of Sabrina and

Anele have improved quite significantly for this assignment as their discursive and authorial selves became more dominant. Thandi and Mel's marks improved slightly as their discursive selves improved.

The three identities overlap quite significantly in both assignments when it comes to viewing writing as an act of identity. We note very strongly that the autobiographical self is always

present in student text and helps the students to develop discursively and authorially in both sets of writing. The difference is in the dominance of the one over the other. In the first semester, the autobiographical self was quite prominent in writing and in the second semester the discursive self and the authorial self became dominant. In many ways the authorial positioning depended on the discursive positioning. Students position themselves consciously or subconsciously according to the subject positions available to them. In this case the literacy practices of the institution were quite dominant.

Time does change student voices as it differs in their second assignment. It is noted that the topics are different, but there is also a developing sense that students want different things for themselves at different stages of their development. The sense is that as writers get to know their discourses they also get to know what works and what does not work and use this to construct an identity. This construction is an ongoing process. In the next section I focus briefly on journal writing to reflect on whether writers positioned themselves differently in another genre of writing.

Journal writing

Introduction

Students were asked to keep an ongoing journal in the second semester. They were told to write about anything in their lives and in any form or style. The only criteria were that the journals had to be written in English and they had to make at least one entry per week. I also added this to my data for my research as my interest lay in how people experience writing as an act of identity. As a language lecturer, I often heard people complaining about how academic writing 'was not me' and how they struggled with identifying with the academic genre. It was thus interesting to analyse journal writing using the same framework and to discover whether students still felt alienated from their writing.

Journal writing has entered the arena of language communications classrooms at CPUT. Language lecturers are encouraging writing in any form in order for students to develop into better writers.

The focus of student journals in my course is to encourage reflective personal development in subject knowledge, knowledge of the field and their ability to learn independently. Boud (2001) says that journal writing is related to learning as it enhances reflective practice. He says that we can use journals to see what writers have learned and how they as writers have learned to express themselves in journals. His reflective model is based on the premise that learning is always grounded in prior experience and any attempt in new learning must be based on that. My research will suggest that students are social beings and writing should be a socially meaningful activity. Writing is always contextual and situated.

The journal writing my students engaged in reflected on their experience of being a first year student. I used it as a discursive tool as it was an excellent lens for my research as it showed clearly what writing text reveals about writers' sense of self, social world and the construction of identity. Moon (1999) adds that the purposes of using a journal as reflective practice is to increase active involvement in learning, take personal ownership of learning, to enhance the personal valuing of the self and to provide an alternative voice for those not good at other forms of writing (in Boud 2001).

I have chosen Sabrina's journal writing for analysis as I think that she is the student who changed the most. She received very low marks in most of her subjects in the first semester and at the end of the year, she received three distinctions.

There were no set criteria for this activity. The students could write what they want. Boud (2001) also recommend that these journals should not be assessed, become less controllable and students be allowed to freely express themselves in order for it to be powerful. The only thing required of them was to hand in the journals to me once a term, so I could read it. I also assured them that it would be totally confidential and if they needed me to respond they should indicate this in their journals. My research students gave me permission to use their journals in my dissertation. Most of my students enjoyed this writing activity and I was flooded with journals all the time. I found it very interesting as it reinforced my opinion that every single student had their own story to tell.

My analysis will be brief and my focus will be on whether students represent themselves any differently in another genre. My interest is in tracing all three aspects of writer identity as discussed before.

Self-representation in Sabrina's journal writing

Ivanic says that all writers are unique and every writer has a different experience when they write and this is because we all have different life experiences. These life experiences related to our autobiographical identity is present in all our writing. In the extract below Sabrina's lexical choices indicate a religious person with deep family roots.

Extract 4.36, Sabrina –Horticulture (Diary entry)



This religious identity (as noted in the previous writing) is present in her academic writing as well. Sabrina invites the reader into her home and we get the sense of a strong relationship with her family and God.

This entry asserts Sabrina's authorial presence strongly in her writing. The use of the first person, the reflections on her life and the way she answers herself all direct a path in how she wants to portray herself. This reflective conversation with her diary demonstrates Sabrina's self awareness of her life and what motivates her. Her writing is reflective and personal. These characteristics affect her discursal self in her academic writing as well in the first semester. The reflective nature of her writing is represented in the passage below.

Extract 4.37. Sabrina –Horticulture- first semester (Conclusion)

Through this research I have learnt interesting aspects towards the beauty of nature .It has surprised me that this tree know if this tree is multi - functional as it has many uses in order to save people's lives .Millions of people who are suffering from diseases are being saved by the uses of this tree . All I can say is that the populus tree plays a big role in our lives. Simon's poplar's outer appearance can have a defined objective in using it showing that it is more powerful. It is so amazing to know that it helps a lot from doctors, in our homes, and even in traditional healers. Therefore I can say that this could be brighter meaningful not to judge the book by its cover.

There is a perception that as she gets to know academic discourse as represented by the institution, she discards her primary discourses. When asked why she had changed her style of writing, she answered: 'I learnt what is important for good marks and this has developed my writing'.

Sabrina has developed the skill of writing for different audiences and still owning what she writes. This is evident in the way her autobiographical, discursal and authorial self is represented in her second assignment.

An apt ending to this section would perhaps be the following quote from an interview with Sabrina after her last assignment.

Sabrina: *I was determined to write in an academic way. The more I wrote, the better I became. I pictured what my lecturers wanted and presented myself in this way. What helped a lot was thinking and talking about writing to my friends. We supported each other. The journal writing was helpful as it allowed me to write for myself and this was a good boost for me. It was me .I understood that you write differently for different people.*

This comment was significant to me. As a lecturer, I am always aware that students are not presenting their own angles in their assignments because of the criteria I have set. Somehow, I felt that my present method of feedback based on set criteria for assignments could stunt student individuality in writing.

The above comments from Sabrina are evidence that suggests that writing is an act of identity. These identities discursively weave themselves to individually position students as writers.

Conclusion

The above analysis demonstrates again that all forms of writing are acts of identity construction and writers position themselves according to socially available options they have. The discursive choices they make are always represented in their writing and every person has a distinct way of representing themselves. They all have different perspectives, ideals, social situations and these can all be represented in many different ways in their writing even if they are presented with the same task. As I said in the introduction to this section, the writer is a social being and writing should be viewed as contextual and situated. The analyses of journal writing has supported the view that writing is not a neutral activity, but filled with nuances of the individual circumstances. Awareness about the significance of identity in all types of writing empowers the individual to engage with writing in new ways in their particular subject fields. It is also important that writers become aware of the different identities used in their writing. In this way they can use the various identities to construct new ones.

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Appendix 1:

Ethics consent form

Student Consent Form

Name of participant:

Date:

Thank you for agreeing to participate in my research project "Taking ownership: the self-representation of

I value your participation and look forward to working with you on this project.

Your involvement will require the use of your biographical writing, journal writing, two of your written assignments designed as part of your coursework in Horticulture 1 or Analytical Chemistry 1 and interviews and discussions based on your writing experiences.

The Ethics Committee of the University of Cape Town requires that all research participants give consent when participating in a university research project.

This form is to indicate that you understand the research process and you are not exploited in any way.

Consent

I the undersigned understand that I will be interviewed for research purposes and my writing will be used to analyse how students represent themselves in first year writing at CPUT.

I understand that my responses will have no bearing on my assessment and status as a student at CPUT.

I understand that my name will be kept confidential. I agree to take part in this research project. I understand the research process.

I freely give my consent.

Signature:

Thank You for your participation

Ayesha Reiners

E-mail: reinersa@cput.ac.za

Appendix 2:

- Semester 1 (assignment topics)
- Semester 1 (writing assignments)

- Semester 2 (assignment topics)
- Semester 2 (writing assignments)

Semester 1

Analytical Chemistry ECP 2008

Communication Skills and Chemistry assignment

Read the passage below before attempting the next activity.

Acute effects of radiation were first observed in the use of X-rays when the Serb-Croatian-American electric engineer Nikola Tesla intentionally subjected his fingers to X-rays in 1896. He published his observations concerning the burns that developed on his fingers, attributing the damage to X-rays rather than to X-ray tubes. His injuries healed. The general effects of radiation, including the effects on cancer risk, were not understood much better until 1927. Hermann Joseph Muller published research showing that the effect of radiation in 1946 was awarded the Nobel prize for his findings.

Before pathological effects of radiation were known, many physicians had begun marketing radioactive substances as patent medicines. Examples were radium bromide treatment, and radium chloride, which was drunk as tonics. Marie Curie spoke out against this sort of treatment. The effects of radiation on the human body were not well understood. Curie's aplastic pneumonia assumed due to her work with radium. Later examination of her remains showed that she had been a careful laboratory worker and had a low radiation dose. A more likely cause of death was her exposure to unshielded X-ray tubes while a volunteer medical worker in World War I.

In the 1930's, after a number of cases of bone necrosis and death in enthusiasts, radium-containing medical products nearly vanished from the market.

NB Radioactive materials are generally regarded as dangerous to mankind and all other forms of life on earth. Yet many countries use nuclear reactions as an alternative source of energy. **ESKOM** currently has plans afoot to build another nuclear reactor that will address the most serious energy crisis South Africa has ever seen.

1. In this activity you are required to research any nuclear disaster in Africa that occurred in the last hundred years. Use the Internet and type the words "nuclear disasters Africa" in the search criteria box of a search engine like Google or Yahoo.
2. Write down the reference entries for the website(s) you intend to use for this assignment.
3. Read and summarise your research findings into a structured mind map or a logical outline. You should not use full sentences but key words.
4. Write a report based on your research. Your report must have headings and subheadings. The report should have approximately 300 words.

The assessment for this assignment will be divided as follows.

Group presentation 60%;
Individual essay: 40%

The criteria for the assessment will be discussed in class.

Due dates: Oral presentations: 20 May 2008 (Tuesday); Essay: 27 May 2008 (Tuesday)

Introduction

The essay is about a disaster that took place in Japan, ^{it} ~~is~~ ^{the} ~~was~~ called Tokaimura Nuclear Disaster and it was caused by the employees. I'm going to concentrate on its ^{the} ~~the~~ background, its occurrence and what really caused the accident.

Background

According to Dickenson (1994), the disaster took place in Japan on September 1999. It was Japan's latest and largest ever. It occurred in the plant called JCO Corporation. This disaster occurred when the workers were handling uranium and the release of high levels of radiation. ^{explain more}

This disaster left many experts with many questions about the failure of this nuclear disaster. ^{at this stage} Japan was depending on the nuclear power for the electricity and after the disaster, the nuclear safety policy were seriously considered. Japan's most nuclear radiation accident occurred at a uranium reprocessing facility in the city in Japan. (Dickenson 1994).

The Accident

The accident took place in a small fuel preparation plant. It occurred around 10:30 (area local time) when the company that operates the plant, poured 35 pounds of uranium into a purification tank that contain nitric acid in place of 5.2 pounds that is normally used there. What followed after that, ³⁵ pounds of uranium instead of 5.2 pound is that there was a formation of a flash of blue light inside the plant, as the result that was called a nuclear fission chain reaction (<http://en.wikipedia.org/wiki/tokaimura-disaster>, May 2008).

The Japan's Electric Power Company rushed 880 pounds of sodium borate to the plant to absorb the radiation that was emitted, but the workers had difficulty in getting close to that processing tank. The employees then entered the facility again and they crushed

the water pipes that leaded to that tank where the accident was occurring (<http://en.wikipedia.org/wiki/tokaimura-disaster>, May 2008).

CONCLUSION

Tokaimura disaster was caused by human error because if the of that company that operates with the plant didn't do that error of pouring 35 pounds of uranium in place of 5.2, the accident wouldn't have happened. All I can say the people of Japan would've got electricity safely, but because of that error that didn't happen. (350 words)

REFERENCE

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THE THREE MILE ISLAND ACCIDENT

INTRODUCTION

The Three Mile Island accident was the most significant accident in the history of the American commercial nuclear power generating industry. The accident started in the 28 March 1979 (Wednesday), when the main feed water pump failed, & radioactive elements were released into atmosphere ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

BACKGROUND

The plant had 2 reactors TMI-1 & 2, the accident started in the TMI-2 reactor the TMI-1 reactor was shut down for refueling at the time of the accident. The accident started when plant's main feed water pump in the secondary non-cooling system failed (04:00). Then a backup system started automatically but on that backup system there were two valve which were not working because they were closed ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

THE OCCURRENCE

Water entered pneumatic air line that controlled the flow through a filter known as condensate polisher. Since the water was no longer flowing in the secondary loop, the steam generators were not removing heat from the reactor. The turbine & nuclear reactor shut down automatically, due to the loss of removal in the primary loop (steam generators). Because of this the pressure increased in the sides of the primary loop ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The pilot-operator pressurizer relief valve (PORV) opened automatically at the top pressurizer to prevent primary side's pressure from being excessive. The valve should have closed when the normal pressure was reached by the primary sides but it didn't do so. A device to notify that the (PORV) has closed was not installed during the building of the plant to save time. As a result of this the (PORV) remain opened & the operator's could not see that something wrong. This caused the pressure to continue to decrease in the system. Since the (PORV) was opened the water poured out stuck open valve at the top of the pressurizer & that caused the core of the reactor to over heat ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The operator's couldn't see that there was no water in the core because there was no device to measure the water in the core. They assumed that if there is water in the pressurizer there is water in the core.

The main feed water system failed to work & that caused it to shut down. A backup system starts automatically, three emergency feed water pumps start up but two were closed preventing the feed water from reaching the steam generators ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The valves were closed because there was a test on the plant two days before the accident started & the people who were doing the testing forgot to reopen the valves. The valves were discovered that they closed, so they were reopened then the steam generators started to remove heat in the system ([http://en.wikipedia.org/wiki/Three Mile Island Accident](http://en.wikipedia.org/wiki/Three_Mile_Island_Accident), May 2008).

The generators were working removing the heat in the system but still there was no water in the primary loop & this caused the prevention transfer of heat from the reactor to the secondary loop via the generators.

The pressure in the primary system continued to decrease, this was no longer notified in the pressurizer only but in the reactor vessels. Then water was redistributed & the pressurizer level rose while the system water inventory

decreased. The operator's saw that the was enough water in the pressurizer so they stopped the water by turning off the emergency core cooling pumps which started automatically after the decrease in pressure (http://en.wikipedia.org/wiki/Three_Mile_Island_Accident, May 2008).

The reading which the operator's received was a false reading, this false reading was caused by the reactor vessels which had no water on it. The quench tank which was collecting discharge in the (PORV) was overfilled, this caused the containment building sump to fill. The alarm went off because of this but the operator's ignored this. The radioactive coolant leaked out of the quench tank display sign ruptured into the containment building (http://en.wikipedia.org/wiki/Three_Mile_Island_Accident, May 2008).

In the control room the was a shift change, they noticed that the temperature holding tank was excessive & they used a backup valve called a block valve to shut off coolant venting. This was noticed all most too late because the was already 250,000 US gallons leaked out (http://en.wikipedia.org/wiki/Three_Mile_Island_Accident, May 2008).

After math

The were radioactive element released out to the atmosphere. People living near by were not injured by the accident but were given doses of radiation of 8 millirem. After sometime people suffered from lung cancer, but this is not been yet proven that it was caused by the accident. The water which was being used by the villagers was contaminated with the radioactive elements from the accident, so the villagers were removed in that area.

The device for (PORV) was installed after the accident. Also the one for measuring the water in the core (http://en.wikipedia.org/wiki/Three_Mile_Island_Accident, May 2008).

CONCLUSION

From my observation this accident was all caused by a human error. For example the (PORV) had no device on it to check if it has open or closed & the core also had no device on it to check if had water or not. Because, there were some devices which were not there, the operators shouldn't have depended on the signals they got. They knew that maybe the readings were not true. The administrative for not seeing if very thing that was there is in place after they were done with the testing, they were test if the was something wrong not to make something to wrong they are expected to 100% accurate.

The bosses of the plant were selfish by building that plant near a village (Bum) because they knew that a nuclear plant is very (http://en.wikipedia.org/wiki/Three_Mile_Island_Accident, May 2008).

REFERENCING

Wikipedia Three Mile Accident, March 2008
 (<http://en.wikipedia.org/wiki/Three-Mile_Island_accident, March 2008>)
 (Accessed 8 May 2008)



VINCA MAJOR

INTRODUCTION

This research report will focus on the medicinal, herbal, and domestic uses of the Vinca Major. It is a trailing, prostrate, evergreen sub shrub, with a stem rooting at the tips with leaves that are glossy green, ovate pointed. This plant has large pale, blue, propeller-like shaped flowers of which appear on short erect flowering stems in spring- mid winter. "The Vinca Major is a native to W. Mediterranean, Europe, and N.Africa and lastly to C. Asia" (Brown:404).

THE DOMESTIC USES

The Vinca Major can be used as a quick groundcover, but it can soon become rampant if not controlled by cutting back, however it should rather be planted in containers. This plant mostly thrives in shade, but can also flower in sunnier positions. The Vinca Major will flourish amongst the stones of rock gardens, or on steps. The Vinca Major appears to form thick carpets of groundcover with blue or white flowers.(Brown:1995:404)

THE MEDICINAL USES

Plants are cut after flowering and processed commercially for Alkaloid Vincamine extraction. This plant is used by pharmaceutical industries, as a cerebral stimulant and VA solidator. However they do not contain the anti-cancer alkaloids, which are found in the related Catharanthus roseus.

The Vinca Major also contains Reserpine of which when manufactured from the periwinkle, have the ability to carry side

effects, such as drowsiness, nightmares and deep mental depression, which can lead to suicidal tendencies. However in cases where there is water retention, the drug Reserpine, has the capability to lead the patient into cardiac failure. Nevertheless, other allergic reactions include, itching and bronchial asthma. When the Vinca Major is used medicinally, it can be used for the treatment of heavy menstruation and involuntary urination.

THE HERBAL USES

"In fact William Cole and Adam in Eden, 1657, claimed that it was used as an anti-inflammatory."(Brown: 404)

The Vinca Major is used for the treatment of cramps. "As it was Lord Bacon, who himself testified, that if you have a limb that was suffering from cramps, it could be cured if bands of Periwinkle were tied around it."

An ointment prepared from bruised leaves with lard, has been used in domestic medicine. It has been reputed, to be both soothing, and healing in all anti-inflammatory ailments of the skin. Also known for its use as an, excellent remedy for bleeding piles.

Periwinkle tea can be used for the treatment of scurvy and inflamed tonsils, particularly if used as a gargle. For bleeding piles it can be used externally, as well as if taken internally.

When harvested and dried, it can be used infusions, liquid extracts and powders. This plant is Toxic if eaten. In medieval times, periwinkle was mashed with earthworm's chicks and hens and used as a love potion which was used for married couples, (Grieve: 631).

CONCLUSION

I would strongly advise that if the Vinca Major is used medicinally, it is to be used under strictest supervision of a Doctor. However this plant is a treasure that would be able to transform any tricky place into brilliant carpets of colour. But more importantly, it is an excellent herbal plant.

Horticulture 1

ECP1

Semester 2

26 September 2008

Your task is to compile a report for an oral presentation on one of the following topics.

1. Propagation of roses.
2. Propagation of fruit trees.
3. Propagation of Orchids.
4. Propagation of vegetables.
5. Propagation of herbs.
6. Propagation of street trees.
7. Layering as a production technique.
8. Propagation of African violets.
9. Propagation of perennial plants.
10. Propagation of annual plants.
11. The tissue culture production of indigenous bulbs.
12. Propagation of grasses.
13. Propagation of indoor plants.
14. Growing conditions needed during plant propagation.
15. How to control pest and disease problems during propagation of plants in the green house.
16. Making use of old fashioned and organic propagation methods and materials to produce crops without commercial propagation facilities.
17. Seed propagation of flowering crops.

Notes:

- Students may only select one of the topics.
- A written report needs to be compiled for handing in on the 21 October 2008
- Students need to prepare a 5 min oral presentation with visual aids on their report also for the 21 October 2008.
- Student need to have enough knowledge on the topic to be able to answer questions from the floor.
- All work must be referenced and in students own words. Report must be typed and include pictures that need to be referenced. A minimum of 5 references must be used.
- Topic must be explained in detail with proper examples relevant to what is being discussed.

TOTAL:

100

Semester 2
Analytical Chemistry ECP
Research assignment

Communication skills and Chemistry

Research the chemistry of synthetic detergents, including soap. You can choose liquid, solid or powder detergents.

You will be required to do the following:

Theory

Write a report of 3-5 pages where you outline the chemicals used to make the detergent, and then you focus on the advantages and disadvantages of this particular industry.

Power point presentation

Present the detergent making process to the class using power point slides.

Further requirements for this assignment:

Your report must be word processed

Referencing in your report is compulsory



MAKING USE OF OLD FASHIONED AND ORGANIC PROPAGATION METHODS AND MATERIALS USED TO PRODUCE CROPS WITHOUT PROPAGATION FACILITIES.

1. INTRODUCTION

My research is based on making use of old fashioned and organic materials and using alternative methods of propagating to produce crops without the use of propagation facilities.

2. COLD FRAMES

Cold frames (Figure 2.1) are environmentally useful, as they provide protection for crops, either temporary or long term use. Classical cold frames are low, wooden or brick framed structures, with a sloping roof, that are made from wooden frames, known as "lights". These lights can be hinged to form a lid or may slide across. Some cold frames are inexpensive, such as wooden or aluminum cold frames. Ventilation is highly essential; therefore the lights need to open to allow for proper ventilation, and eventually must be able to open all the way, when the plants need to be hardened off. (Pears,2001)

FIGURE 2.1 A wooden cold frame



INTRODUCTION

This assignment is about something that we use everyday to wash ourselves, to wash dishes and also to clean things inside our homes, As we know that there are many types of soaps so the type of soap that I'm going to talk about is the bar soap, so I'll first talk about the background of this soap that is used everyday for cleaning and bathing purposes, so I'll talk about where was this soap made, who were the people using it and why does the wash but my main focus on the soap itself. As we know that soap is made from fats and lye (NaOH). So I'll also talk about why soap washes other substances. I'll talk about how to make a bar soap etc.

Detergents and Soaps

According to Browner C.M (1998) a detergent is a substance that cleans dirty surfaces and soap is a type of detergent. Detergents & soaps are basically used for cleaning because water can't just take away oil. Soaps on the other side can remove oil quicker. Detergents allow oil & water to mix so that the 'oil stain' can be removed during the rinsing. Mainly detergents are surfactants, which can be formed simply from chemicals of petrol.

They were created because the was scarce animal and vegetable fats to make soap around World War 1 and World War 2. Like any bar soap, detergents have water-loving (hydrophobic hydrocarbons) and water-hating components (hydrophilic hydrocarbons). Those hydrophobic hydrocarbons are pushed away by water, but they become attracted by oil and grease. One end of the hydrophilic molecule will be attracted to water (Browner C.M 1998).

According to Mullin R. (1993) soaps and detergents products are produces in the form of bars, grains and tablets. People use to wash their bodies. They use shampoo for their hair and brush their teeth with soaps and detergents. Also, doctors clean sore wounds with soap to kill germs that cause infection. Detergents and soaps contain a basic cleaning agent called Surfactants. Surfactants consist of molecules that attach themselves to dirt particles. Those molecules pull these particles out of this material and hold them until they rinse away. Detergents and soaps have many different uses, in households and in industries.

1. Introduction

This report will be based on how to propagate grasses. I will focus on the main points that are closely related to the techniques of propagating grasses and other aspects related to it. These aspects will include grass propagation by division and seeds, fertility and important requirements on grass propagation.

2. Propagation of grasses by division

Darke (1999) reveals that division is the preferred means of vegetative propagation for grasses and is usually done when grasses are in active growth. The vegetative propagation method includes plugging, stolon, and sprigging.

Each method will produce similar results but at different rates of time. It has a very wide range of variety of plant multiplication techniques.

Many grasses can be renewed by division and transplanting. Grass plants made by division are best produced from the new outer growth, which is usually the strongest, healthiest material. Firstly it is best to lift small and medium-sized grasses from the ground with a strong trowel or sharp spade and use a knife or narrow edged trowel to divide them. Secondly discard dead material from the center and thoroughly water divisions immediately following transplanting.

Thirdly, a sharp spade is essential for dividing and managing the largest grasses.

The mature parts of a grass that are often too big and heavy to be lifted in one piece must be sectioned in the ground with a spade before they can be lifted.

The best spade to be used should be the one which are light but exceptionally strong. This type of tool is comfortable to use when cutting into the roots of grasses and is strong enough to be used lift heavy divisions out of the ground

(See figure 1.1-1.2 pg 5).

Sprig and stolon are essentially the same process as the above. According to

Turgeon (1999) it is the use of single plant sections with many growth nodes from which new plant develop. Sprigging is

1. INTRODUCTION

In this project I will focus on the making of soap, what makes it and how is it made, the processes involved in making it. I have chosen the bar soap. In my background I will discuss the nature of bar soap and what they are in terms of surfactants and the difference between a soap and a detergent (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

I will also the ingredients which we will be used in making the bar soap, the four industrial basic rules one must follow in focus on the making of the soap(<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

Finally I will look at the advantages and disadvantages of the soap (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

2. BACKGROUND OF SOAP MAKING

Soaps are used as a cleaning agent made from the interaction of fats and oils with alkali. The alkali used in the bar soap is the sodium. Soaps are anionic surfactant (negative charge) (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

Soaps are said to be a surfactant because they reduce the surface tension in the water by doing that they will make water to be wetter (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

Soaps are different from detergents because they only have one surfactant were as detergents have more than one surfactant. Detergents are less sensitive than soap; they perform well under a variety of conditions (<[http:// www.cleaning 101.com/cleaning/chemistry](http://www.cleaning101.com/cleaning/chemistry), August 2008>).

<i>Virgilia divaricata</i>
<i>Rhus pendulina</i>
<i>Syzygium cordatum</i>
<i>Acacia xanthophloea</i>
<i>Harpephyllum caffrum</i>
<i>Platanus x acerifolia</i>
<i>Caratonia allicia</i>
<i>Populus simonii</i>
<i>Schinus molle</i>
<i>Ficus rubiginosa</i>
<i>Carissa macrocarpa</i>
<i>Polygala myrtifolia</i>
<i>Dovyalis caffra</i>
<i>Chrysanthemoides monilifera</i>
<i>Eriocapalus africanus</i>
<i>Myrtus communis</i>
<i>Murraya paniculata</i>
<i>Hibiscus syriacus</i>
<i>Viburnum tinus</i>
<i>Abelia x grandiflora</i>
<i>Carpobrotus edulis</i>
<i>Agapanthus praecox</i>
<i>Plectranthus neochilus</i>
<i>Helichrysum petiolare</i>
<i>Gezania rigens</i>
<i>Vinca major</i>
<i>Viola hederacea</i>
<i>Duchesnea indica</i>
<i>Cotoneaster dammeri</i>
<i>Convolvulus sabatius</i>
<i>Olea europaea subsp. Africana</i>

Write a scientific research report on the medicinal, herbal and domestic use of the plants indicated.

The report must be 2 typed pages.

All information given must be referenced.

All writing must be in your own words.

Your report must have an introduction, the report and then a conclusion.

A bibliography must be given at the end of the report with all your reference material stated.

The report will be due on the 10/04/08

1. INTRODUCTION

Populus simonii is a genus of trees which include the Cotton wood, Poplars and Aspens which are known as Poplars. It is a deciduous tree. The leaves are turning bright gold to yellow before they fall during autumn. It grows about 30 m at a fast rate. It is flowering from April to June and ripens from May to July. In order to grow well, it needs light and well-drained soils. It can also establish well in the shade. The leaves are simple, usually alternate and have an attractive growth form (Carrère 2004). In this report I will focus on Populus simonii's medicinal, herbal and the domestic use.

2. MEDICINAL AND HERBAL USES

(Down 1995) explains that Populus simonii treats problem such as anorexia, lower back pains, gout, and fevers. Externally, it acts as remedy for chills, haemorrhoids, infected wounds and sprains; it assists in the treatment of heart problems. It also plays a biggest role on the kidneys, promoting the flow of urine. It relieves coughing that leads to a disease called tuberculosis. This tree can be used in healing muscular pains and for dry skin conditions.

This plant can also be used in various ways for both herbal and medicinal uses; the bark itself is used to treat rheumatoid arthritis, cystitis and diarrhea. Buds are used against chronic bronchitis and rheumatism. For external use it is used for frost bite, sun burn and used as an ointment for myalgia (Carrère 2004).

3. DOMESTIC USES

Although the timber for Populus simonii is not a good quality, but it is put to many great uses. This tree is an important natural resource because it is used to make pulp, matches, basket and boxes. Cricket bats are also made from this tree. Sand papers are made from this type of plant to smooth rough wooden surfaces inside the houses. The tree is also be used as a holder to hang on forches and is used for starting fires. At homes, this plant can be used to fight pollution. Musical instruments such as the guitars, wood triangles are made with this tree. Papers used to test whether a substances

is acidic or basic are made from this tree. This tree can also be used for fencing the gardens. Mulch used for covering the ground conserves the nutrient in the soils made from this tree (Carrère 2004).

4. CONCLUSION

Through this research I have learnt interesting aspects towards the beauty of nature. It has surprised me that this tree know if this tree is multi-functional as it has many uses in order to save people's lives. Millions of people who are suffering from diseases are being saved by the uses of this tree. All I can say is that the populus tree plays a big role in our lives. Simon's poplar's outer appearance can have a defined objective in using it showing that it is more powerful. It is so amazing to know that it helps a lot from doctors, in our homes, and even in traditional healers. Therefore I can say that this could be brighter meaningful not to judge the book by its cover, meaning that not to look the outer appearance. I thought it is just a tree with their own physical characteristics. Moreover I can say that there's no art to find mind's construction in the face. I find out that each and every organism has the purpose in this the universe.