

https://dspace.org/

How IsiZulu speakers use cohesion in English in their academic writing

Drummond, Andrew Meikle

2016

http://hdl.handle.net/10539/20758

Drummond, Andrew Meikle (2016) How IsiZulu speakers use cohesion in English in their academic writing, University of the Witwatersrand, Johannesburg, <http://hdl.handle.net/10539/20758>

Downloaded from a DSpace repository. https://dspace.org/

HOW ISIZULU SPEAKERS USE COHESION IN ENGLISH IN THEIR ACADEMIC WRITING

Andrew Drummond
Student: 1015347

A research report submitted to the Wits School of Education, Faculty of Humanities, University of the Witwatersrand in partial fulfillment of the requirements for the degree of Master of Arts by combination of coursework and research.

Johannesburg, 2015

Copyright Notice

The copyright of this thesis vests in the University of the Witwatersrand, Johannesburg, South Africa, in accordance with the University's Intellectual Property Policy. No portion of the text may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, including analogue and digital media, without prior written permission from the University. Extracts of or quotations from this thesis may, however, be made in terms of Sections 12 and 13 of the South African Copyright Act No. 98 of 1978 (as amended), for non-commercial or educational purposes. Full acknowledgement must be made to the author and the University. An electronic version of this thesis is available on the Library webpage (www.wits.ac.za/library) under "Research Resources". For permission requests, please contact the University Legal Office or the University Research Office (www.wits.ac.za).

Abstract

Achievement rates in higher education in South Africa for black students remain low after 20 years of democracy. Writing academic English according to existing conventions is a complex skill. One aspect of this skill is producing dense, cohesive text. The writing of a group of IsiZulu speakers at Wits is analyzed to find out how Hallidayan (1976) cohesion is operating therein: how does this language group use conjunctions, lexical cohesion, referencing, ellipsis and substitution when writing in English? In addition, it explores whether differences in how IsiZulu and English are structured create problems with cohesion for these undergraduates when writing in English. Furthermore, it aims to uncover if the rhetorical structure of IsiZulu influences the organization and the cohesion of their English texts. From this analysis, it is evident that there are elements of referencing, conjunction use and lexical cohesion which are well developed in their writing. At the same time, evidence of speech-type syntax in the data points to areas where further development is possible. This knowledge has led to suggestions on how academic literacy input could facilitate writing skills development for this language group. The investigation has also established the dominance of English rhetorical organisation in both the English and IsiZulu writing of this cohort. It has also shown that these students experience rhetorical conflict when instructed not to use repetition as a meaning-making strategy in their writing. Both a pragmatic and a critical response to these findings has been provided. The pragmatic response is a set of suggestions on how to develop language skills in the area of cohesion. The critical response is a proposal for an alternative style of academic textual organisation with stronger links to IsiZulu oral rhetoric practices.

Key words: Cohesion in IsiZulu, cohesion in English, IsiZulu rhetoric, English rhetoric, academic literacy, transformation in tertiary education

Declaration

I declare that this research report is my own unaided work. It is being submitted for the degree of Master of Arts at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

Signature: 

Name: Andrew Meikle Drummond

Date:

Acknowledgements

I would like to thank my supervisors, Prof. Hilary Janks and Dr. Sipho Ntombela, who have been supportive, professional and inspirational throughout the process of writing this report. I would also like to thank Prof. Leketi Makalela and Dr. Laura Dison for reading the initial research proposal and making valuable comments on it. The process of moving out of a deficit approach to writing skills development was greatly aided by their feedback. For the duration of this full-time Master's, I have depended on my wife to earn most of the money: thank you Muluka Miti-Drummond! My dad always encouraged me to do an MA, having completed his own MA during cancer treatment. Whilst I read his MA report, he sadly will not be able to read mine. Dad: giving up never crossed my mind.

Contents

Chapter 1: Introduction p. 1

1.1 Background p. 1

1.2 Context p. 2

1.3 Research Questions p. 2

1.4 Rationale for the Study p. 2

1.5 Terminology p. 4

Chapter 2: Literature Review p. 6

2.1 Introduction p. 6

2.2 Spoken and Written Language p. 6

2.3 Cohesion p. 8

2.3.1 Halliday and Hasan's model p. 8

2.3.2 Cohesion in IsiZulu p. 10

2.3.3 Comparing conjunctions in IsiZulu and English p. 11

2.4 The theory of contrastive rhetoric p. 13

2.4.1 Topical structure analysis p. 13

2.4.2 Reader-responsible and writer-responsible languages p. 14

2.4.3 Critical responses to contrastive rhetoric p. 14

2.4.4 Features of oral rhetoric in students' writing p. 15

2.5 Conclusion to literature review p. 17

Chapter 3: Research design and methodology p. 19

3.1 Introduction p. 19

3.2 Participants p. 19

3.3 Research instruments p. 20

3.4 Data collection and analysis p. 20

3.4.1 Methodology for Research Instrument 1 p. 20

(i) Features of cohesion in the texts p. 20

(ii) Features of rhetorical organisation in the texts p. 21

3.4.2 Methodology for Research Instrument 2 p. 22

3.4.3 Methodology for Research Instrument 3 p. 23

Chapter 4: Analysis of Data set 1 p. 25

4.1 Introduction p. 25

4.2 Cohesion p. 26

4.2.1 Reference p. 26

(i) Definite article p. 26

(ii) Errors with 'zero' articles p. 27

(iii) Absent definite articles p. 27

(iv) Use of pronouns p. 27

(v) Inexplicit references p. 29

(vi) Pronouns and identity p. 29

(vii) Gender specific pronouns p. 30

(viii) Determiner references p. 30

(ix) Determiner only references p. 30

(x) [Determiner + noun] references p. 32

4.3 Conjunctions p. 34

4.3.1 Additive vs adversative conjunctions p. 35

4.3.2 Coordinating vs subordinating conjunctions p. 35

4.3.3 The semantics and syntax of conjunction use p. 37

4.3.4 Combinations of conjunctions, determiners and nouns p. 38

4.4 Lexical cohesion p. 38

4.4.1 'Technology' p. 38

4.4.2 'Learner' p. 39

4.4.3 'In the classroom' p. 40

4.5 Substitution p. 42

4.6 Ellipsis p. 43

4.7 Rhetorical organisation and coherence p. 46

4.7.1 Introduction p. 46

4.7.2 Rhetorical structures p. 46
4.7.3 Use of parallel and sequential progressions p. 48
(i) Parallel progressions p. 48
(ii) Sequential progressions p. 49
(iii) Punctuation p. 50
(iv) Sequential progressions to address run on sentences p. 51
(v) Lexical resources used in parallel and sequential progressions p. 52
4.8 Findings in data set 1 p. 54
4.8.1 Cohesion p. 54
4.8.2 Rhetorical structure p. 55
4.8.3 Sequential and parallel progressions p. 56

Chapter 5: Analysis of data sets 2 and 3 p. 56

5.1 Data set 2 – Undergraduates' writing on LOLT issue in IsiZulu and English p. 56
5.1.1 Introduction p. 56
5.1.2 Conjunctions p. 57
5.1.3 References with pronouns p. 57
5.1.4 Evidence of additional conjunctions in the English texts p. 58
5.1.5 Ordering of ideas in English and IsiZulu p. 59

5.2 Data set 3 – focus group interviews p. 60
5.2.1 Introduction p. 60
5.2.2 Responses to questions p. 60
5.3 Summary of findings from data sets 2 and 3 p. 65
5.3.1 Corroboration in data set 2 p. 65
5.3.2 Findings from data set 3 p. 65
5.3.3 Questions arising from the interview data p. 66

Chapter 6: Conclusion p. 67
6.1 Introduction p. 67
6.2 Findings pertinent to key research questions p. 67

6.3 Academic literacy input p. 67
6.3.1 Areas of focus p. 67
6.3.2 The structure of the academic literacy input p. 68
6.4 Transformation in the academy p. 69
6.4.1 Forms of rhetorical organisation p. 69
6.4.2 Additions to the curriculum p. 71
6.4.3 Transparent rubrics p. 71
6.5 Further research p. 72
6.6 Conclusion p. 73
References p. 74
Appendix i – Samples from data set 1 p. 79
Appendix ii – Samples from data set 2 p. 91
Appendix iii – Interview schedule p. 98
Appendix iv – Key to mark up of data set 1 p. 99

Chapter 1: Introduction

This research sets out to understand how cohesion is operating in IsiZulu speakers' writing in English. It explores the relationship between the linguistic and rhetorical structures in IsiZulu and the normative use of language required for academic writing in English. In order to establish the relevance for this study, this chapter includes background information on some of the inequalities currently operative in South Africa and then gives a rationale for why work in the area of cohesion can provide knowledge capable of reducing these inequalities. In addition, this chapter also contains the key research questions explored by this study and definitions of key terminology used herein.

1.1 Background

According to the recent Census (SA Gov., 2011), almost 80% of South Africa's population is black but Van der Berg (2007:852) cautions that:

> 'While the white population has educational levels almost similar to those for developed countries, backlogs still plague other groups. Altogether 70% of whites above age 26 had completed matric or more; almost 15% had a degree. In comparison, only 19% of blacks over 26 years had completed matric or more and only 1.4% had graduated'.

That this is the case after 20 years of democracy in South Africa suggests that more needs to be done to create opportunities for formerly disadvantaged groups of people. Letseka & Maile (2008: 4) state the problem thus: 'The promise of equality has yet to materialise. Black Africans and coloureds … continue to lag behind in education success rates'. They state that 30% of learners drop out in their first year of study at university with a further 20% discontinuing in their second and third years. Ultimately, '[Only] 22% graduated within the specified three years duration for a generic Bachelor's degree' (Letseka & Maile, 2008:5).

Language is a key issue throughout the educational process. Whilst only 9.6% of South Africans speak English as their first language (SA Gov., 2011), the same percentage make up 32% of University enrolments (Ministry of Education, 2002); an extent that far outstrips English speakers' demographic presence in the country. Butler & Van Dyk (2004:1) summarise this advantage thus: 'If one specifically considers the correlation between the numbers of first- and second-language speakers of English who register at universities in South Africa … it is apparent that a significantly larger proportion of mother tongue students are successful.' This linguistic advantage, however, raises questions about whether the language policy status quo, which tends to favour English at every stage of the South African's educational journey, is actually equitable for the majority of South Africans.

Once they get to University, students are expected to produce longer essays in English conforming to various academic writing conventions. Achieving mastery of academic discourses might be troublesome for South African matriculants who may, 'have attended schools which place little stress on reading and writing,' (Taylor & Vinjevold, 1999 as cited in Parkinson et al., 2008:12). In fact, Clarence-Fincham (as cited in Parkinson et al., 2008:12) states: 'A high proportion of South African students enter tertiary study with inadequately developed reading and writing skills in any language.' Gaining proficiency in academic writing conventions may require considerable exposure

to academic texts, along with overt instruction in and sustained practice with their key linguistic features in order to achieve mastery of these conventions.

However, such difficulties in acquiring academic language are not purely a South African issue. Studies in the US show that almost 30% of freshman nationally across the US had need of an additional academic skills course (Breneman & Harlow as cited in Michael & Venezia, 2001:4). Given that only 14% of Spanish speakers obtain a University degree, it is evident that many of those requiring additional language input were English native speakers (US Census, 2007:5). Although when it comes to forming an argument in academic writing, Ferris (1994:46) believes: 'second language writers may have even greater problems with persuasive writing than do native speakers due both to linguistic [deficiencies] and differing rhetorical patterns in their first languages.'

Whilst Ferris aims to make the challenges facing second language writers clear, it would be preferable to avoid positioning these students as deficient. These students are fluent in many languages and it is therefore current policies that do not allow these languages to be used in HE that are deficient. In contrast, English native-speakers who are frequently monolingual can complete their degrees with no competence in any African language.

1.2 Context

I have carried out this research among second year undergraduates who are IsiZulu speakers studying for a B.Ed. at Wits University, Johannesburg, South Africa.

1.3 Research questions

The following are the key research questions I will investigate in this research project:

1. How do IsiZulu speaking undergraduates use conjunctions, lexical cohesion, referencing, ellipsis and substitution when writing in English?

2. Do differences in how the IsiZulu and English are structured create problems with cohesion for these undergraduates writing in English?

3. Does the rhetorical structure of IsiZulu influence the organization and the cohesion of the L2 English text?

4. What rhetorical and cohesive resources does the IsiZulu speaker bring to the task of writing academic English that ought to be valued and recognized?

1.4 Rationale for the study

With dropout and failure rates unacceptably high for South African learners in tertiary education, IsiZulu speakers at English-speaking institutions are operating at a considerable disadvantage in relation to English native-speakers. According to Angelil-Carter (as cited in Archer, 2010:497) the language of academic English is troublesome whether you speak it as a first or additional language. For this reason, writing centres and modules centering on academic literacy practices have been developed in South Africa universities with a view to facilitating the development of the skills that will lead to achievement at a tertiary level. Second language speakers, however, who form the majority in South African universities, could potentially benefit from specifically tailored language development as a pragmatic strategy to help facilitate academic success.

For example, Butler & Van Dyk (2004:7) describe such an academic literacy course in South Africa for first year undergraduates with lexical, grammatical, register and rhetorical organisation components but whose 'general aim is to hone students' awareness of language.' It is not clear from the existing research, though, how finely tuned the input on the existing academic literacy courses is. Are these courses written for all L2 writers of English? Are they crafted for all Bantu speakers? Are there differences between South African Bantu languages that should be taken into account?

IsiZulu is both the most frequently spoken home language in South Africa, with as many as 22.7% of households using it (SA Gov., 2011:29), and it is the most widely spoken home language in Gauteng, with almost 20% of households using it (SA Gov., 2011:30). In addition, with many students at Wits using IsiZulu as their primary language, it seems relevant to investigate how to aid the development of African language speakers' academic literacy with speakers of IsiZulu. Any useful knowledge generated from such a study may be of direct benefit to a significant proportion of South African students.

English academic discourse contains many features: it is more formal than other kinds of writing; contains more frequent use of passive verbs; it contains more impersonal grammatical subjects such as 'it' and 'there'; it is lexically denser than speech; there are fewer categorical statements and there is more hedging; the argument of the text develops in a linear fashion avoiding repetition; and the text is constructed cohesively with conjunctions, references, lexical items and ellipsis. No doubt useful research could be conducted into how IsiZulu speakers' are using each of these in their academic English.

The purpose of this research, however, is to focus on how cohesion is being used in the IsiZulu speakers' writing in English. According to Cox, Shanahan, and Sulzby (as cited in Palmer, 1999:49): 'Cohesion is important both to the reader in constructing the meaning from a text and to the writer in creating a text that can be easily comprehended.' Knowledge of this system of linguistic conventions, which can facilitate the clear construction of meaning within a text and the development of an argument, can powerfully influence the quality of writing across the text as a whole. As such, it seems an appropriate focus of an investigation into how to help IsiZulu speakers improve their academic writing.

Cohesion in writing is complex (see literature review); often the result of purposeful instruction in academic discourses; with some antecedents in speech but with particular conventions in written forms of the language; it is central to writing in an economic style and in avoiding redundancy. Cohesion, in the form of conjunctions, allows for explicit signposting of the how the text is developing as required by written English academic discourse.

The literature review sets out some of the differences in how cohesion is achieved across English and IsiZulu and this knowledge is then used to examine whether these differences are manifest in students' written English. This is, in part, a kind of contrastive analysis which considers whether transfer from IsiZulu affects the students' writing in English. Insights from such an investigation could help to inform the content of academic literacy courses for IsiZulu speakers at Wits and other institutions; that a clearer and more relevant scaffolding process benefitting IsiZulu speakers writing in English might emerge. At the same time, where effective rhetorical or cohesive strategies which are not currently considered conventional in academic English are present, my intention is to

consider whether the range of conventions currently allowed by the academy should be broadened to include them.

1.5 Terminology

I will now set out some of the key terminology that informs this research project.

IsiZulu speaker:

This term is used throughout this paper to indicate an undergraduate student for whom IsiZulu is the main language. This is likely to be the language most widely used in the home environment of their formative years, notwithstanding the possibility that more than one language may have been used there. It is not intended to exclude the possibility that the students know other languages learned both at home and in other domains.

Cohesion:

Crystal (2011, cohesion entry) describes the Hallidayan treatment of cohesion as those features of the text which link different parts of the text using, for example, pronouns and determiners as cross-referencing devices to make ties between two places in the text. As Halliday and Hasan state (1976: 4): 'The one [textual element] presupposes the other, in the sense that it cannot be effectively decoded except by recourse to it. When this happens, a relation of cohesion is set up.' For Halliday and Hasan, cohesive relations are set up between elements of clauses rather than sentences, making many of their observations pertinent to both speech and writing at the same time. Please see the literature review for a more detailed explanation of cohesion.

Coherence:

This term refers to the property of written or spoken discourse which signifies that it is decodable due to its mode of organisation. Hinkel (as cited Ahmed 2010:212) describes coherence as: "the organization of discourse with all elements present and fitting together logically". The measure of how coherent a text is not accounted for by surface level features such as referencing and conjunctions. Instead, it is achieved through the ordering and proximity of propositions which can be understood as sufficiently functionally connected (Crystal, 2011) to allow the reader to process the text as unified and meaningful.

Reader-responsible language and writer-responsible language:

Hinds (1987:65) sets out the concept that some languages such as English ascribe the responsibility for the effectiveness of the message being communicated with the speaker or writer, while in other languages, such as Japanese, the onus is more on the listener or reader to decode and apply their own cultural knowledge in order to understand the text correctly. He calls the former 'writer-responsible' languages and the later 'reader-responsible' languages. The conjunctions system of academic written English functions as a guidance system for readers enabling them to decode the argument of the text easily, without having to assess the illocutionary force of every sentence or paragraph by themselves. This is one way in which cohesion contributes to realizing English academic discourse as writer-responsible.

Academic literacy:

Academic literacy is a broad term used to refer to knowledge of how whole academic texts are composed, as well as to particular syntactic features of such texts used to create language in an academic register. The practice of academic literacy instruction aims to promote competence in passively decoding and actively producing language that is commensurate with the dominant conventions of the written academic genres. Academic conventions vary depending on the subject specialism (Swales, 1990) and students may need to learn rhetorical conventions particular to the discourse community they are interacting with. For example, the knowledge that qualitative data analysis is more common in the social sciences than the hard sciences may need to be transmitted.

Knowledge of how Anglo-Saxon academic conventions differ from other academic cultures is also a form of academic literacy. For example, Chinese students may need to be instructed to paraphrase instead of using uncited verbatim quotations from sources seen as authoritative (Crowe, 1992). Even students with highly developed language skills are unlikely to be aware of features of the academic genres they are required to write in without some explanation of how texts are structured in their particular field. For example, academic language in the social sciences includes fewer personal pronouns as grammatical subjects and more nominalizations and passive structures than less formal genres of writing.

BICS and CALP:

Cummins has set out to distinguish between BICS (basic interpersonal communicative skills) and CALP (cognitive academic language proficiency) with a view to identifying why some bilingual learners may sound fluent in their L2 but do not produce more academic-style texts successfully. He believes that BICS does not require the same of overt instruction as CALP to be acquired successfully. The overt instruction he proposes that is required for the development of CALP can be provided for bilingual students by specific academic language education focusing on: '(1) cognitive skills; (2) academic content; and (3) critical language awareness' (Cummins, 1999: abstract).

Chapter 2: Literature Review

2.1 Introduction

The groundwork for this area of research has been laid down and explored by others, allowing for the frame of reference within which the present study takes place. In this literature review, I will focus on three main areas of academic work from which this current research emerges. To begin with, this review focuses on some of the scholarship and theory about the differing natures of spoken and written language which, from a sociolinguistic perspective, has proven to be a contentious issue.

The second is the area of cohesion, especially the work of Halliday and Hasan (1976), which is the foundation for this analysis. In addition to their seminal work, I will also describe some research which pertains to a comparison of cohesion in English and IsiZulu, notably the work of Ndlovu whose PhD (2009) thesis and subsequent article (2013) provide valuable insights into similarities and differences between how cohesion is achieved in IsiZulu when translating from English texts. Gowlett (2004) has also provided an excellent contrastive analysis of conjunction systems across IsiZulu and English.

Finally, the third major area is that of contrastive rhetoric. Kaplan's theory of contrastive rhetoric (1966) lays the groundwork for understanding that patterns of rhetorical organization differ from one language culture to another. Hinds (1987) further elucidates differences between rhetorical styles across languages by drawing the distinction between reader-responsible and writer-responsible languages. Building on these general insights, others, such as De Klerk & Gough (1996) and Makalela (2007) apply these principles to speakers of African languages writing in English.

2.2 Spoken and Written language

Much of the primary data for this research projects comes from written language, which is still the dominant mode of assessment in the academy worldwide. Knowledge of the features of the written mode, though, arise in part from the research done in contrasting written and oral modes of communication. Most scholars seem to agree that orality precedes literacy in both the individual's and the culture's linguistic development and that there are differences in oral and written forms of languages. There are sharp disagreements in the academy, though, on whether cultures with mature writing practices are in some way intellectually or cognitively more advanced than oral cultures. Walter Ong (1982:7), for example, has stated that: 'Writing, commitment of the word to space, enlarges the potentiality of language almost beyond measure [and] restructures thought … Writing gives a grapholect a power far exceeding that of any purely oral dialect.' Additionally, he equates the ability of a culture to write with its ability to participate in study (p.8), in the sense of extended and ordered enquiry into a specific area. For Ong and others this amounted to a clear distinction between oral and literate cultures; that a great divide separated them in terms of their cognitive and intellectual potential and achievement. The extent and nature of this 'divide' was challenged by Street and others. Street (1988:59) states: 'Differences between literate and oral channels of communication [were] overstated in the past and … scholars were now more concerned with overlap, mix and diverse functions in context.' Clearly, if such an overlap includes some of the analytic functions supposed by Ong to be exclusively 'written' then that would refute the belief that literate cultures possessed technologies of thought and study that purely oral cultures did not.

Although from a sociolinguistic perspective this debate continues, from a grammatical perspective, the differences between speech and writing can be analyzed for variations in syntax. Gee (1990:75) explains that speech occurs faster than writing and is therefore more fragmented and 'less syntactically integrated' than the graphically rendered language. Due to the amount of time writers have to craft their texts, they can make use of resources that speakers do not have time to employ such as 'nominalisations, participles, attributive adjectives and various subordinating clauses'. Conversely, Schleppegrell (1996:272) explains that: 'spontaneous spoken language typically employs clause chaining strategies using adverbial clauses and conjunctions to link segments of discourse'. When syntax from speech has not been sufficiently adapted for the written mode, long run on sentences can occur where clauses are separated with commas and coordinating conjunctions. One aim of the research methodology is to examine what cohesive resources the students are using in their writing to ascertain if speech-type syntax significantly appears there.

Many forms of academic writing are detached when compared to most speech acts: there are fewer first person pronouns, more complex referential cohesion is achieved without deixis, passive tenses and nominalisations are more frequent and there are fewer categorical statements. This distinction is not absolute, however, and there are examples of speech acts, such as giving lectures, which are highly structured and share some of the above features of writing (Gee, 1990:75). For the purposes of studying academic language, though, such generalizations can provide a vantage point from which to notice variations between students' language and the type of prose expected by the academy. Whilst recognizing that academic discourses have elements which are subject specific and otherwise locally situated, they possess elements that occur across disciplines and constitutes a kind of semi-autonomous discourse (Brandt & Clinton as cited in Street, 2003:80)

Interestingly, while many students writing English in their second language (L2) may be concerned that their verb tenses are not correct, academic English is more notable for complex noun phrases than difficult verb forms and, as such, fluency in these lexical constructions perhaps ought to be more of a priority for academic literacy input than verb forms. Halliday (1994:61) explains: 'Written language tends to be lexically dense, but grammatically simple; spoken language tends to be grammatically intricate, but lexically sparse.' This lexical density is made possible by nominalizations whereby activities with active agents can be rendered as more detached products as in the following example: 'The workers produced the cars more slowly,' could be nominalized as 'Car production fell'. In this example, we no longer see exactly 'who' did 'what' and the product of actual human labour can appear in words without any apparent human cause. It should be noted that such written forms can be used to hide the agents concerned in order to advance a particular agenda or ideology; or because the writer is inculcated into cultural privilege. For example, the following extract from a Wikipedia article on 'Pre-Columbian America' contains nominalisations that fail to credit the people concerned with any legitimate agency (Wikipedia, 2015). In fact, they are not even mentioned in this extract:

> The North American climate finally stabilized by 8000 BCE; climatic conditions were very similar to today's. This led to widespread migration, cultivation and subsequently a dramatic rise in population all over the Americas.

This kind of shift away from processes to products is typical of how spoken and written language vary from one another. Halliday (1994:65) explains: 'Written language presents phenomena as if

they were products. Spoken language presents phenomena as if they were processes. With this in mind, it is perhaps salient for academic language teachers to help their students become sufficiently aware of both the stylistic and potentially ideological features of nominalisations.

In summary, knowledge produced by the linguistic comparison of speech and writing affords those concerned with academic language skills development a means of analysis that can be employed to scaffold the student's academic language in the direction of the discourse conventions expected by many English-language tertiary institutions. For example, essays which sound more like speech can be analyzed for the relative frequencies of coordinating conjunctions versus subordinating conjunctions and their writers can be advised on how to restructure them accordingly.

2.3 Cohesion

2.3.1 Halliday and Hasan's model

Analyzing cohesion in undergraduates' work would not be possible without what Van Dijk (1985:5) calls the emergence of 'discourse analysis as a new discipline,' in the early 1970s. He describes this development in the following way:

> '[In] grammatical theory …, it was repeatedly maintained that grammars should not merely provide structural characterizations of isolated sentences. This and other arguments led to the development of text grammars … The study of pronouns and other cohesion markers, of semantic coherence … [and much more] began to be studied in linguistics within a new, integrated perspective.'

This notably led to the work of Halliday and Hasan outlined below which provided the tools for textual analysis in a new way.

It is important to note that the term 'discourse analysis' used in this sense refers to what Gee (2014:52) calls 'little d' discourses. That is, 'stretches of language that hang together' (Gee, 1990:115) rather 'big D discourses' that are embodied ideologies constructing and prescribing power relations between people and across society at large (Gee, 2014:52). Having said that, later discussion in this research report treats the expectation that students adopt potentially alien rhetorical strategies in order to succeed academically as a big 'D' issue; there are power relations involved in less powerful discourse practices being required to accept the conventions of the more powerful.

Halliday and Hasan (1976:4) explain how cohesive elements in a text are related to one another by showing that some textual elements cannot be interpreted correctly without reference to others. These elements work together to form a cohesive relationship which serves to create a sense of integration in the text, e.g. by employing 'the cross-referencing function of pronouns, articles and some types of adverbs' (Crystal, 2011, cohesion entry). The cohesive use of pronouns, articles and so on are needed as 'glue' because relations between various clausal elements within a text cannot be established by grammar alone (Halliday, 1994:288).

Halliday (1994:290) supposes that reference originated in the language exophorically in speech where pronouns such as 'he' and 'she' would indicate subjects in the immediate vicinity. This is an example of deixis where the referential language can only be properly decoded with reference to the local environment. Later, such pronominal and other referential resources were put to work in written language and used mostly anaphorically.

Halliday and Hasan's seminal analysis of cohesion sets out the following aspects in English:

A) Conjunction:

For Halliday and Hasan (1976:5): 'Cohesion is partly expressed through grammar and partly expressed through vocabulary', and '[Conjunction] is on the borderline between the two' (p.6). This is because conjunctions carry a lexical meaning along with a syntactic demand on the language surrounding them. E.g. 'However', indicates that the following clause, sentence or paragraph will be in contrast to something that has gone before, achieving this through its semantic properties. At the same time, it requires that the contrasting information be not in the same sentence as itself, therefore, exercising a syntactic influence on the text. Similarly, 'Despite,' has a particular contrastive meaning but also requires a noun, noun phrase or gerund following in order to be deployed grammatically.

Halliday and Hasan (1976:242) subdivide the category of conjunctions into further classifications according to how they order and interrelate the text around them. These groupings are as follows:

i) **Additive**: when clauses are related together with additive conjunctions such as 'and', 'also', 'in addition', 'furthermore', etc., the writer is indicating that further information or examples are being added to the initial proposition. This allows related, additional points to contribute to the strength of argument and signals to the reader that the matter subsequent to the additive link needs to be considered alongside what has preceded it. Additive conjunctions predominate in speech which, on the whole, has fewer subordinate clauses than writing.

ii) **Adversative**: An adversative conjunction is a signpost used by a writer to signal that the matter following it will be in contrast to the preceding or following proposition. For example: 'Although the farmer had a bumper crop that summer, he still made a net loss for the year.'

iii) **Temporal:** Here, clauses are connected by conjunctions that indicate the order of events in time. Words like 'then', 'next' and 'after that' show that one events or action 'is subsequent to the other' Halliday and Hasan (1976:261). Temporal conjunctions can also order events that occur simultaneously with the use of 'while' and 'as' for example.

iv) **Causal**: Conjunctions of the causal type relate clauses in terms one being either the cause or result of another. A simple example of a clause being a *result* is indicated by 'so' in the following: 'We were broke so we ate in.' Alternatively, the clause following the conjunction can be cohesively linked to one preceding it as a *cause* with the use of 'because' as in the following: 'We ate in because it was raining.' Both are examples of conjunctions used to create causal cohesion between clauses. Links across sentences can be set up with adverbs and phrases such as 'hence,' 'consequently,' 'therefore', 'as a result' and so on.

B) Reference:

Reference is the use of pronouns, possessives, determiners and phrases usually used 'anaphorically', i.e. to refer back to something that has previously been encountered in the text. For instance, in 'My

brother loves his wife,' we perceive a tie between 'my brother' and 'his'. This looking back into previous text is known as anaphoric reference and is more common than the other form of cohesive referencing which looks forward and is known as cataphoric referencing. Halliday and Hasan (1976:324) classify the definite article as establishing cohesive relations in the text by means of reference. Ties set up by the definite article can be made with both an anaphoric and a cataphoric orientation (Bruti, 2004:43) as in the following example: 'It was **the** best time we ever had together, **the day we spent at the Edinburgh festival**.'

C) Ellipsis:

In order not to repeat language that may appear redundant in the text, we can leave it out as the reader will 'know' what would follow if it had been written in full. For instance: 'He asked me which jumper I wanted and I told him the red', where 'red' could have been written as 'red jumper'.

D) Substitution:

This is when a word, phrase or clause is replaced by another word to avoid its repetition. In the following example: 'Do you want this book?' 'No, I want the other one', it is evident that 'one' replaces book. Equally, the predicate can be substituted as in the following: 'Shall we drive all the way to Cape Town this weekend? 'Yes, let's do so,' where 'do so' replaces the words denoting the proposed action.

E) Lexical cohesion:

In order to avoid repetition and to add additional information a proper noun, noun or noun phrase may be referred to by alternate wordings or synonyms as the text develops. E.g. 'David Beckham' may be later referred to as 'father of four', 'the former England Captain' as the text develops, with each reference providing additional information as required. This use of synonymy to add information is also an economic use of language whereby the grammatical subject carries the new information, negating the need for a whole clause to perform the same function.

2.3.2 Cohesion in IsiZulu

Ndlovu's (2013) investigation into referential cohesion in isiZulu translated health texts is one of the only studies available on referencing in IsiZulu to my knowledge. Building on the features of cohesion in English set out by Halliday and Hasan (1976), he has sought to identify whether the semiotic resources for referencing in the Hallidayan system are present in texts translated from English into IsiZulu. He also includes material on lexical cohesion, substitution and ellipsis. Many of his observations about cohesion in IsiZulu are pertinent to this research in that they provide information on the differences between the systems of cohesion in English and IsiZulu, which may relate directly to my second research question, which is discussed in the research design section.

Ndlovu has made useful observations on cohesive referencing in IsiZulu. He shows that (2013:352): 'In Zulu, the third-person [subject] pronouns (he/she) are expressed by the concord u-.' Interestingly, Makalela (2007:140) has found that: 'Conflation of masculine pronouns with feminine pronouns and vice-versa is a prominent feature among non-native English speakers … Bantu languages do not distinguish between feminine and masculine pronouns in both anaphoric and cataphoric contexts.' Furthermore, Ndlovu (2009:104) shows that there is a comprehensive system

of concords for each noun class allowing referential pronouns in English to be translated and retain their referential function. 'Instead of using pronouns as common reference items, Zulu uses prefixes.' Further to these observations of referential cohesion, he explains (2009:107) that the definite article, which according to Halliday and Hasan is commonly used in referential cohesion in English, is not present in Zulu but that determiners such as 'lokhu' (this) can be used in their place (2013:356). His work shows examples of 'lokhu' as the grammatical subject of the sentence with no accompanying noun, as 'this' would do in English.

In terms of other aspects of Hallidayan cohesion, in his PhD thesis (2009:168 & 159) Ndlovu is able to give examples of lexical reference chains in texts translated in IsiZulu. He also (2009:58) gives examples of ellipsis where nouns are ellipted but suggests that repetition may be employed more frequently in Zulu than English. Finally, he shows (2009:57) that nouns can be substituted.

His PhD thesis states (2009:349): 'The subject of reference in African languages is still underrepresented.' He reports that he struggled to find works on the use of cohesive reference in African languages, although many such studies had appeared in linguistics literature more broadly. He urges that (2009:349): 'Scholars of African languages have to consider doing research, not only on reference as used in African languages, but also on the subject of cohesion in general.' In a similar way, I have also found that there is no published research on cohesion in the writing of IsiZulu speakers producing academic English and it is hoped the study proposed may be a contribution in that regard.

It is interesting to note that by comparing the English L1 source text with its IsiZulu translation, Ndlovu was able to observe the cohesive phenomena described by Halliday and Hasan (1976) also present in this African language. However, it is perhaps worth adding that if Hallidayan cohesion is all that we are looking for, that is probably all that we shall find. What is perhaps not yet known is how fronting strategies in African languages such as IsiZulu may follow alternate modes of thematic progression (Danes, 1974) not common to English. Since thematic patterning affects the placement of given (theme) and new information (rheme) it will also affect how cohesion is achieved in the text. As Abed (2010:92) explains: 'Thematic progression gives a reader orientation as to where the information has come from and where it is going, and hence creates cohesion in a written text.' With this in mind, it would be interesting to see how further studies might investigate, for example, how verb fronting in Bantu languages affects cohesion; whether this is achieved by means not laid down in the classic Hallidayan categories. In this way, the sufficiency of a model of cohesion arising from studies into English only could be questioned and, ultimately, our knowledge of cohesion in languages in general could be expanded.

2.3.3 Comparing conjunctions in IsiZulu and English

Ndlovu's studies did not cover the systems of conjunction in IsiZulu and English. Whilst there appears to be very little published academic work in this area, some information on conjunctions is very well presented in Gowlett's (2004) *Zulu Newspaper Reader*. Using this information as a starting point I have attempted to map out the functions of the main conjunctions of IsiZulu. The purpose here is to show that an IsiZulu conjunction may have a variety of functions rendering a single-word translation into English impossible. This is in line with Gowlett's observation that (2004:li,): 'some high-frequency conjunctions in IsiZulu such as 'ukuthi, ukuba, or lapho … can have different

functions and/or different meanings,' depending on the context in which they are used. If patterns of semantic error in the use of conjunctions were to appear in the data, perhaps interference stemming from the different semantic functions carried out by each conjunction could account for this.

Class of Conjunction	**Conjunction with Typical Translation**	**Potential Interference for IsiZulu Speaker, Writing in English**
Additive	**Futhi** = furthermore, moreover, again (isizulu.net), and, also (Gowlett)	**Futhi** covers a variety of functions which are rendered by separate words in English. May lead to 'and' beginning sentences. Possible confusion over 'also' and 'again'.
	Noma… noma… = 'either … or' (Oxford)	The repetition of '**noma'** here in '**noma**… **noma**…' may be transferred into English resulting in 'or…or…'
Adversative	**Kodwa** = but, however, yet (isiZulu.net) **Nakuba** = although, even though (Gowlett, Oxford)	**Kodwa** can join two clauses in same sentence or across sentential boundaries whereas 'however' generally operates across sentential boundaries in English.
	Noma = though, although, even if (Gowlett)	If translating **noma** as an adversative into English there could be confusion over when to render it 'although' and when 'even if'.
Temporal	**Kade** = until, already, for a long time (Gowlett), long ago (Oxford, IsiZulu.net) **Lapho** = when	Potential conflation of 'until' and 'for a long time' when translating **kade.**
	Uma = if or when (Gowlett; Oxford)	Dual use of **uma** in IsiZulu may lead to conflation of 'if' and 'when' when writing in English.

Causal	**Ngoba** = because, seeing that, since (Gowlett) **Ngakho(ke)** = therefore, consequently (isizulu.net) so (Gowlett)	
	Ukuba = so that, in order that (Gowlett) **Ukuthi** = so that, in order that (Gowett)	**Ukuba** and **ukuthi** have a wide variety of functions in IsiZulu (including functioning as verbs) with no single equivalents in English.

2.4 The Theory of Contrastive Rhetoric

Kaplan looked at the reasons why some non-native speakers of English at tertiary level were not succeeding in tertiary institutions. He was not looking at the texts in terms of lexico-grammatical issues but in terms of how students were organizing texts in line with the rhetorical patterns common in their first language, rather than those expected by English. He explains (1966:13): 'Foreign students who have mastered syntactic structures have still demonstrated inability to compose adequate themes, term papers, theses, and dissertations.' Their lecturers have commented that the required material is present but '"seems somehow out of focus," or "Lacks organization," or "Lacks cohesion."' Kaplan believed that the underlying cause of the difficulties experienced by these L2 writers was that: 'The foreign student is employing a rhetoric and a sequence of thought which violate the expectations of the native reader' (p.13). Connor (2002:494.) supports this: '[To] the degree that language and writing are cultural phenomena, different cultures have different rhetorical tendencies.' These observations have been relevant for academic language teachers working with non-native speakers where L2 texts had mostly been analyzed for L1 interference at the level of lexical and grammatical issues at the sentence level.

2.4.1 Topical structure analysis

Researchers in the area of contrastive rhetorical systems have employed sets of specific analytic criteria with which to compare the way an argument develops within paragraphs, and within the whole text. Lautamatti's topical structure analysis (as cited in Connor, 1987:682) is a means of identifying three types of progressions tending to promote the coherence of a text, namely (1987:682): 'parallel, sequential, and extended parallel.' Connor defines each one in turn (1987:682): 'In parallel progression, the sentence topics are semantically identical. In sequential progression, the sentence topics are always different; the comment of the previous sentence becomes the topic of the next sentence and so on. And in extended parallel progression, a parallel progression may be temporarily interrupted by a sequential progression. Simpson (2000:305) describes sequential progressions as 'a valued characteristic of composition in academic English.' Parallel progressions and extended parallel progressions are not redundant repetitions of topics, but rather a means of maintaining a particular focus within a paragraph where the reoccurrence of the topic allows its further development.

Using this topical structure analysis, Simpson (2000) was able to measure the relative quantities of these progressions within English and Spanish published academic discourse. It was found that in English (p.305): 'parallel progressions make up 17.7 percent of the clauses, while in Spanish they are only 12.2 percent of the total clauses. Similarly, in English, 16.8 percent of the clauses contain topical development in the form of sequential progressions, while Spanish only has 6.6 percent.' In this way, topical structure analysis has mostly been applied in terms of assessing the *coherence* of texts as part of studies into contrastive rhetoric across linguistic cultures.

The current study aims to assess whether parallel and sequential progressions are constructed with lexical synonymy or reference as a cohesive strategy to link the sentences without word-for-word repetition. This area of enquiry is concerned with both coherence and cohesion. Its purpose, though, is to see whether texts that cohere with parallel and sequential progressions are also adequately embedded with cohesive elements. If there are cases of well-resolved coherence without synonymy or reference, does it matter to the reader in terms of the writer's ability to transmit knowledge or is it just a stylistic difference? This data is intended to inform my third research question.

2.4.2 Reader-responsible and writer-responsible languages

Further to Kaplan's contrastive rhetoric theory, Hinds (1987) proposed that all written languages could be classified as either reader-responsible or writer-responsible languages. Connor (2002:496) explains this distinction as clarifying whether the responsibility for decoding the text lay primarily with its writer or the reader. This is a potentially valuable insight when looking at non-native speakers' writing in English where the failure to produce a text signposted with conjunctions may not be due to the writer not knowing them, but rather not wanting to appear condescending to the reader. Salager-Meyer (2011:71) gives an example from German academic tradition where 'easy-to-follow' texts full of clearly signposted transitions could be construed as insulting by German academics, 'whose texts are dominated by the primary function of Wissensdarstellung (knowledge representation)'. Once more, what seems a natural level of writer-responsible structural explicitness to the Anglo-Saxon reader may not be interpreted the same way by other linguistic cultures. In fact, Salager-Meyer (2011:71) contests that: 'To write explicit statements may be regarded as polite in one culture and patronizing in another.' Here, academic literacy teachers perhaps ought to heed Magennis' (1997:138) warning who believes: 'Academic literature, and EFL teachers, may at times be guilty of cultural imperialism by implying that the English-style model of expository writing is the best.'

2.4.3 Critical responses to contrastive rhetoric

Notions within the English-speaking academy that our rhetorical strategies are somehow resonant with a sort of elevated, universal logic are also challenged by Atkinson who discerns a linguistic culture influenced by and orientated towards the demands of the market. He (as cited in Morgan & Ramanathan, 2005:52) proposes: 'that market-based practices are latent beneath L2 compositional practices, where our collective emphasis on "clear writing" might be seen "as part of a functional system in which efficiency and speed of delivery are central—in which knowledge is defined as a movable, transposable, commercial phenomenon—literacy as commodity".

Further to these critical perspectives, Kubota & Lehner (2004) have sought to reveal how the theory of contrastive rhetoric in its initial formulation perhaps unconsciously positioned English as the norm with other rhetorical traditions positioned as deficient in relation to it. Kubota & Lehner (2004:9) believe the theory to be '[a] well-meaning effort to facilitate second language learning,' but one that 'implicitly reinforce[s] an image of the superiority of English rhetoric' (p.9) and portrays learners as deterministically transferring their L1 rhetorical practices into English. Early studies only seemed to focus on 'foreign' students struggling with English rhetoric rather than, say, studies of English native-speakers struggling to acquire the non-linear discourse of academic Japanese. The positioning of the languages and academic cultures here seems to invariably imply more effort should be made to adjust to the conventions of English than vice-versa. Moreover, in the world of academic publishing, the dominance of English language publications and their greater visibility vis-à-vis journals in other languages, along with the pressure to have one's work cited in order achieve bibliometric significance, also contribute to the hegemonic role of English in the academic domain (Lillis & Curry, 2010:1).

Others have focused on problematizing the deterministic view of the student whose written English invariably follows a pattern of rhetorical transfer common to all from his/her linguistic culture. For example, Spack (as cited in Kubota & Lehner, 2004:10): 'elucidates the reality of multiple writer identities and proposes viewing students as individuals rather than members of a generalized cultural group,' Similarly, Zamel (as cited in Kubota & Lehner, 2004:10) recommends a broader focus capable of looking beyond deterministic rhetorical transfer and allowing for 'variability, complexity, and unpredictability' in students' writing. Likewise, Matsuda (1997:49) cautions us not to view the students as 'a "writing machine" … that creates text by reproducing the patterns provided by his or her linguistic, cultural, or educational background.' These suggestions are pertinent to the formation of my third research question which does not *assume* that the rhetorical structure of IsiZulu *will* interfere with and influence the cohesion of the IsiZulu speakers' written English. For example, lexical repetition may be due to the students' present range of productive vocabulary in English rather than to rhetorical transfer from L1.

Matsuda (1997:51) also questions whether it is an inappropriate intrusion into the primary literate identity of the L2 writer to demand that they acquire, 'a new cultural and linguistic identity' and to judge their academic achievement on their ability to do this (Land and Whitley as cited in Matsuda, 1997:51). With this in mind, it is interesting to consider if rubrics at tertiary level could be engineered to allow students writing in English as their L2 to compose in alternate or hybrid rhetorical forms especially in a country such as South Africa where multilingualism is protected by the constitution. Whilst some the knowledge generated by this research might help in the scaffolding of English academic practices for IsiZulu speaking students, this is not intended to be a tacit acceptance of the current hegemonic role of English rhetorical practices within these institutions or more broadly; knowledge of the effective use of non-Anglo-Saxon cohesive and rhetorical resources found here might help to inform stakeholders within the academy of how the range of what is considered acceptable academic English might be broadened.

2.4.4 Features of oral rhetoric in students' writing

The research of Mohamed-Sayidina (2010, abstract) describes how classic written texts in Arabic cultures, such as the Koran and classical poetry, retain the features of oral texts such as repetition of nouns rather than using synonymy for lexical cohesion. Further to this, she demonstrates that in her

Arabic speaking students' academic written English, repetition features more prominently than lexical and referential cohesion with pronouns. Here, as predicted by Kaplan, the rhetorical structure of Arabic is powerfully present in the L2 text. She explains (2010:255): 'When English writers use lexical cohesion, they tend to repeat a synonym rather than the same noun,' whereas in Arabic (p.255): 'The most common cohesive device … is the repetition of the same noun.' Interestingly, her study also shows a much more frequent use of additive conjunctions than contrastive ones. Additive conjunctions belong to the coordinating conjunction class which tend to be more frequent in speech compared with subordinating conjunctions.

I am interested in whether IsiZulu speakers' written English might also demonstrate the tendency for the repetition of nouns due to similarly strong L1 oral traditions. Hlongwane, J. B., & Naudé, J. A. (2004:15) state that: 'Repetition is a favourite stylistic device in Zulu praise poems (izibongo) and traditional narratives (izinganekwane). The lexical item may be repeated two or more times in order to heighten the communicative impact.' If this kind of oral tradition influences IsiZulu writers using L1, a possible consequence for their L2 texts is that their texts may also exhibit a relatively low frequency of synonymy and lexically cohesive items in the text. However, if this sort of synonymy is, in essence, a stylistic requirement, how deeply does it affect the formulation of the argument within the paper?

Labov's (1969) study into the logic of non-standard English among black Americans may be informative here. He demonstrates the power and coherence of an argument presented by a young black man, formed without the supposedly necessary verbosity associated with white middle-class English. He goes on to present an example of verbose language with a weaker propositional development. Labov's (1969:12) warning in this area could be perhaps be applied to insisting on an Anglo-Saxon rhetorical style of organisation exclusively: 'Before we impose middle-class verbal style upon children from other cultural groups, we should find out how much of this is useful for the main work of analyzing and generalizing, and how much is merely stylistic—or even dysfunctional.'

Circumlocution has been noted by De Klerk & Gough (1996) and Makalela (2007) as a feature of Black South African English (BSAE), both of whom identify this to be the result of rhetorical interference from L1. Makalela (2007:141) points out that: 'Discourse according to Western cultures follows the maxim 'short and to the point,' while African cultures value a 'beat around the bush' philosophy [and that] this style is not commensurate with the norms of English for Academic Purposes (EAP)'. Similarly, De Klerk & Gough (1996:365) state: 'Pragmatic transfer has been claimed in BSAE in terms of a preference for indirectness over the Anglo-Saxon norm of directness or getting to the point,' and that (1996:388): 'BSAE shares with other new Englishes … a tendency towards … using circumlocution'. This valuable knowledge about BSAE could potentially be added to by the present study. Grimes (1972:513) describes a circular type of rhetoric evidencing purposeful repetition thus:

> 'Some languages make use of a pattern of organization beyond the sentence that differs sharply from the familiar outline-like structure of western European discourse. This structure, which I call an *overlay* consists of the near repetition of relatively long stretches in such a way that certain elements in one stretch are repeated in another, while other elements are novel each time.'

This study, then, aims to evaluate IsiZulu speakers' writing for the extent to which it is linear or circular in its rhetorical organization. Once the assessment has been made, the argument in the students' writing, whether linear or circular, can be assessed for the extent to which it is supported or not supported by cohesive elements such as conjunctions and synonymy in lexical chains. It may be the case, though, that a circular argument is just as effective and I aim to investigate the strength of the propositional development present in students' writing in whatever form it exists. In addition, there is an ethical problem of expecting students, whose cultural norms are grounded in the understanding that to be direct is rude, to simply abandon that cultural practice when it comes to their L2 writing.

Cadman and Song (2012) argue that the supposed multiculturalism espoused by Higher Education institutions in Australia lacks any substantial reality for Asian students who are, in fact, expected to represent knowledge according to the Anglo-Celtic traditions of Australia. In arguing for an alternative to these hegemonic practices, she advises academics: 'to prise open for articulation and scrutiny the dominant Northern assumptions of what constitutes knowledge and knowledge-making in our own contexts.' Similarly, if South African academics are trained only to notice knowledge represented according to the norms of the Anglo-Saxon tradition, then the validity of other organizational strategies that do not infringe on the writer's cultural identity may be rejected for violating stylistic conventions rather than for matters of content. An example of a discourse convention common in the Anglo-Saxon tradition is that a paragraph should contain a topic sentence. This is a sentence which demarcates the central theme of the paragraph (D'Angelo, 1986) and, according to some textbooks (Braddock, 1974), should be placed at the beginning of a paragraph. Whilst stating from the outset the central purpose of a paragraph may suit Anglo-Saxon writers, a South African student may experience this convention as contrary to a cultural preference for indirectness.

In the current socio-political reality of South Africa, success in tertiary education means speaking English and learning to be 'concise'. However, it would seem more equitable in the long run to problematize the view that a linguistic culture which prioritizes being concise is more in accordance with a model of 'universal best practice in communication', such as the one proposed by Grice (1975). Wilmsen (2009) has argued that Grice's model is in fact based on Anglo-Saxon communication conventions and that 'other languages embody behavioural imperatives different from those of English.' That being the case, instead of focusing only on what is different in non-Anglo-Saxon rhetoric, we could perhaps identify the assets of other rhetoric as part of a movement towards broadening what is allowed by the academy.

2.5 Conclusion to literature review

Whilst Ong (1982) has argued that the presence of writing in a culture indicates that its users will possess higher order cognitive and intellectual abilities, Street (1988) has questioned this, showing that functions of writing and speech are not discrete and can overlap. Halliday (1994) has argued that speaking is grammatically complex, taking the form of a 'process' while writing is lexically dense and presents as a 'product'. Halliday's insights into the proliferation of nominalisations and complex noun phrases in academic language is of major importance to academic language teachers who can provide their cohorts with overt instruction in this area. Its relevance to this study is that

nominalisations are often employed as items within longer lexical reference chains and can be combined with determiner references and I am interested in how the IsiZulu speakers are using or not using such language in their essays.

The development of discourse analysis has enabled us to analyze and understand texts at a global rather than sentential level. Halliday and Hasan (1976) have described how cohesion functions in English. This knowledge can be used by academic language teachers to describe students' writing in terms of identifying how features of this system are operating in their work. Ndlovu (2009, 2013) has shown that IsiZulu has some parallel features of the system of cohesion in English and has also identified some differences. However, there are no published papers, to my knowledge, demonstrating whether academic English written by IsiZulu speakers shows evidence of transference of the features of L1 cohesion and oral rhetorical practices into their English writing.

Kaplan's theory of contrastive rhetoric (1966) has provided insight into the potential causes for L2 essays being syntactically accurate but possessing modes of propositional development that are unanticipated by the native-speaker reader. Hinds (2001) has proposed that English, being a writer-responsible language places the onus on the writer to achieve the high level of explicitness expected by the native-speaker reader. Connor (1987) and Simpson (2000) have shown how Lautamatti's topical structure analysis can be employed as a means of comparing the frequency of those transitions typical to coherent academic texts in English with other languages and the frequencies achieved by L2 writers of academic English. The circularity of discourse common to Bantu languages has been noted in the writing of BSAE speakers by De Klerk & Gough (1996) and Makalela (2007).

I wish to acknowledge that the linguistic and cultural identities of our IsiZulu speaking students may be complex. Each individual will most likely have had varying degrees of exposure to both circular types of oral discourse and linear academic forms of writing in English due to growing up in a multilingual environment. Whilst it is not taken as a given, it seems valid to investigate whether exposure to circumlocution in IsiZulu speech gives the linearity expected in academic English an unnatural feel for the IsiZulu speaker writing in his/her L2; is there potentially a resistance to adopting a new rule when it means breaking the old one? Moreover, if the cohesive and rhetorical resources brought to the L2 text on the basis of transfer are equally effective, is it not incumbent on academic gate-keepers to allow them?

To summarize, the reading I have done so far in these areas indicates that little or nothing is known about how IsiZulu speakers are using cohesion in English and what resources they bring to the writing process from their L1. Knowledge of this, once developed, could be useful to those involved in developing academic literacy for IsiZulu speakers and potentially to speakers of other Nguni languages where there are close parallels. Additionally, if this study produces knowledge which can affirm the legitimacy of non-Anglo-Saxon rhetorical styles in academic English, it is my intention to submit this for the consideration of senior academics by publishing the results in a peer-reviewed journal.

Chapter 3: Research Design and Methodology

3.1 Introduction

Frankael and Wallen (1993:380) identify one of the characteristics of qualitative research as not stating a hypothesis from the outset but allowing hypotheses to emerge 'as the study develops'. Additionally, they (1993:380) state that the results of this type of study are written up as a narrative rather than a statistical summary. Qualitative research analyses the words and creations of the participants themselves rather than purely scoring them and rendering their responses into statistics, in the belief that there is a richness in the raw language of the participants that tells a story that statistics and numbers alone may not. The researcher then, '[constructs] a picture that takes shape as [he] collects and examines the parts' (Bogdan and Biklen as cited in Frankael and Wallen, 1993:381). In a sense, then, this study is intended to be a 'naturalistic enquiry' whereby the researcher maintains an 'openness to whatever emerges' (Patton as cited Frankael and Wallen, 1993:382). Having said that, a numerical measure of cohesion in undergraduates writing, for example, by recording and counting the correct uses of conjunctions, reference words and lexical chains is a useful as a tool to support the qualitative analysis. Counting may allow the observation that, for example, determiners such as 'this' are used more frequently than the definite article. Tables summarizing these counts may also contribute to highlighting variation in the kind of cohesion operating in different papers.

3.2 Participants

The students that form each class of participants for this research are IsiZulu majors in their second year, training to be teachers on the B.Ed. programme at Wits University. Whilst these students are often multilingual, they have identified IsiZulu as their primary language on enrolling at Wits. The choice to focus on IsiZulu speakers over other linguistic groups is based on their being the most numerous single linguistic group on campus and in Gauteng more broadly. The intention here is to produce knowledge which may benefit the largest number of students possible. In addition, IsiZulu is also the only African language major offered at Wits; as a result Wits students and staff are effective as participants and linguistic informers in this regard.

In the second year of the B.Ed. at Wits, around 60 students from a total cohort of approximately 600 students have opted to take IsiZulu as their major. Dr Ntombela, my supervisor, introduced me to this group and I discussed my research project with them. I wished to look at the cohesion of the exam scripts these students wrote in their first year (June 2014) for their New Literacies for Teachers (NLFT) module[1]. However, this group of 60, had not all written exams on the NLFT module due to a restructuring of modules available on the B.Ed. As a result, there were only 23 papers available from this group. The writers of these 23 papers formed the first group of participants for this study.

The second class of participants was formed in the following way: I asked all the IsiZulu speakers from the IsiZulu majors group to attend a data collection session where they would write papers for me on the LOLT issue at Wits in both English and IsiZulu. Around 40 students attended and wrote papers for me. From these, I selected the students whose NLFT essays I had already analyzed. This

[1] The New Literacies for Teachers module is taken by all B.Ed students at Wits University. In this module, literacies are treated as multiple in nature. For example, digital literacy, academic literacy and school literacy each exhibit distinctive features. Student teachers are encouraged to reflect on their own literacy practices and, in doing so, are better equipped to communicate features of literacies to their learners, once the student teachers have qualified.

selection was motivated by the fact that the second class of participants would also be taking part in interviews and I wished to address in interview some points arising from all the data sets at my disposal. In total, I had 14 sets of NLFT exam scripts and LOLT papers in two languages. Since two of the papers in this data set were very short, I discarded these. The students in question had been expected at another class and were not able to spend long on their work. The second class of participants is formed by the writers of the remaining 12 papers. This second group of participants needed to be smaller than the first due to the amount of time needed to identify features of cohesion in two languages and subsequently interview each of the participants.

3.3 Research instruments

The following table describes each research instrument and how it was used to collect the data. They are arranged in chronological order:

First class of participants	1. I analyzed students' essays from the June 2014 'New Literacies for Teachers' exam to investigate how they used cohesion in their writing in English and what type of rhetorical organization was operating there. I referred to the questions set out below for this purpose.
Second class of participants (12 students)	2. I asked the second class of participants to write an answer to the following question in *IsiZulu*: 'With reference to your experience of the advantages and disadvantages of using English as the language of instruction at University in your first year, make an argument for or against the use of IsiZulu instead.' They then rewrote or translated their original text into *English*. This allowed for a comparison of the cohesive and rhetorical resources brought to each text.
Second class of participants	3. I conducted interviews with focus groups consisting of 3 or 4 participants during which I asked them questions intended to triangulate inferences drawn from data sets 1 and 2 with particular reference to rhetorical organization in their writing.

3.4 Data Collection and Analysis

3.4.1 Methodology for Research Instrument 1: Essays on 'Technology in the classroom'

The first year undergraduates were given four articles to read at home prior to taking the mid-year NLFT examination in June 2014. The prior reading was intended to allow them to include ideas and citations from the papers in their written exam paper in the construction of an argument in response to those papers. This exam question asked students to form an argument around the advantages and disadvantages of using technology in the classroom. Prior to this, there had been a focus on the construction of an argument as part of academic literacy input as part of the NLFT module.

(i) Features of cohesion in the texts

The features of cohesion I analyzed in these scripts are those set out by Halliday and Hasan (1976) in the literature review: reference, conjunction, lexical cohesion, substitution and ellipsis. This was, in part, a 'little d' discourse analysis approach to collecting and analyzing the data according the definition given earlier by Gee (1990; 2014) where stretches of language are analyzed. In dealing

with rhetorical patterns, though, and the current requirement that the less powerful linguistic culture accommodates the more powerful, it also involves big 'D' discourses. The questions set out below and subsequent data analysis are concerned with both types of discourse analysis:

Type of cohesion	Researcher's questions about the text
Reference	• How has the writer used pronouns anaphorically to refer to earlier instances of the noun? • What kind of referencing is present in the text? E.g. Are there references comprised of [determiner + noun] such as 'this issue' or [conjunctions + reference] such as 'because of this'? • Is the definite article used accurately?
Conjunction	• What are the relative frequencies of additive vs adversative conjunctions in the text? • What are the relative frequencies of coordinating and subordinating conjunctions in the text? • Is the writer aware of the syntactic conventions required by the conjunction they have used? • Has the writer chosen the conjunction correctly according to its meaning in English?
Lexical cohesion	• How has the student used synonyms in creating lexical cohesion? • What other kinds of lexical cohesion has the writer employed?
Ellipsis	• How has ellipsis been used in the text?
Substitution	• Are there examples of substitution in the text? • How has this been done?

For the 23 papers I analyzed, I recorded instances of cohesive phenomena in each category. I recorded these in the following way: I read each script a number of times, marking reference words and conjunctions used accurately and inaccurately. Then, I tracked instances of lexical chains in the texts and highlighted each chain in a separate colour. Finally, I re-read each text to note instances of ellipsis and substitution. Once all the scripts had been marked in this way, I was able to add up instances of each feature of cohesion across the entire data set and add this information to a table. The beginning of the data analysis chapter shows samples of scripts marked according to this methodology, along with several tables of data derived in this way.

Compiling data in this way afforded, for example, a direct comparison of the number of subordinating and coordinating conjunctions in the texts and a juxtaposition of accurate uses of the definite article along with inaccurate uses, among other contrasts. In this way, the data provided knowledge of how various areas of cohesion are functioning in the IsiZulu speakers' written English.

Where there were noticeable patterns of good practice and areas for development, these informed decisions on what the most appropriate content for academic literacy input might be.

(ii) Features of rhetorical organisation in the texts

In addition, I also read the same technology essays to look for the following aspects of rhetorical organization:

Researcher's question
1. Is there an argument in the paper with claims, evidence and counter claims? 2. Is there a linear or circular progression of the argument in the paper? 3. Is the rhetorical structure employed by the writer effective in conveying the argument? 4. Are the writers' views stated explicitly? 5. Are there are examples of parallel progressions in which the 'theme' is repeated to develop on the previous 'rheme'? 6. Are there sequential progressions in which the 'rheme' of the previous sentence becomes the 'theme' of the next, in order to develop the idea? 7. What lexical resources are used to introduce parallel and sequential progressions? 8. How is the circular organization of the text effective in ways that a linear progression is not?

This aspect of the data collection relates primarily to my third research question on whether the rhetorical structure of IsiZulu influences the organization of the English text. In order to ascertain if the argument was linear or circular, I made a list of the main ideas appearing in each paragraph as they appeared in each paper. Then, I re-read this lists to see if certain ideas has been repeated or not. I then added observations on the degree of repetition in each paper to a table enabling me to count how many papers were written in linear and circular styles respectively. This list of main ideas also enabled me to notice when the writer was making explicit position statements.

Next, I read each paper thoroughly to see how many sentence transitions in each paragraph evidenced parallel and sequential progressions. In order to do this, I noted the theme of each sentence in each paragraph and noted the number of times the theme was the same in consecutive sentences. Next, I read each paragraph again checking to see when the rheme of a sentence substantially formed the theme of the sentence following it. Counts for both of these were recorded in a table. To this table, I also added information on what lexical resources were used for each transition. I classified them either as verbatim repetitions or instances of synonym / paraphrase. This data afforded a clear of view how existing coherence and cohesion strategies were contributing to the texts in this area.

3.4.2 Methodology for Research Instrument 2: IsiZulu and English texts on the LOLT issue at Wits

The papers written by the second class of participants in both IsiZulu and English on the LOLT issue contributed additional data in the areas of rhetorical structure and cohesion in the undergraduates' writing. The following table indicates the main points of enquiry in each area:

	Researcher's question
Rhetorical structure	Does the rhetorical structure of each text follow the same organizational pattern? I.e. Are both the IsiZulu and English texts linear or circular in terms of rhetorical style, or are there differences?
Cohesion	When the writer has translated references from IsiZulu to English, has this been done accurately? How are conjunctions used in both texts? Are translations of conjunctions from the IsiZulu text into English accurate?

The central purpose of this phase of data collection was to ascertain if the rhetorical structure in both their IsiZulu and English scripts was the same or different. I wanted to assess whether the writers demonstrated competence with more than one set of rhetorical conventions. In other words, do these bi- or multilingual students vary their rhetorical and cohesive resources according to the conventions of the language they are using? This research instrument allowed for data to be collected on this question.

Since I do not speak IsiZulu, my supervisor, Dr Ntombela, acted as an expert informant on IsiZulu enabling me to carry out the required data analysis. Initially, I made a list of the main ideas in each paragraph in the English text and recorded them. I looked for instances of ideas being repeated in these English scripts. I then took these scripts to Dr Ntombela, who summarized the main point of each sentence in the IsiZulu text for me. I then noted the appearance and reappearance, if any, of these ideas in each script. This contrast enabled me to notice if the rhetorical structure of the IsiZulu text differed from the English. In this way, I recorded differences in the linearity or circularity of each text.

In addition, I noted instances of conjunctions and pronouns in the English texts and highlighted them in the scripts. Dr Ntombela's translation of the IsiZulu texts enabled me to see whether similar or different cohesive resources were present in the IsiZulu text. Where translations had taken place I noted whether they were accurate or not. Conjunctions that were present in the English text but not in the IsiZulu text were also noted. This data was used to corroborate findings from data 1 set in the areas of reference and conjunctions.

3.5.3 Methodology for Research Instrument 3: Semi-structured interview

Thirdly, I interviewed 10 of the students forming the second class of participants. The interviews took place in focus groups of 3-4. These interviews were conducted in a semi-structured manner in order to investigate their experiences of thinking and writing in both English and IsiZulu. With this data, I hoped to be able to better understand the background to their development as writers in English and IsiZulu.

A major focus of the interviews was to investigate the undergraduates' experience of using the Anglo-Saxon rhetorical style advocated by the university. Was there any underlying conflict with the perhaps more deeply inculcated rhetorical styles from their practices of speaking and/or writing IsiZulu? In order to do this, I established how much formal instruction in academic writing had taken place in each language, and the extent to which Anglo-Saxon and/or IsiZulu rhetoric had featured in such instruction. Similarly, given oral IsiZulu's nuanced use of repetition, I also wanted to investigate how students felt about the convention of *not* using repetition in academic English and whether there was any conflict in this area. In addition, I wanted to establish how students felt about the convention that English, as a writer responsible-language, should be signposted with conjunctions to make the transition of ideas explicit for the reader. Was there conflict in this area? Finally, I wanted data on their views about the institutional language practices they are operating within at Wits; to establish their experience of whether these practices disadvantaged them in any way.

This stage of the data collection was used to triangulate inferences drawn from the analysis of their writing in data sets 1 and 2. For example, in data sets 1 and 2, it appeared that the students were largely comfortable creating writer-responsible texts with conjunctions but I also wanted to corroborate this inference with their expressed views on the issue. In this area, the IsiZulu speaking students themselves are the experts on what they think and feel about the languages they use.

The questions listed below were intended to be initial points of enquiry that could lead to further unscripted dialogue. At times, the exact wording of the question varied in order to make explicit links to previous questions in the most comprehensible manner achievable at the time.

	Researcher's Question
1)	Where did you go to school and what was the LOLT?
2)	Which language is easier to write in: English or IsiZulu?
3)	When writing in English, do you think first in IsiZulu then translate into English?
4)	Have you been instructed to write using the 'introduction, claims, support, conclusion' type of essay format?
5)	Does it feel natural to write in this genre or would you prefer to write a different way?
6)	Were you taught to write academic IsiZulu? If so, was it the same format or a different format (as above)?
7)	Do you ever feel like repeating material in an essay but do not do so because you are not allowed?
8)	When using conjunctions widely in your writing, to do ever feel that this will create a negative effect on the reader: that your point is obvious so it doesn't need be signposted so clearly?

9) Could Wits University do more to be flexible in these matters?

Once I had conducted the interviews, I transcribed them from recordings into word documents, except in one case where a student had preferred not to be recorded. Once transcribed, I read the responses to each question and noted areas of similarity and contrast in the students' responses as well as looking for corroboration with earlier sets of data. The analysis of this data can be found in the second part of chapter 5.

Chapter 4: Analysis of data set 1

4.1 Introduction

I obtained 23 scripts of students enrolled as IsiZulu majors on the second year of the B.Ed. and analyzed this data according to the questions described in the previous chapter. The following are two examples of papers marked up with features of cohesion highlighted and made more prominent with bold and italic typefaces. Please see appendix iv for a key to the mark up used here.

Paper 14

Technology is essential to both teachers and students in the classroom. The reason is that technology provides learners with skills and ***it*** provides more information to learners. Students enjoy learning online or learning using technology, by ***that*** technology enhance learning in the classroom. Technology gives teachers and learners the opportunity to learn from other people across the globe Scwartz (2013). Technology is very essential because teachers and learners get involved in blogs, help learners think critically, blogging promotes creative, intuitive and associational thinking (Miller).

Technology are a large term ***it*** includes internet, with the use of the internet learners can be able to search for difficult terms in the internet to assist in ***their*** learning in the classroom.

I believe that technology is essential to both teachers and students in the classroom, because everything in the classroom is printed using technology, the worksheets are also products of technology. With that I conclude by saying that technology need to be strategically implemented in every learning area.

Paper 17

My position in this argument is that technology should be used for teaching and learning in classrooms. Reason being is that there are far too many learners who are in high schools but has never touched a computer. ***That*** makes me want better technology to be included in classrooms. However computers and internet are not the teacher, teachers need to continue doing ***their*** jobs of teaching [rep] because ***this*** [inexplicit or unclear ref] leads to learners having to google everything. For example last year in my matric I went on town to do my assignment in a library but ***they*** did not have textbooks for what I wanted, ***they*** referred me to a computer and I did not know a thing about computers. As a result I did not do my assignment.

Technology should be used in the most appropriate manner where at school ***they*** have a period made for teaching the use of computers not that everything is done by a computer because computers are not teachers and pens. (Cuban 19998) agrees that education should be enhanced by technology not to be defined by ***it***.

However, technology in classrooms is not a bad idea but what will happen when ***it*** is no longer there. I suggest that ***this*** strategy [unclear ref] should be done is secondary grades and upward not in primary school. (Cuban, 1998) strongly agrees that the stages of learning and of cognitive development remains unchanged even in an increasing technological methods.

Here, the lexical chains are marked in distinct colours. For example, lexical items related to technology are written in yellow and items related to pedagogy and the learning process are in blue. Conjunctions are not highlighted but marked in brown. Pronouns and determiners used as anaphoric references are marked with a bold, italic font. As these colours and highlights show, it is evident that there are many cohesive devices operating in both the above papers. In fact, this is true across the whole data set. The following chapter sets out an analysis of the data obtained by this method of noting cohesion, as well as data on the rhetorical structure and parallel and sequential progressions evident in the texts. Where language is quoted from a particular script as an example, I have not corrected the language.

4.2 Cohesion

4.2.1 Reference

(i) Definite Article

Although the correct use of the definite article in English is considered to be a difficult area for speakers of BSAE (Walt & Rooy, 2002:121), this data set shows the overwhelming number of usages of 'the' are accurate according to standard English, as seen in the following table:

Script no.	No. of articles used correctly	No. of missing articles	No. of zero articles required
1.	11	0	1
2.	12	2	5
3.	7	2	0
4.	14	2	1
5.	11	1	0
6.	7	0	4
7.	13	4	4
8.	9	0	2
9.	11	1	2
10.	9	2	1
11.	10	0	0
12.	22	0	0
13.	7	0	0
14.	12	0	0
15.	18	0	2
16.	6	0	4
17.	4	0	0
18.	6	2	0
19.	10	0	0
20.	13	1	1
21.	14	0	4
22.	6	0	0
23.	32	0	5
Totals	264	17	36

(ii) Errors with 'zero' articles

However, given that 16 of the 23 writers made at least one mistake in this area, there may be a case for some input in this area. The most noticeable pattern of error occurring in the data was a tendency to use a definite article when a 'zero' article would be expected in standard English. 'Zero' articles indicate a noun being used in a generalized sense rather than as a mention of a noun previously acknowledged by the writer. The data set shows this type of error in 13 out of 23 papers. Here is an example of the writer overgeneralizing article use, from the opening line of the essay.

> "Technology plays an important role in learning in the classrooms." (paper 6)

Since this is the first line of the script, it is too early to be referring to a specific, known or limited set of classrooms and seems, therefore, to be a case where the zero article would be accurate.

The following example shows the zero article operating correctly:

> "I am against the use of ^ technology at ^ school" (paper 22)

(iii) Absent definite articles

Also occurring at a slightly lower frequency is the absence of the article where one would be required, as in the following example:

> "Technology should not be used in ^ classroom" (paper 16)

Since this is the first line of the script, either a definite article or the plural 'classrooms' would be required to locate which particular classroom or classrooms are being referred to.

Whilst there were only 17 cases of this error across the whole data set, this type of error was present in 9 of the papers. To a significant extent, the definite article's accurate referential use has been acquired by these undergraduates, with some still making errors in this area. As the table shows, the vast majority of article uses in these papers are correct.

(iv) Use of Pronouns

The data set also provided a picture of how accurately references with pronouns were used. Every paper in this data set contained pronouns used referentially with a high level of accuracy. Here are some examples of the successful use of pronoun referencing from one paper:

> "Technology plays an important role in the classroom as it brings about new and effective changes in the education system." (paper 13)

> "Nowadays, cellphones are widely used our society, thus they must be allowed in schools." (paper 13)

As the following table shows, there were very few errors with pronouns:

Paper no.	Double subject	Singular/plural agreement error	Ambiguous reference
1.	1	1	0
2.	0	0	0
3.	0	0	0
4.	0	0	0

5.	0	0	0
6.	1	0	0
7.	0	0	0
8.	0	2	0
9.	0	0	0
10.	0	0	0
11.	0	0	0
12.	0	0	0
13.	0	0	0
14.	0	0	0
15.	0	0	0
16.	0	1	0
17.	0	0	0
18.	0	0	0
19.	0	0	0
20.	0	0	0
21.	1	0	0
22.	0	0	0
23.	2	0	0

Keih (as cited in Ndlovu 2013:352) states there is a correspondence between the referential function of subject and object concords in isiZulu and pronouns in English. Ndlovu (2013) asserts that aspects of referential cohesion across the two languages can be regarded as 'a problem that needs attention since isiZulu is structurally different from English.' A specific transfer error that is thought to occur frequently for IsiZulu speakers is adding a pronoun as a second reference to the subject of a sentence. Nzama (2010) gives the following example of this: 'Umfana yena akakufuni ukudla … could be literally translated as: The boy he does not like food.'

However, as the above table shows double subjects did not appear as a very significant issue in this data set. In fact, I noted only 5 cases of such a structure appearing in this set. Here is an example from this limited set of errors:

> "I firmly believe that technology it is a distraction towards learning in the classroom." (paper 23)

In addition, there were only four singular/plural agreement errors in the data set where a pronoun, such as 'it', was used to refer to a plural noun instead of 'they' or 'them', as in the following example:

> "People in developing countries have developed love for mobile phones, some are using it for learning and other entertainment." (paper 16)

Given the very low number of errors in this area and the consistently accurate use of pronouns, the overwhelming impression afforded by the data is that this aspect of cohesive referencing in English is largely acquired by these undergraduates.

(v) Inexplicit references

I have not noted any instances in the data set where a reference cannot be decoded by the reader, on the grounds of ambiguity. However, there is a use of 'they' prevalent in the texts which, being relatively inexplicit, does require the reader to do more processing of the text than would be necessary had the reference been resolved with more lexical specifity, as in the following examples:

> "For example last year in my matric I went on town to do my assignment in a library but they did not have textbooks for what I wanted…" (paper 17)

> "Technology should be used in the most appropriate manner where at school they have a period made for teaching the use of computers not that everything is done by a computer because computers are not teachers and pens." (paper 17)

Progress towards maintaining a more analytic tone may be aided by highlighting where instances of 'they' could be replaced with more specific lexis. For example, 'the institution' could replace 'they' in first case above. At times, a passive would also seem a valid choice where the identity of the agent is deemed unnecessary for inclusion by the writer.

Here is a sample of material that might be helpful as part of academic literacy input in this area:

Look at the following text. Who does 'they' refer to in each case?

"When I first applied to this university, I had some difficulty with my enrolment. They wanted certain paperwork that I did not have and did know how to obtain."

Now consider which of the following phrases may allow the reader to identify who is being referred to more specifically: a) the staff b) the admissions office c) some people d) the workers
Alternatively, how could you rewrite the second sentence beginning with 'There were…'?

(vi) Pronouns and identity

An interesting confluence of pronoun use and identity expression has also surfaced in this data. The writers were required to reference papers written by educators and academics in their essays and situate themselves within the debate about the use of technology in the classroom. Some of the writers chose to identify themselves with educators and teachers with use of the first person plural pronoun 'we' and others did not. The latter group seemed to identify more with the learners. The following is an example of an undergraduate identifying as a teacher:

> "So I think that what I understand about this statement is that we should not rely on technology all the time as teachers we should identify the areas that needs technology the most and also identify those who need not be used with technology." (paper 6)

Conversely, here is an example of a writer who appears to identify more as a learner:

> "We do not need to be sitting with a textbook to learn and to prepare for the next lesson or to learn for a test because our cell phone laptops and smart phones connect to the internet which allows us to search for all kinds of information." (paper 12)

Interestingly, there was an occasion when the writer alternated between the use of the first and third person pronouns when discussing learners, which perhaps indicates an intermediary stage of identity development if it is not an error:

"When we do understand a question, we post it our tutor's Facebook account." (paper 3)

"They can also use Boosty which allows learners to study by SMS." (paper 3)

This interesting variance could perhaps be the focus of further research whereby the frequency of such pronouns use could be tracked in papers written throughout the first and second year of the B.Ed study. That has sadly been beyond the scope of the present study, however.

(vii) Gender specific pronouns

Although this particular writing task did not lend itself to the production of a large amount of gender-specific pronouns, there was one case of error here, where the academic 'Miller' was referred to as a 'he'. It is possible, though, that the writer did not recognize or recall the gender of the author. The other three papers that referred to her did so correctly. Given the relative infrequency of gender specific references in this type of argumentative essay, this is too small a data sample to be informative.

(viii) Determiner references

The determiners *this*, *that*, *these* and *those* are powerful cohesive tools allowing references to be made to long ideas in aforementioned text. They are, therefore, a means of reducing the redundancy that can occur through repetition. I have included data on the use of [determiner + noun] references from the undergraduates' technology papers in this section on reference, although this device potentially represents aspects of reference, substitution and lexical cohesion. In fact, Halliday and Hassan (1976:85) state that: 'There are many instances of cohesive forms which lie on the borderline between two types and could be interpreted as one or the other.'

(ix) Determiner only references

The following table shows of the use of the above determiners in the first data set. The final column indicates those references whose referents were ambiguous:

Script no.	This	That	These	Those	Other	Ambiguous references
1.	0	0	0	0	0	0
2.	3	0	0	0	0	0
3.	1	1	0	0	0	0
4.	0	3	0	0	0	'and with that…'
5.	0	0	0	0	0	0
6.	0	0	0	1	0	0
7.	0	0	0	0	0	0
8.	0	0	0	0	0	0
9.	0	0	0	0	0	0
10.	0	1	0`	0	0	0
11.	0	0	0	0	0	0
12.	0	0	0	0	0	0
13.	1	0	0	0	0	0
14.	0	0	0	0	0	0
15.	1	0	0	0	0	0
16.	2	0	0	0	0	'this is true…'

						‘this means…’
17.	2	1	0	0	0	‘this leads to learners’’ This strategy’
18.	3	0	0	2	0	‘This could lead them…’
19.	2	0	1	0	0	‘We encounter these…’
20.	2	0	0	0	0	0
21.	1	1	0	0	0	0
22.	0	0	0	0	0	0
23.	0	2	0	0	0	0
Totals	18	9	1	3	0	This = 5 That = 1 These = 1

In total, there were 31 uses of determiners used as cohesive reference items across the data sample. This is a low total for 23 scripts and indicates capacity for development in terms of the frequency with which these determiners are used. This is also supported by the fact that there were no determiner references in 8 of the 23 papers. In addition, 7 of these 31 instances were ambiguous references. This means that almost a quarter of the determiner based references did not link the text cohesively and this seems like a high degree of error.

Here is an example of ‘this’ used to link ideas where the reference is clear to the reader:

> “When learners are allowed to use cellphones in the classroom discourse this can be a good thing to learners as they will not be writing but typing…” (paper 24)

The following is an example of ‘this’ whereby the reference is inexplicit:

> “Technology must be questionable to all us in terms of usage. It must not be exposed to learners too much they should learn to answer on their own. This could lead them in problems not to think on their own.” (paper 18)

It is probable that ‘this’ refers to ‘unrestricted access to technology’ but it requires the reader to volunteer the probable coherence to the text when a more explicit reference would requires less decoding.

Given the relatively low frequency of such references across this data set and the fairly high occurrence of ambiguous or inexplicit references, it would appear valuable for academic literacy development to focus on this area. A methodology for input would be to explore the possible influence of deitic references from speech creating ambiguity in the undergraduates’ writing. In the written mode, the physical world does not contribute to establishing the context for our reference. Awareness of this could be raised be raised by, for example, playing a video of an interaction in a shop, where the customer uses phrases such as ‘this one’, ‘the one next to red one’ which are only decodable by the context. The transcribed dialogue could be given to students who are then asked to identify any references that cannot be decoded without the visual context. Input could be given on how references are made explicit in writing. Samples of the academic writing with ambiguous uses of ‘this’ could then be given to the students for correction.

(x) [Determiner + noun] references

[Determiner + noun] references are powerful devices for replacing longer stretches of text with lexical economy and very specific linking. For example, the use of 'this problem' in the following fabricated example illustrates the ability of the [determiner + noun] device to replace much longer stretches of text, quite differently from the action of personal pronouns:

> 'The rand is losing value against many other internationally traded currencies. This problem is making it difficult for South Africans to travel to some countries.'

This following table shows those instances of such [determiner + noun] combinations found in this data set:

Script no.	This + noun /That + noun These + noun / Those + noun	Ambiguous references
1.	These advanced tools / those questions =2	0
2.	Those computers / This access = 2	0
3.	This essay / those ipads = 2	0
4.	0	0
5.	These social networks / those students = 2	0
6.	These devices / this statement = 2	0
7.	These cellphones x2 / These software / These things = 4	These software
8.	That village = 1	0
9.	That village / these devices x3 = 4	0
10.	That word / these technologies = 2	0
11.	0	0
12.	This program = 1	0
13.	0	0
14.	That technology = 1	0
15.	These gadgets / these children = 2	0
16.	0	0
17.	0	0
18.	These children = 1	0
19.	0	0
20.	0	0
21.	0	0
22.	0	0
23.	0	0
Totals	26	1

It is notable that there are fewer ambiguous references when the writer has used a noun following the determiner than was evident in the previous section where determiners by themselves. In fact, only 1 of the 26 instances here were ambiguous. This increased success at creating explicit

references with the [determiner + noun] combination indicates that those students having difficulty creating explicit links could benefit from adding an accompanying noun instead of writing a single determiner.

References comprised of [determiner + noun] were noted in 12 out of the 23 scripts assessed. Most were linking by repeating the first instance of the noun as in the following example:

> "Technology can help answer many basic questions. A teacher cannot always have the correct answer to give to the learners, therefore, technology play a vital role in answering those questions" (paper 1)

What is notable, then, about the instances of [determiner + noun] referencing in this data set is the relative absence of the use of abstractions to refer to whole ideas mentioned in earlier parts of the paragraph. In other words, they are not yet fully realized as a resource to produce lexically dense text as the nouns are not used to substitute for longer stretches of text. The following fabricated example show how this can done:

> Garcia (2007) states a firm belief that relaxing school policies to permit bilingual children to communicate with resources from both languages will allow a broader access to knowledge. This idea is resisted in some quarters, however.

I noted only three [determiner + noun] references in the 23 papers where the abstraction of the noun went beyond either a repetition or a synonym for an earlier noun. Here is one of those examples:

> "Miller states: '…We must assess the implements available for each specific discipline…'. What I understand about this statement is that we should not rely on technology." (paper 6)

Here, this use of the [determiner + noun] combination provides an authorial comment on a citation.

The low frequency of such linking points to an opportunity to raise awareness of [determiner + abstract noun] combinations as part of academic literacy provision designed to provide tools to comments on citations and refer to entire ideas. Combinations such as 'this idea', 'this principle', 'this process', and 'this approach' could help the writers achieve greater density in their writing.

Coxhead (2000) has compiled a list of frequently occurring academic vocabulary and suggests that: 'The direct learning and direct teaching of the words in the [academic word list has] value.' Alemi, Sarab & Lari (2012) have shown that explicit instruction of key words from academic word lists can broaden students' lexical capacity. Importantly, Mozaffari & Moini (2014) have analyzed a corpus specifically compiled from articles on education and noted the key word frequencies. They found significant differences between Coxhead's (2000) original list and the results from the discipline specific corpus they investigated. This indicates that academic literacy input specially designed for education undergraduates may need to be fine-tuned for the specific discipline. More research is required here to establish exactly which words ought to be introduced. Here is a potential set of criteria which could applied to both Cohead's (2000) and Mozaffari & Moini's (2014) list in order to investigate suitable abstract nouns:

A) Which of the frequently occurring nouns in each list are abstract?
B) Which are common collocations with [this / these + noun] or [such + noun]?

C) Which of these words has the capacity to stand in for entire ideas?

Although a full investigation of this area of beyond the scope of this paper, the following is a very brief sample intended to demonstrate how such lists could be exploited as resources:

From Coxhead (2000)
Access, analogy, approach, emphasis, environment, estimate, feature
From Mozaffari & Moini (2014)
Characteristics, curriculum, concerns, evaluation, instruction

4.3 Conjunctions

This section deals with the way conjunctions have been used in this data for cohesive purposes. The additive and contrastive conjunctions noted here do not only to refer to words linking two clauses in the same sentence, but more broadly to include discourse markers such as 'however' and 'on the other hand' operating beyond the sentence level. Coordinating and subordinating conjunctions, however, are only noted when providing relations between clauses in a sentence. The final two columns contain the number of syntactic and semantic errors arising in the data. It is immediately apparent when looking at this table that conjunctions are widely used in all the scripts; joining clauses to produce longer stretches of writing is being done by all the writers:

Script no.	Additive	Contrastive	Coordinating	Subordinating	Syntax errors	Semantic errors
1	9	1	10	8	1	0
2	9	3	11	2	2	0
3	15	1	8	4	1	0
4	10	0	10	12	2	0
5	10	0	7	11	0	0
6	6	1	6	7	2	1
7	20	7	26	12	1	1
8	4	2	2	7	0	0
9	8	3	9	12	1	1
10	8	3	8	18	2	0
11	8	1	7	8	1	0
12	16	2	15	6	1	0
13	8	2	8	2	0	0
14	6	0	7	4	0	0
15	14	3	17	11	3	1
16	6	0	7	5	1	0
17	7	5	8	9	1	1
18	10	4	11	5	1	0
19	4	1	6	3	0	0
20	15	4	14	3	2	0
21	15	2	15	11	0	0
22	5	0	5	3	0	0
23	12	2	18	19	0	1

Totals	225	47	235	182	22	6

4.3.1 Additive vs adversative conjunctions

The data shows that there are a number of papers in which the use of adversative conjunctions is very limited or non-existent. From 23 papers 5 have no adversative conjunctions at all; 5 of the papers contain one adversative conjunction and the remaining 13 display a range of instances between 2 and 7. A reason for noting the distribution of additive versus contrastive conjunctions in the undergraduates' writing is that the presence of adversative conjunctions can be a sign that the writer has consciously included counter claims in their argument. Significantly, the five papers that do not contain any adversative conjunctions do not contain any counter arguments either. Additionally, none of the five papers with only one adversative conjunction contains a substantial counter argument. These single contrasts appear as caveats to the main argument, as in the following example:

> "Cellphones in the classroom can be seen as a distraction to learners but maybe if learners are given a chance to learn them during learning time they can be of big value in teaching." (paper 6)

To a significant extent, then, the absence of adversative conjunctions in this data set also corresponds with the writer's argument being one-sided. It would seem appropriate, then, that academic literacy input combine the presentation of adversative conjunctions with illustrations of how they signpost the development of a counter-argument. This could be contrasted with writing where a position is stated but not tested in the crucible of contrasting evidence. For example, two texts could be given; one with counter arguments and one without. Students could be asked to identify which writer constructed their argument with references to opposing views. They could then be asked to highlight the conjunctions which have signposted the movements in the argument to the reader.

4.3.2 Coordinating vs subordinating conjunctions

Prior to counting and comparing the number of coordinating and subordinating conjunctions in the scripts, I had expected to find coordinating conjunctions to be considerably more numerous. In fact, the actual data did not support this. Coordinating and subordinating conjunctions appear at similar rates across the scripts. This data includes the use of 'and' as a branching device but if these instances were removed, the count would be noticeably in favour of subordinating conjunctions. Here are the totals for this area:

Subordinating conjunctions	Coordinating conjunctions
Total = 235	Total = 182

At times, some writers evidenced control in the weighting of clauses with the use of subordinate conjunctions, as in the following example where the clause given emphasis is in bold (paper 8):

> Although digital cellphones might be seen as a disruption in a classroom situation**, not all of the users use it for only one purpose of having fun browsing through the internet**

At the same time, though, both coordinating and subordinating conjunctions are often situated in longer run on stretches of writing that gives the writing a speech-type feel. Run on sentences also make it difficult, at times, to assess the relative importance the writer is giving to various clauses within the sentence. As Halliday states (1976:222): 'In a paratactic clause complex, the clauses have equal status.' In fact 9 of the 23 papers had significant sections of run on language that were connected by several conjunctions. Here is an example of this:

> "From a young age you need to learn how to read and from a book and how to write because if you don't learn from the foundation then you will have problem of reading and writing when you grow older." (paper 5)

Here is another example:

> "When you use technology in class you are not doing something that is wrong because technology is essential in [our] class today as we make use of cell phones in class not to chat while the teacher is teaching but doing academic work such as reading on libraries using our cell phones." (paper 3)

In both of these examples, the writer has used both subordinating and coordinating conjunctions to connect clauses to form very long sentences. These kinds of constructions have a speech-type syntax. In speech, clauses can follow on from one another indefinitely, and only the speaker's intake of breath produces a pause. Writing does not allow for shifts in volume and emotional texturing to indicate strength of conviction on a certain matter. Long stretches of paratactic language such as those noted above can leave the reader with ambiguity over what the main point being made is. The absence of paralinguistic features seems to leave these undergraduates with a doubt over how to emphasize certain ideas, as they expressed in the interviews (question 7).

This doubt could be addressed with input on the use of subordinate clauses. Input on these clauses could provide the writer with tools to reformulate speech-type thought into a written framework that gives prominence through making decisions about what goes into the main clause and the subordinate clause. Input on this could include reading short transcribed samples of speech and asking students to identify which idea is given prominence by the speaker. The same piece of discourse could then be played as a recording and the same question asked. The point would be to raise awareness that prominence in *speech* can be communicated by paralinguistic features but that *writing* requires other resources. Students could then be asked to compare samples of writing to identify when the idea being given prominence is clear in each case:

1) Johannesburg is an interesting and it is very warm in the summer but there is some crime and unease here.
2) In spite of some crime and unease in Johannesburg, it is a warm and interesting place to live.

More examples and practice could be given, then, in rewriting stretches of paratactic language to give prominence to a particular clause by restructuring the language with a subordinating conjunction.

4.3.3 The semantics and syntax of conjunction use

The data shows very large amount of semantically and syntactically accurate conjunctions. In fact, there are only 6 occurrences of a conjunction failing to link the text semantically so that it is easily decodable by the reader. This indicates that transfer errors caused by multiple meanings of apparent equivalents (as set out in the literature review) are extremely rare to almost non-existent. The following is a rare error in selecting a conjunction inaccurately in terms of its meaning. Here, the writer begins a new paragraph in contrast to some earlier positive points. A word like 'however' would seem to be closer to their contrastive intention:

> "… the teacher can never be sure the learners are not off context if a technology it is allowed in the classroom. To keep track of that will be hard and time consuming.
>
> For example, when learners are allowed to use cellphones in the classroom discourse this can be a good thing to learners." (paper 23)

Given how rare such errors are, though, these cohesive resources, used with great semantic accuracy, are an excellent foundation for further development.

The syntactic type of error with conjunctions appears more commonly than the semantic, though. In fact, I noted 22 instances of non-standard syntactic relations around the conjunction. Here is an example of a syntax error, where 'but' is used to begin a sentence (paper 20):

> "But, using computers in classrooms can improve the learners' performance."

Whilst 'but' is sometimes used in this way in more informal writing, and it is no doubt a word in transition, its classification as a coordinating conjunction linking two clauses leads me to regard this as an error.

Syntactic errors seem to correspond, at times, with difficulties with sentential boundaries. Here is an example of a sentence being divided into two clauses, where the second clause lacks a subject and a verb, making it a fragment:

> "So let's rather use computers in classrooms for the beneficial purposes and research purposes. Than have the top of the art schools with all technological equipment you can find but not producing the satisfactory results at the end of the academic year." (paper 2)

Whilst Simmons (2015) explores how fragments can be used intentionally for meaning-making, this approach seems yet to have any currency in academic writing (Bazerman & Prior, 2003:60). Linell (2004:5) notes that speech forms are dynamic, continuously developing and free of punctuation. Punctuation difficulties may be understood, then, as a need for input on how to transform speech type structures into a textual form which adheres to the conventions of the written mode. With this in mind, academic literacy input could involve providing samples of texts with fragments and asking students to restructure the language, as in the following example:

Look at the following piece of writing. One of sentences is not complete. Identify which sentence is not complete. 'I have a brother and sister who both play football. My sister is the better player. Because she practices more.'

Two of the sentences can be joined together. Which are they?

Classifying conjunctions into inter- and intra-sentential groups may also help here.

4.3.4 Combinations of conjunctions, determiners and nouns

Whilst the vast majority of conjunction usage in the scripts demonstrates a robust acquisition of their meanings and syntactic conventions, there were very few examples of [conjunction + determiner], [determiner + linking verb + conjunction] constructions. I have chosen to deal with these constructions in the conjunctions section although they can comprise elements of lexical cohesion and determiners referencing as well as conjunctions. The following examples illustrate the kind of linking made possible by such combinations:

1. The pass rate has risen every year since the introduction of the new assessment. Because of this, the school has regarded its introduction as an unqualified success.
2. For years, women were prevented from voting. Despite this policy, the influence can be seen in the political life of the nations in other ways.
3. The roads were almost empty. This was due to the number of people watching the game.

I only noted two examples of this kind of combination used accurately in the scripts as well as two more uses where the syntax around the phrase was not resolved. Here is one of the correct uses:

> "I agree with Miller's argument that teachers must find a way to accept the use of technology in classrooms. This is because, there is a large number of things teachers and students will benefit." (paper 13)

Since many of these cohesive phrases establish causal and adversative relations between sentences, they are therefore useful in constructing an argument. They are also very common when constructing a sequential progression between two sentences. The relatively low frequency of such linking in the scripts points to the relevance of developing such explicit linking as part of academic literacy input.

4.4 Lexical cohesion

Stotsky (1983:437) attributes a writer's ability to set up lexical ties as 'lexical maturity' and 'stylistic flexibility'. In order to track the development of lexical chains in the undergraduates' writing on technology, I highlighted key nouns and tracked their repetition, replacement with synonyms and moves towards using subordinate terms. The four most common lexical chains appearing in the papers may be classified by the following superordinate terms: technology, learner(s), teacher(s) and classroom(s), as these are most frequently appearing nouns in texts. The often complex lexical cohesion in the undergraduates writing on technology is evident in the highlighted words in the two papers in the introduction to this chapter.

4.4.1 'Technology'

In all the papers reviewed, the lexical item 'technology' acts as a superordinate term; the central, most general term from which its synonyms and co-hyponyms are derived. Its frequency is perhaps due to its presence in the essay question. The lexical item 'technology' is widely repeated in the scripts with an average number around 7 repetitions per paper, and a range of between and 3 and 12 repetitions per paper. Typically, as the writer moves from general statements to more specific

claims and evidence, particular forms of technology appear in the texts. Stotsky (1983:435) notes this tendency 'for a general concept to precede the discussion of examples or aspects of the concept' is typical of essay writing in English. Most writers demonstrate the capacity to move from the general to the specific fluently.

Here is an example of such a fluent move into hyponymy commensurate with the text's shift from the general towards the specific:

> "Through technology can be in touch with school based knowledge wherever we are. We do not need to be sitting with a textbook to learn and to prepare for the next lesson or to learn for a test because our cell phone laptops and smart phones connect to the internet which allows us to search for all kinds of information." (paper 12)

However, the data does not show a broad range of synonyms for 'technology'. There is some evidence of a tendency to repeat the superordinate instead of deploying a synonym. Excluding the use of the frequently used term 'computer(s)' given its denotation of a subset of technology as a whole, only 8 out of 23 writers made a lateral movement into the lexical field with at one least synonym for 'technology'. The total number of instances of superordinate synonyms for 'technology' in the data set is 12. This equates to just over one occurrence every in every second paper. Here is an example of a synonym for technology being used:

> "However, I do not say that computers or digital media can replace teachers." (paper 20)

4.4.2 'Learner'

The development of lexical fields around the term 'learner(s)' does not follow the same pattern as 'technology'. Instances of superordinate level synonyms for the term 'learner' are more frequent than for 'technology' in the data sample. This perhaps due to the relative frequencies of these synonyms in everyday language use. Also, there are fewer available moves into subordinate categories without indicating an individual learner. The lexical field for technology, however, contains numerous examples of devices to refer to. This contrast is set out in the table below:

Most common word in chain	Superordinate level synonyms	Subordinates
Technology	Devices	Cell phones, tablets etc.
Learners	Students	n/a

Excluding pronominal references, the total number of writers using more than one word for 'learner(s)' or 'student(s) in the same text is 16 out of 23. There are, therefore, twice as many as writers using synonyms in this field compared to 'technology'. Whilst this may due in part in the relative accessibility of high frequency alternatives to 'learner(s)' available to the writers, it does appear to be strong evidence of an awareness of the stylistic requirement for variation of key terms within a text. The conventions of English in this area do seem to be widely known and followed. For many of this cohort, it may be that the size of the lexicon is a greater determiner of the range of synonyms used than a kind of transference from the oral traditions of IsiZulu. Here are the frequencies of 'learner(s)' and associated synonyms across all 23 papers:

Lexical item	No. of instances in data set

Learner(s)	81
Student(s)	37
Children	19

4.4.3 'In the classroom'

In analysing the uses of phrase 'in the classroom' in this data set, it seems apparent that this term is sometimes used to refer to *pedagogy and learning* and at others times to *geographic space*. In the following example, it seems as if one could substitute the phrase 'in the classroom' for 'throughout all the learning activities that take place in the school,' without changing the writer's intended meaning.

"The type of technology used in the classroom needs to be a kind that does not distract the lesson." (paper 23)

In contrast, here is an example of a use of 'in the classroom' to refer to the domain as a concrete geographical place, with the phrase 'teaching and learning' covering the pedagogic aspect:

> 'My position in this argument is that technology should be used for teaching and learning in the classroom' (paper 17)

The data shows writers shifting between applying the phrase in its more pedagogic sense and its more geographic domain sense interchangeably. The follows extracts are both taken from the same paper. The first instance carries the geographic domain sense and the second the pedagogic:

> "Pea, 1998, as cited in Miller, 2008 explains that technology changes constantly meaning that even the technology that we own in our classroom such as overhead projectors in few months or few years it will be replaced by something new, there will be new technology invented." (paper 1)
>
> "In conclusion, technology should be in the classrooms because we cannot ignore the technology that is changing our learners' lives in providing them with educational knowledge." (paper 1)

Of course, it is reasonable to switch between senses of the same phrase and this is characteristic of all kinds of written and spoken discourse when using polysemes, where related meanings can contribute to the cohesive texture of the text. Having noted, though, the frequency with which 'in the classroom' was used to cover *pedagogy and learning*, along with other related words and phrases in the same lexical field, I noticed variation in the extent to which the writers were also able to use more analytic language to describe teaching and learning. Such analytic language, as well as contributing to cohesion, could also allow the students to potentially explore questions more precisely. With this in mind, the following figures indicate the number of instances of the phrase 'in the classroom' and closely related phrases such as 'in classrooms', 'in class' and 'in school' alongside all other phrases referring to pedagogy or the learning process. I have not counted verbs like 'teach', 'learn' and 'study' in this count since its purpose is to uncover the extent of abstracted, lexicalized language capable of contributing to analytical and lexically dense text. This data is taken from ten of 23 papers at random:

'In the classroom'	Other references to	Range of language present:

with a pedagogic sense	pedagogy / learning	
2	2	‘studying’, ‘making some research’
4	5	‘the process of teaching and learning’, ‘learning’, ‘improving of the literacy skills’, ‘learning through written texts’, ‘blogging for academic purposes’
3	5	‘teaching and learning’, ‘using a computer to research’, ‘learning and teaching’, ‘learning’
2	2	‘do research’, ‘access information’
3	0	
4	4	‘Teaching and learning’, ‘learning’, ‘education’, ‘cognitive development’
1	1	‘quality education’
5	4	‘Education’ x2, ‘opportunities for learning’, ‘educational purposes.’
5	1	‘every learning area’, [excluding 1 phrase which appears to be a citation]
3	3	‘the education system’ x2, academic purposes
32	27	TOTAL

Whilst it is true that there are more instances of ‘in the classroom’ than the more analytic language, there are still a considerable number of lexically more analytic phrases, such as ‘the process of teaching and learning’ and ‘improving of the literacy skills’. It seems that some writers are acquiring terminology comprising the specialized discourse of education studies, affording them resources to write about processes without reference to human agency (nominalisations). Whilst there remains a considerable difference between the lexical density of the undergraduates’ writing and published academic work, the data here seems to show a group of learners developing their abilities to move into a more abstract way of writing; an existing partial acquisition of academic discourse in the education field. Some writers display more resources in this area than others, though, and 3 of the 10 papers here contain between 1 and 0 analytical references to teaching and learning.

Further attention to the process of using impersonal analytic, nominalized language would benefit many of these students, providing them with more generative power to produce lexically dense text in the academic register, although would be an extension of an existing skill for a minority of this cohort. To illustrate the need for more abstract, nominalized language, here is a script from the data set where the highlighted words show that almost every clause begins with a personal, human subject. The non-agential subjects of clauses are underlined:

I am against the use of technology at school because some other learners use it in an ineffective way.
Some learners will use technology like cell phones to make distraction on classes. A student is sitting at the back of a classroom not paying attention to the teacher, busy texting to the learners sitting in the front and that causes distraction to the learners.

Learners use cellphones for social networks and they don't use a correct form of writing they use improper language when texting to others. We don't have to apply technology anywhere and not anyone is supposed to use technology.
People must use technology wisely and effectively. They must not use it by showing things that would be harmful to others. Playing videos and music is not that useful because you are taking lot of time in wrong things instead of studying, making some research about something and get knowledge.
(Paper 22)

Further to the existing resources on nominalisations to create lexically dense texts, such in Janks et al. (2013), I also propose explicit instruction on using nominalisations as paraphrased, dense references to previously stated longer passages of text. In other words, such nominalisations would contribute to lexical cohesion. Here is a fabricated example of how nominalisations can be used to do this:

> There are widespread examples of tablets and mobiles being used effectively in class for collaborative projects. Using devices in this way can promote peer-to-peer learning as well other benefits.

Interactive activities, in a multiple choice format, offering accurate and inaccurate forms of syntax could help raise awareness of the somewhat difficult ordering choices in involved in constructing longer, nominalized phrases with pre-modification, head nouns and post-modification (Bolton, BALEAP paper). Here is an example of the kind of activity that might help in the area:

Have a look at these two sentences and identify which of the two choices has accurate word order.
'My experience of asking learners to limit their usage of technology is that, in practice, setting such boundaries can be very difficult. Limitations on usage / Usage on limitations are often not respected and the temptation to go off task is too great in many cases.
What is the relationship between the phrase you chose and the underlined words?

With such materials, it would be hoped to raise awareness of how nominalisations can link the text cohesively and contribute to lexical density.

4.5 Substitution

Examples of substitution using 'one/s', 'do', (the) same and 'so', which Halliday and Hassan (1976:91) set out as the key substitutionary devices, are very minimal in this data. I found no substitution of this kind in 22 of the papers. In fact, there was only one example as shown below:

> "It also serve time for teachers to send their grading to district but they can use email to do that." (paper 7)

Such a low number of occurrences in the texts perhaps points to the need for input on how these words can be used, with a view to producing denser text which avoids unnecessary repetition. Academic literacy input could draw attention to the use of substitution words like 'do' and 'so' to

replace clauses and entire ideas. The value of this is illustrated in the extract below where the writer has produced a long run on sentence which reads as somewhat unanalytical due in part to the way the writer has repeated the distraction idea in three places:

> 'Learners will not use the technologies to do the school work only in the classroom an example would be when the learners are using the social media or application to communicate in the classroom they will talk about things which are not part of what they are learning and they can listen to music which is a big distraction in the classroom because learner or teaching happens when the teacher is teaching and the learners are listening without listening learning will not happen or will be distracted.' (paper 23)

I have rewritten this extract in a more economic writing style and have included 'in doing so' as a substitutionary device:

> 'One disadvantage of technology in the class is that it may be not be used solely for school work. An example of this would be learners using social media and listening to music instead of focusing on the lesson and, in doing so, are certainly damaging to the learning process.'

4.6 Ellipsis

I analysed the undergraduates writing on technology for examples of ellipsis. Halliday lists various forms of ellipsis (1976) including verbal, nominal, and clausal ellipsis. This count did not include branching within sentences to allow additional adjectives, adverbs or verbs to follow on without repeating the verb:

> "The use of technology have brought about large and […] interesting developments" (paper 19)

> "However, technology should be used strategically and […] correctly" (paper 2)

Neither have I counted examples of auxiliary verbs being ellipted in the same sentence, since Halliday (1976:174) regards them as a form of ellipsis that does not contribute directly to cohesion. It is worth noting, though, that there a number of successful examples of this in the students' writing which, nevertheless, demonstrated a skill in producing dense text. For example:

> "The teacher might be teaching and […] thinking that the children are paying attention or […] doing their work whereas they are just texting each other for personal purposes." (paper 15)

> "To conclude, if technology is implemented and […] managed correctly in the classroom then working with it won't be a problem." (paper 15)

In other places, the data demonstrated a need for the development of elliptical branching strategies to avoid unnecessary repetition, such as in the following example where it can be seen that altering the syntax to place the two verbs together would have eliminated the need to repeat the adverbial phrase following each one:

> "I believe that though technology can be a distraction when it is taught in the correct way and used in the correct way productive learning can take place." (paper 11)

The following table shows the noted examples of ellipsis in the undergraduates' texts on technology in the classroom. Of the 23 papers analyzed, only 7 evidenced examples of ellipsis. In each case listed here, it is evident that the second highlighted word or phrase can only properly be decoded with reference to the earlier highlighted text. As Vujević (2012) states: 'Where there is ellipsis there is presupposition, i.e. all the examples when something needs to be reconstructed or understood.' I have written the ellipted words in square brackets to show how this has been achieved:

Paper	Example of ellipsis
1	None
2	None
3	None
4	None
5	None
6	… as teachers we should identify the areas that needs technology the most and also identify those [areas] who need not be used with technology.
7	None
8	…not all of the users use it for only one purpose of having fun browsing through the internet, some [users] might use it for academic purposes and to enhance their interest in learning. …a library in Ghana that had no books on it's shelves, hand an e-reader giving the students of that village access to hundreds of books that could never be physically sent to the library. This shows that the technology is essential in a classroom situation, despite the fact that some [of the students] might utilise it to distract others.
9	None
10	With technology, all students would type their notes, be it with their cellphones or laptops and it would be easy for teachers to read what they have written and they all would have written in good grammar. Nevertheless, the disadvantage [of using technology] would be that during exams and tests, they would have to handwrite their work and they would show poor writing skills as they would be used to. It would be good to have technology in classroom, but, the biggest disadvantage [of having technology in the classroom] is that the teachers would not be able to monitor all learners to see if they are really typing their best notes. I think as much as technology possess some good things, when [it is] put in the classroom environment, it possess more cons than pros.
11	None
12	None
13	None

14	Tech is essential to teachers and students… The reason [for this] is that…
15	None
16	Africa is the fasted growing mobile market and the second largest [mobile market] after Asia Vosloo says, there are most mobile phone subscriptions that people in Africa, meaning some people have more than one [mobile phone].
17	None
18	I agree that technology is somehow important but somehow not [important]
19	None
20	None
21	None
22	A student is sitting at the back of a classroom not paying attention to the teacher, busy texting to the learners sitting in the front [of a classroom]
23	None

As can be seen in the examples in the table, there is some evidence of the writers using substitution to omit words that can be understood by other elements preceding them in the text. Given, though, that the above table represents all of the examples noted in the data set, there would seem to be potential for further development in this area. Moreover, there were several points in their texts where almost entire [verb + complement] strings were repeated. The following example shows the kind of redundancy that can occur by such repetition:

> "So I think that what I understand about this statement is that we should not rely on technology all the time as teachers we should identify the areas that needs technology the most and also identify those who need not be used with technology." (paper 6)

The following amended example shows how the language could be made more economical by ellipting the words after the negation:

> What I understand about this statement is that we should not rely on technology all the time. Instead of this, we should identify the areas that needs technology and those that do not […].

Academic literacy on ellipsis could focus on providing exercises requiring the students to delete redundant language.

4.7 Rhetorical organisation and coherence

4.7.1 Introduction

The next section explores the rhetorical structures I have found in this data set, and also comments on the extent to which ideas are linked coherently within paragraphs with sequential and parallel progressions.

4.7.2 Rhetorical structures

A question in the research methodology asked whether the rhetorical structure employed by the writer was effective in conveying their argument. When designing the methodology, I had assumed

that there may be clear differences how various writers had structured their work; essentially I considered this may be a continuum between a linear, Anglo-Saxon organization and the circular, overlay structure (Grimes 1972:513) as set out in the literature review.

What is apparent in this data set, though, is that there is very little evidence of the writers using anything but a linear style of organization. Here is a characteristic example of one writer's progression of ideas throughout their paper:

Paragraph 1: Introduction to topic of technology use in class along with position statement in favour of using technology in the classroom.
Paragraph 2: Examples of benefits of use of technology include facilitating the search of information.
Paragraph 3: Some reservations on technology and advice on its principled usage.
Paragraph 4: Further support for technology usage detailing projects of successful use of education.
Paragraph 5: Specific focus on uses of texting in the classroom.
Paragraph 6: Concluding statement giving support for technology with a caveat that learning is also done without it.

There is no significant repetition of ideas in this paper but instead there is evidence of a move from the general to the specific and a clear intention to address various areas of the debate one by one without returning to them. Although the writer spends more time supporting the positive view of technology, there is also evidence of an awareness that a position cannot be strongly stated unless some of the counter arguments are also assessed.

In order to identify how the writer had organized their ideas, I noted down the progression of ideas in each paper in a similar way to the above table. This summary has enabled me to note incidences of new ideas alongside incidences of repeated ideas. This table presents a summary of the extent of the repetition of ideas present in each paper.

Paper No.	Researchers comments on the structure
1	Clear progression
2	*dangers of 'free access to internet' idea appears in para 2, 3, 4, and 5
3	No repetition of ideas but little analysis; list form used
4	tech use leads to self-esteem problems para 6 and 8
5	repetition of idea that technology use hinders learning to write repetition of claim that technology ruins development / learning process
6	No repetition of key ideas

7	Para 5 repeats need for introducing tech at a young age x3. Repetition limited to one paragraph.
8	Short but no repetition of ideas
9	Dangers of tech expressed in paras 2 and 3 and
10	Effective linear structure
11	Linear structure evident
12	Clear progression
13	Linear but no conclusion
14	Linear structure attempted without repetition
15	*Technology as distraction idea appears in paras 1, is developed in para 3, repeated in para 4 twice and repeated in conclusion.
16	Some inexplicit material but no repetition
17	repetition of idea that 'computers are not teachers' x2
18	*Technology use should have limits idea appears in para 1, para 2, para 3, para 4 and para 7
19	Improved access idea appears twice in para 2 near verbatim and again in para 3 very similarly
20	No repetition but paragraphing is non-standard
21	Fairly complex ideational structure but repetition of technology as distraction argument in para 1 and 2
22	Distraction idea repeated in para 3 and appears again in para 4
23	*distraction idea appears in para 1, 2, 5 (twice), 7

In all, 12 out of 23 evidence a linear development organization of ideas with no evidence of a repetition of ideas not commensurate with Anglo-Saxon rhetorical organisation. In the remaining 11 papers, there is at least one case of an idea being repeated where this repeated material is, to an extent, not typical of English rhetoric. However, it would certainly not be true that overlay rhetoric is noticeably dominant in the majority of these 11 papers. In fact, only 4 out of these 11 papers have four or more repetitions of the same idea. Only in these fours papers does the presence of repeated ideas appear contribute something like an 'overlay' structure to the writing. Conversely, a linear mode of essay writing featuring an introduction, a body and a conclusion seems a considerably more dominant mode of rhetoric organisation. For most writers, then, rhetorical transfer from IsiZulu oral and written traditions does not appear to be a significant factor in their essay writing at this stage.

This point is picked up later in the discussion of the data arising from the interviews with the undergraduates, where they contributed some valuable insights on their motivation to repeat ideas.

4.7.3 Use of parallel and sequential progressions

This interesting area of discourse analysis combines elements of cohesion and coherence. Identifying how the flow of ideas between sentences is controlled by the writer to form an argument certainly comes into the territory of coherence. That the relations between the sentences are signaled by cohesive lexical resources is more to do with cohesion. The following fabricated example is intended to show how parallel and sequential progressions can encompass elements of coherence and cohesion:

> Their attempts to build a new culture of tolerance were laudable. Such great efforts will surely bear some fruit in the long run. Such fruit, though, does not always appear when it would have the most encouraging effect.

The theme of sentence one is 'their attempts to build a new culture of tolerance.' This theme is repeated as the theme of sentence two in order to develop it. This is a parallel progression. 'Such efforts' is an example of lexical cohesion where an economic phrase intended to be synonymous 'their attempts to build a new culture of tolerance' is used. The theme of the third sentence, 'Such fruit', develops on the rheme of the second sentence where the fruit is first mentioned. This is a sequential progression. Lexical cohesion is achieved here repeating the noun 'fruit' and adding the determiner 'such.' Hence, it is clear where there are parallel and sequential progressions, there is lexical cohesion. Therefore, the following analysis looks into both how effectively these transitions are employed by the undergraduates in terms of both coherence and cohesion.

(i) Parallel Progressions

This table shows the frequency with which ideas within paragraphs were developed by means of parallel progressions. These counts relate instances of this kind of ideational development occurring within the same paragraph:

Paper	No. of parallel progressions per paper	Lexical repetition	Lexical paraphrase	Other
1	0	n/a	n/a	n/a
2	5	2 = technology …. Technology /this ….. this	3 = students … they / internet …. It / use of technology …. This	
3	0	n/a	n/a	n/a
4	1	1 = computers ... the computer	n/a	n/a
5	1	1 =children … children	n/a	n/a
6	3	1 = technology … through technology	2 = they … other children / tablets …. Using these devices	n/a
7	5	1 = children … children	4 = Technology … it / Melanie (Miller) thinks…. Miller believed…. / technology … these things / technology … it	
8	0	n/a	n/a	n/a
9	2	2 = technology … technology /	n/a	n/a

		mobile learning …. Mobile learning … /		
10	2	n/a	1 = technology …. It	Ellipsis = disadvantage [of using technology]
11	1	n/a	1 = cellphones … use of technology	n/a
12	3	3 = We… we / we … we / the article of texting in the classroom… Texting in the classroom	n/a	n/a
13	2	1 = cellphones … cellphones	1 = cellphones … they	n/a
14	3	3 = technology … technology (x3)	n/a	n/a
15	2	2 = it ... technology / technology … it	n/a	n/a
16	0	n/a	n/a	n/a
17	0	n/a	n/a	n/a
18	5	1 = he / she …. He/ she	4 = technology …. It (x2) / teacher …. He she / these children …. They	n/a
19	3	n/a	3 = The use of technology… we use technology everyday / the access …. This…. / Learners … they	n/a
20	2	2 = we …. We / we …. We		
21	0	n/a	n/a	n/a
22	2	n/a	2 = some learners … a student / people … they	n/a
23	3	1 = technology …. Technology	2 = people … they / some learners … a student	n/a
Total	45	21	23	1
		6 papers with zero PPs		

(ii) Sequential progressions

Instances of sequential progression are noted in the following table. Once again, these counts relate to sequential progression occurring within the same paragraph:

Paper	No. per paper	Lexical repetition	Lexical paraphrase	Other
1	1	n/a	….the network for all the learners' computers. Learners are free to use…	n/a
2	2	technology in education … technology	…children being uneducated. Education	
3	1	Technology in classroom. Technology…	n/a	n/a
4	0	n/a	n/a	n/a
5	1	…social networks. …these social networks	n/a	n/a
6	1	n/a	…can make a big difference. It …	n/a
7	1	n/a	…introduced to learners at a young age. If children can grow	n/a

			up….	
8	1			benefits of tech in Ghana / 'This' – stands in for whole idea
9	0	n/a	n/a	n/a
10	0	n/a	n/a	n/a
11	2		…population. People / access to information they did not know before. Searching for info online…	
12	1			use of citation to continue previous thought
13	2		educational tool … they	Need to find a way to use tech. 'This' stand for previous idea
14	1		…learners. Students ….	
15	0	n/a	n/a	n/a
16	1		…a program with English teachers. Programs leaders…..	
17	1			'that' stands for idea in previous sentence
18	1		…young and fresh learners. These children	
19	1	…access to information. The access….		
20	1	….teachers …. teachers		
21	0	n/a	n/a	n/a
22	0	n/a	n/a	n/a
23	0	n/a	n/a	n/a
Total	19	5	10	4
		7 papers with zero SPs		

(iii) Punctuation

The analysis of occurrences of parallel and sequential progressions recorded in these papers indicates that they appear at a relatively low frequency. With an average of around 2 parallel progressions and less than 1 sequential progression noted per paper, it does seem as though the development of skills in this area could contribute to the development the writers' ability to produce coherent, analytical text.

In order to demonstrate this, here is an example of a run sentence from one of the papers where punctuation could be developed:

> "Although digital cellphones might be seen as a disruption in a classroom situation, not all of the users use it for only one purpose of having fun browsing through the internet, some might use it for academic purposes and to enhance their interest in learning." (paper 8)

The actual progression of the thought in this sentence includes a parallel progression which is revealed by the following adjustment:

> Although digital cellphones might be seen as a disruption in a classroom situation, not all of their users are simply browsing the internet for fun. Some might use them for academic purposes and to enhance their interest in learning.

If such sentences had been punctuated differently, this would have dramatically increased the average of parallel and sequential progressions appearing in these papers. These run ons often possess a clear internal coherence without satisfying the criteria of extending the development of either the theme of the rheme across the sentence boundary. This is, in part, quite a positive finding in that there is often is a coherent flow of ideas even when sentence boundaries do not situate these ideas according to the conventions of academic discourse. In other words, there is some very tangible content here that might be further crafted by specific attention in this area. The extract below is an example of the kind of activity that might facilitate clearer sequential progressions so that the writers' existing ability to produce content might be framed in more conventional sentence boundaries:

Look at the following sentence and decide where to put a full stop. Try to make it clear that the second sentence builds on the final idea of the previous sentence: "So many people contributed to the moment in history when South Africa finally became a democracy, this moment will be forever remembered by the millions who voted for the first time."

(iv) Sequential progressions to address run on sentences

As previously stated, long run on sentences can obscure the development of the argument. There are several examples in the technology scripts where this seems to be the case. Here is an example of this:

> "Learners will not use the technologies to do the school work only in the classroom an example would be when the learners are using the social media or application to communicate in the classroom they will talk about things which are not part of what they are learning and they can listen to music which is a big distraction in the classroom because learner or teaching happens when the teacher is teaching and the learners are listening without listening learning will not happen or will be distracted." (paper 23)

In order to show how the input on linking sentences with parallel and sequential progressions may be of benefit in this area, I have amended the original text below and indicated the resulting sequential progressions with a green highlight:

> Learners will not only use the technologies to do the school work. An example of this would be when the learners are using the social media or other apps to communicate in the classroom. At such times, they will talk about things which are not part of what they are learning. This causes a big distraction in the classroom disrupting both learning and teaching.

The first cohesive device was present in the original text but it was necessary to divide the sentence. This was essentially a punctuation issue in the original. The second progression has been generated by the substitution 'at such times'. The causal relationship between the activities of the students and the impact on their learning has been clarified with 'this causes'.

The addition of the punctuation and the cohesive devices has also allowed for a clearer, coherent progression between the sentences. A sequential progression is formed in each case. Here, the close relationship between coherence and cohesion is demonstrated where, in pursuit of showing clearer progressions, conjunction reference and substitution have also been called on. Academic literacy work in this area, then, may help the writers to produce more writer-responsible text with a clearer progression of ideas. Here is an exercise illustrating the type of work that is possible in this area:

Look at this long sentence and decide where to break it up. You should end up with 3 sentences. You can use the following phrases to begin sentences 2, 3 and 4
Sentence 2: 'This is because...'
Sentence 3: 'As a result of this…'
Sentence 4: 'Such a memory lapse can be avoided…'

"One of most important things to remember as a new teacher is that you need to prepare before each lesson because in the early days anxiety may affect your confidence levels and you might forget what you wanted to say at a crucial time and you can help to avoid this memory lapse by having a plan to refer to."

Correct answer:
"One of most important things to remember as a new teacher is that you to prepare before each lesson. **This is because** in the early days anxiety may affect your confidence levels. **As a result of this**, you might forget what you wanted to say at a crucial time. **Such a memory lapse can be avoided** by having a plan to refer to."

(v) Lexical resources used in parallel and sequential progressions

Parallel progressions

In the 45 noted parallel progressions, 23 have been resolved by lexical variation across the two sentences forming the progression. This variation includes the deployment of synonyms, pronouns and paraphrase for the second occurrence of the topic [theme]. A further 21 have been constructed by verbatim repetition of the topic. The total of 45 does include transitions in which the theme repeated is a subordinate of a superordinate noun in the preceding sentence as in 'Technology …. Cell phones.' I have counted it as repetition if the head noun is the same of each with minimal variety surrounding it, as in 'technology in education…. Technology'. The following is an example of lexical variation:

> "However, students in schools do not only use computers for academic purposes only. Rather, they use those computers for their personal enjoyment." (paper 2)

The following is an example of lexical repetition:

> "Technology is essential to both teachers and students in the classroom. The reason […] is that technology provides learners with skills and it provides more information to learners." (paper 14)

Although, the above figure gives a relatively high number of parallel progressions achieved by variation, many of these were resolved by using 'technology' in the first sentence and 'it' in the second. This valuable use of pronouns as a cohesive strategy to be employed across parallel progressions is, however, a sound foundation upon which further strategies could be built upon in academic literacy input. As noted elsewhere, abstract nouns referring to entire ideas would be a key area of focus. This could be augmented with awareness-raising of the value of synonyms in parallel progressions. Specific attention could also be given to developing the range of abstract academic lexis at the disposal of the undergraduates. In this way, both the technique and the required lexical content might be consolidated at the same time.

The following activity could be used in order to both raise awareness of how themes are repeated in texts in order to develop an idea, as well as the conventions for varying the lexical resources used when such a theme is repeated:

Look at the following paragraph. Which idea is developed in the sentences 2, 3 and 4?'

"Life in the mines was hard. The workers often developed respiratory problems. The workers often sustained injuries due to rock falls. The workers often lived a long way from their families and did not see their children grow up."

The writer has repeated 'workers' at the beginning of sentence 2, 3 and 4. Can you think of two words that mean the same but could be replace 'workers' to allow for more variation?
E.g. miners, they

Sequential progressions

As in the above data analysis, looking at the lexical cohesion strategies used by the writers to produce sequential progressions also reveals an awareness among some writers that lexical variation can be deployed as the rheme becomes the theme as a strategy in addition to repetition. Ten of the nineteen instances of sequential progressions in the data set show some degree of variation of lexis. This is shown in the following example where a clear link between the sentences is noticeable with lexical variation in place.

> "If only ***these*** things can be introduced to our learners at the young age. If children can grow up knowing the dos and don'ts…." (paper 7)

Furthermore, there is some evidence of the acquisition of the strategy of using a demonstrative as a cohesive device to form sequential progressions, where the 'this' or 'that' refers to the entire idea of the rheme; 4 of the 19 instances were of this type. Here is an example of this:

> "Reason being is that there are far too many learners who are in high schools but has never touched a computer. That makes me want better technology to be included in classrooms." (Paper 17)

In addition, only 5 of the 19 instances of sequential progressions noted were resolved with word for word repetition of the rheme and following theme. This figure shows that repetition as a strategy for producing lexical cohesion was in evidence less frequently than variation. Having said that, a total of

ten sequential progressions using lexical variation in a data set comprised of 23 essays does seem to be quite low. As noted above, building lexical resources with academic word lists and giving clear guidance on the value of this type of sentence transition for strengthening coherence and cohesion simultaneously would be of value here.

4.8 Findings in data set 1

4.8.1 Cohesion

Every single paper in this data set provides considerable evidence of the writers' skill with the use of cohesive strategies. Some of the transfer errors considered common for speakers of Bantu languages when writing in English were not found to be prevalent. For example, a large majority of the uses of the definite article were correct and there were few double subject errors. However, a significant number of determiner based references were unclear and this is an issue that could be addressed.

There were very few cases of conjunctions being used inaccurately according to the meaning apparently intended by the writer, although errors with the syntax surrounding the conjunctions were more common. The conjunction use in this data set does, however, indicate further potential for developing control with the weighting of clauses in a more nuanced manner to give the writer's thought the correct emphasis. This would help avoid long stretches of language that maintain a speech rhythm, where clauses are built upon on one another without clear emphasis.

Once the papers had had the chains of lexically cohesive items highlighted, they were all awash with colour often indicating richness of cohesive links made between various lexical items across the texts. In terms of a developmental focus then, it is not the strategy of lexical variation in itself that ought to receive attention. There is, however, evidence that the level of abstraction in noun phrases achieved across the data is relatively low. Acquiring some abstract nouns frequently used in the area education may be useful in this area.

The evident emerging skill in three areas of cohesion listed so far are not matched, however, by an equivalent presence of ellipsis and substitution in their writing. Substitution with 'one', 'do', 'so' and 'do so' is almost non-existent and there are relatively few examples of ellipsis. Having said that, these cohesive strategies are typically less frequent in writing than speech.

4.8.2 Rhetorical structure

The majority of the papers in this data are set out according the 'introduction, body, conclusion' format. Most papers present points one-by-one in the formation of the argument and assume an identifiable linear rherotic. Only 4 of the 23 papers appear to have been written according to an overlay rhetorical organisation, with a single idea appearing as a unfiying motiff throughout the text.

4.8.3 Sequential and parallel progressions

These appear at a low frequency across this data set. When present, the lexical resources used to link the second sentence to the first are not dominated by word-for-word reptition. However, there is only limited evidence of abstract language being used to link sentences. There are numerous run on sentences in the texts which could be addressed with attention to punctuation. Run ons could also be further developed by raising awareness of more complex linking strategies used to form

sequential progressions, such as [determiner + linking verb + conjunction]. In addition, attention could be given to rendering longer stretches of language into nominalisations so as to cohesively link the text with dense lexical material when forming parallel and sequential progressions.

Chapter 5: Analysis of data sets 2 and 3

5.1 Data set 2 – Undergraduates' writing on LOLT issue in IsiZulu and English

5.1.1 Introduction

The second data set is comprised of the work of 12 undergraduates who undertook to write a short answer to a question on the LOLT issue at Wits. These 12 students were selected from the cohort whose essays on technology I had already read. The question was as follows:

> *With reference to your experience of the advantages and disadvantages of using English as the language of instruction at University, make an argument for or against the use of IsiZulu instead.*

Here is a sample of the work comprising this data set. As per the instruction given to this cohort, the IsiZulu answer was written first (paper 1):

Ukufika kwami kulesi sikhungo ngaphatheka kabi kwazise (1) phela ngangiphoqeleke ukusebenzisa isiNgisi ngezinkathi zonke. Enye into (2) eyayinzima kumina ukulalela kahle into ebengiyifundiswa njengoba (3) bekusetshenziswa IsiNgisi kuphela futhi uma (4) bengiyobuza kubo bengingalutholi usizo yingoba (5) njalo behlala (6) bekhuluma IsiNgisi.
Ngibona kungcono ukusetshenziswa kwesiZulu ikakhulu ezifundweni zethu ngoba (7) siqale ukufundiswa ngesiZulu kwibanga lokuqala kuze kufike ebangeni leshumi nambili. Lokhu (8) kuzokwenza kube ngcono ukuthola kahle okufundiswayo futhi (9) sikwazi nokuphendula imibuzo.

This English script was written directly after the IsiZulu one:

I felt bad **after** coming to this university because (1) I had to use the medium of instruction which is English at all times. The other thing (2) was that I couldn't grasp the content very well which was taught as (3) **they** were using English in lectures. To add on that (4), I never got assistance **when** I went for consultation as (5) I had to speak and understand what they (6) say in English.
I believe it is better to use IsiZulu in our courses as language of instruction because (7) from grade 1 to grade 12 all students in my school were taught in IsiZulu. This (8), **therefore**, will make it better for me to understand the content of what is being taught and (9) I will be able to answer the questions **as well**.

The scripts juxtaposed above show instances of referencing and conjunctions. Where appropriate, the number following the cohesive element shows how this element was resolved in each paper. When the writers chose to translate between the two languages, it became possible to analyze these stretches of language for accuracy. References and conjunctions appearing in the English text but not in the IsiZulu text are underlined and bold faced in the above example. Of the five of those in the above example, three do not appear in the IsiZulu text due to the writer choosing to paraphrase the original idea from IsiZulu into English with cohesive resources that were not present in the IsiZulu text. The last two underlined conjunctions, however, appear in rather similar stretches of

language and seem to represent moments when the writer has added additional conjunctions in their English answer. A potential reason for this is explored below.

5.1.2 Conjunctions

The analysis of conjunctions in this data set confirms the findings from data set 1 that the undergraduates make very few errors when using conjunctions in English. I noted only 1 semantic error in data set 2 and 5 with syntax, according to standard syntactic conventions. As with data set 1, these findings indicate that syntactic errors with conjunctions are more common than semantic ones. The advantage of data set 2 in this area is that it allowed a comparison of the two languages directly to ascertain whether the same meaning had been retained in the English writing when translating from IsiZulu. In the correspondences noted, I did not find any errors based on semantic interference from L1 to be significant, as supposed in the literature review.

The following table, then, indicates the number of semantically accurate translations of conjunctions linking very similar stretches of language across the two scripts. Since this was not a translation exercise as such, the lower numbers do not indicate errors as much as the writer choosing to structure the writing differently rather than translating it.

Paper	Noted number of accurate correspondences between conjunctions across the two texts	Errors noted in English texts with conjunctions; semantic or syntactic	
1.	7	0	
2.	6	0	
3.	7	0	
4.	2	Semantic: 'But' with non-standard semantic function	
5.	-	Syntax: 'However' in mid -position needs two commas	
6.	5	0	
7.	6	0	
8.	12	0	
9.	10	Syntax: 'the fact that' instead of 'Because of the fact that'	
10.	7	Syntax: 'because' starts sentence. Main clause in previous sentence Syntax: 'As' starts sentence. Main clause in previous sentence Syntax: 'As well as' starts sentence. Main clause in previous sentence	
11.	11	0	
12.	3	0	
		Syntax errors = 5	Semantic errors = 1

5.1.3 References with pronouns

Pronominal referencing across the two sets of scripts showed many instances where the language had been accurately restructured in the English writing to include pronouns where concords had been used in the original IsiZulu writing. This corroborates the findings from data set one where pronominal referencing appeared to have been robustly acquired. What this data adds, though, is explicit evidence of restructuring concords as pronouns. The following example, although not a

word-for-word translation, shows how the writer has moved accurately from cohesive referencing with concords in IsiZulu to pronouns in English:

> "...sizobabona bezama behluleka..."
> "...let them struggle as we do..."

In addition, there were only 4 errors noted with the use of pronouns in English which resulted in a double subject. This corroborates the findings from data set one that this is a relatively rare error. This table lists the occurrences of the double subject error occurring in English, per English script:

Paper 1	Double subject errors
1.	0
2.	0
3.	0
4.	0
5.	0
6.	1
7.	2
8.	1
9.	0
10.	0
11.	0
12.	0

The following extracts show an example of the double subject transfer error from IsiZulu:

> "English to us Zulus, it is not our mother tongue."
> "IsiNgisi kithina maZulu siyaye sibe inkinga …."

5.1.4 Evidence of additional conjunctions in the English texts

Part of the methodology in each phase of data collection has focused on establishing whether the undergraduates are comfortable with producing writer-responsible text. Very explicit prose is produced with the use of conjunctions to make navigating the text easier for the reader. In identifying patterns of conjunction use in both the IsiZulu and English texts, we noted some additional conjunctions in the English text, where they would have been stylistically inappropriate in the IsiZulu text. For example:

> "Lokhu kuzokwenza kube ngcono ukuthola kahle okufundiswayo futhi sikwazi nokuphendula imibuzo.**"**
>
> "This, **therefore**, will make it better for me to understand the content of what is being taught and I will be able to answer the question **as well**."

In the above example, the writer has added additional conjunctions in order to make the proposition even more explicit in the English text. Dr Ntombela has explained that the presence of two additive conjunctions together in an IsiZulu text would represent a form of tautology since the additive

function is already carried out by 'futhi'. With Dr Ntombela's expert language assistance, I noted 4 cases of greater levels of explication using conjunctions in the English texts in this data set. This corroborates the findings in data set 1 where the undergraduates on the whole seemed to be writing explicit position statements and producing texts with a large number of appropriate conjunctions. In interview, the students gave further input on this issue of producing reader-responsible text which is detailed later in the chapter.

5.1.5 Ordering of ideas in English and IsiZulu

Initially, I read the English scripts and made a list of the key ideas expressed in each sentence in the text, in the order in which they appeared. I added these ideas to a table in order to ascertain whether there were any differences in the ordering of ideas when comparing the IsiZulu and the English scripts. Before reading through this data it seemed possible that there might be a type of overlay structure (Grimes, 1972) used in the IsiZulu writing which was not present in the English scripts. The table below shows the development of ideas from paper 1. These ideas appeared in the same order in both the English and IsiZulu texts:

Paragraph 1
sentence 1: Change of LOLT at Wits causes distress
sentence 2: A consequence of LOLT change is content is difficult to understand
Sentence 3: Additional consequence is difficulty getting help in consultation
Paragraph 2
sentence 1: Position statement: use IsiZulu as LOLT because it is used in schools
sentence 2: Favourable consequence of change to LOLT stated

The ordering of ideas here does not evidence a repetition of the main points in the manner of an overlay structure. In fact, the writer deals with each point in turn and does not return to it. Analyzing each of the 12 scripts in this way allowed us to ascertain which type of organisation pattern appeared when they wrote in IsiZulu.

None of the 12 papers evidenced the repetition of a central idea as an organizing principle. The linear pattern of ideational development was present in both the IsiZulu and the English text regardless of which language the text was written in. Most of the undergraduates, in fact, enacted a direct translation of their original IsiZulu text and, when this was the case, no restructuring of ideas was required to achieve a linear structure in English.

The results, then, indicate that the undergraduates do not use an 'overlay' rhetorical organisation when writing in IsiZulu. This strongly confirms the findings from data set 1 on rhetorical organisation where only a few of the 23 papers on technology evidenced a pronounced repetition of ideas. However, we noted differences in the level of detail entered into by the writer at times. Where there were significant differences, they suggested a greater level of language control when writing in IsiZulu. Given what the students said in interview (below) about IsiZulu being their language of thought, it seems that this cohort possesses a greater capacity to express precise thought in IsiZulu. This difference, though, may also be partly due to the fact that the undergraduates wrote the IsiZulu

text first and so may have experienced a decline in motivation when it came to re-languaging the text into English.

5.2 Data set 3 - focus group interviews

5.2.1 Introduction

Ten of the 12 who wrote on the LOLT issue were also available for interviews. These interviews took place in the form of the small groups and were mostly recorded, except for one interview where a participant had stated that she would prefer not to. Although the sample size was relatively small, what emerges is data that is extremely relevant to the research questions. Please see the research design and methodology chapter for more information on the rationale for this form of data collection.

5.2.2 Responses to questions

i) Educational background

The 10 undergraduates interviewed revealed the following information about their educational background. Five of the ten interviewees went to school in Gauteng and, of that number, three stated IsiZulu as the main LOLT. For the other two, English was stated as the main LOLT. Four others were educated in KZN and each of these states IsiZulu as the main LOLT up to grade 12, except for one who changed to English at High School. The last student stated that she had received instruction in English in both primary and high school but did not state the location.

However, Tshotsho (2013:42) states that schools choosing African languages as LOLTs is still largely a theoretical prospect. He says: 'In South Africa, all final examination question papers are either in English or in Afrikaans'. It seems highly unlikely, then, that 7 of these 10 undergraduates went to schools with an official LOLT favouring IsiZulu. More likely, then, is that they interpreted the question as 'which language did your teachers mainly speak?' rather than 'what was the official language policy of the school?' Notwithstanding this anomaly, the data certainly positions IsiZulu as the dominant language of daily pedagogy, where code-switching into English was perhaps framed within macro-IsiZulu oral discourse. This type of instruction is likely to be grounded in IsiZulu oral rhetoric even when delivering content in more than one language. Interestingly, later responses in the interviews show evidence of deeply held identification with IsiZulu oral rhetorics, especially question 7.

ii) Which language is easier to write in: English or IsiZulu?

In answering the above question some participants distinguished between writing formally and informally; for chatting, or for more academic purposes. Two students expressed that English was their 'chatting' language and IsiZulu was easier for more formal purposes.

A further four participants expressed an unequivocal preference for writing in IsiZulu. A reason for this was stated as: 'Sometimes some ideas are lost along the way when I am trying to translate'. One student expressed a recent preference for IsiZulu since joining Wits and another was without a clear preference. Two students cited the difficulty in translating figures of speech into English. This corroborated by the presence of figures of speech translated from IsiZulu in the English scripts of data set 2 which are verbatim translations, for example:

> "Sometimes I find myself beating my chest saying I know I did well in an assignment of Education only to find out that I was lying to myself."

These interviewees are perhaps also unaware that many idiomatic expressions are considered too informal for academic English. This point is raised again in the conclusion chapter.

Only one of ten interviewees stated English as the language they found easier to write in without reservation. This is significant given that English is the language they are largely expected to write in in order pass their undergraduate degree. In other words, they are not being given the opportunity to write in the language they are most comfortable with for academic purposes.

iii) When writing in English, do you think first in IsiZulu then translate into English?

This question sought to explore how the writing process and the language of thought interact together. Six of the ten said that they *thought* in IsiZulu then *translated* into English. For example, S1 stated: 'I think in IsiZulu, I dream in IsiZulu'. The remaining four described a mixed cognitive-linguistic process. Interestingly, three of these four described a kind of automaticity of switching depending on which language was required. On this automatic switching S10 revealed: 'I just got used to that [switching modes of thought] … it got deep into my mind so sometimes you just do it unconsciously,' and S7 added: 'There's no transition that occurs between the two languages'. This is interesting in the sense that it points to a bilingualism at the level of thought as well as in public linguistic expression.

iv) Have you been instructed to write using the 'introduction, claims, support, conclusion' type of essay format?

Nine out of ten participants recalled explicit instruction at Wits in formatting an essay with an introduction, body and conclusion. Three of these nine also stated being instructed in this format at high school. S8 could not remember any exposure to this genre at school and stated how distressed she was the by the lack of instruction in it at Wits. She said: 'I feel that the system they are using, it fits those who already know [it].' This view is supported by S9 who expressed that: 'it hasn't been a challenge coming here because I've already been exposed to it from high school…'. Juxtaposing these two statements perhaps indicates that, in spite of existing input in this area, the structure of an argumentative essay could be further scaffolded in year one of undergraduate degrees, in order to reach those who had previously not been exposed to this genre of writing. A potential danger in requiring content-based assessed essays early in year one is that those unfamiliar with conventional essay genres may begin their degree by producing work below the required standard, whether they understand the content or not due to their lack of practice with the genre.

v) Does it feel natural to write in this genre or would you rather write in a different way?

I wondered whether, even after such instruction, they experienced a conflict of rhetorical styles when writing English. Eight of the nine participants who responded to this expressed a mostly uncritical view of the rhetorical formatting they had been taught. Four of the participants expressed reasons in support of this essay format. For example S1 stated that: 'You should have order. It makes it easier for the one that's marking'. This view expresses the utility of the genre in that, as far as it is predicable, those inculcated into its typical structure will benefit from being able to read it easily.

The marker here, though, would appear to be the intended reader for S1 rather than a broader academic community.

Further support was given for this format by S4 who believes that, as a student, it is easier to write when you have a structure to follow. He added that: 'Once they read your introduction they know what to expect with the rest of your essay.' Similarly S7 endorsed the prescribed format arguing that: 'Starting with the conclusion, some would find it pointless to read the whole thing. They would just read the conclusion you've made in the first statement and think oh it's just like that.' Perhaps an advantage of this format is that it allows a coherent building up of evidence before reaching a conclusion and, in so doing, it may encourage scrutiny rather acceptance prior to an examination of evidence. The danger, though, may be that established, 'naturalized' ways of formatting discourse may appear beyond critique. Unless one has been taught the practice of critically questioning the status quo and considering alternatives, other realties may be unimaginable. This is perhaps evident in S8's response where she indicated that 'I don't wanna ask anyone questions, I just wanna master how to write an academic essay'. This view clearly shows a set of priorities more aligned with pragmatics than critical agendas.

In contrast to the openly positive comments on the textual genre, there are two ambivalent comments. S5 stated: 'I am used to it' and S6 found it 'not confusing.' In addition, S2 distinguished between feeling comfortable applying the format to academic purposes and creative writing: 'When I writing something informal I don't feel comfortable writing in that format, you need to build suspense, you need to draw the reader [in].'

Only S9 expressed an unequivocally critical position to this question, asking: 'who came up with that method and why? What were their reasons? … I certainly do question it, like, why do we start with the introduction and not the conclusion?' As counter intuitive as this proposal seemed to the others in the discussion, this is in fact close to what happens when an abstract is put at the head of an academic paper. It is also similar to some journalism genres which foreground the key information at the head of the text.

vi) Were you taught to write academic IsiZulu? If so, was it the same format or a different format?

In recalling whether they had been taught how to write academic IsiZulu in any format, or the same format as English, five of the ten participants did not recall any instruction in academic IsiZulu. Two were instructed in both languages with the same rhetorical organisation.

S1, however, mentioned a different type of organisation. She was taught how to write an academic essay in IsiZulu in high school. She recalls an ordering of the discourse whereby the main point was repeated in each paragraph: 'if you are writing an IsiZulu essay, each and every paragraph has to show what you are talking about'. This would enable the reader to understand the gist of the text without 'read[ing] your introduction and conclusion but having read one paragraph.' This is perhaps the clearest data in the interviews indicating a means of ordering IsiZulu academic writing according to an overlay structure. Only one of the ten interviews recalled this sort of instruction. I comment more on this in the findings section of this chapter.

In addition, a further two participants recalled a style of organisation similar to how academic English essays are structured except that the introduction should include an indication of all the main points that were to follow. B10 summarized this as: 'let's say your introduction has four points … you need to have 4 [following] paragraphs'. This is a variation on the linear format.

vii) Do you ever feel like repeating material in an essay but do not do so because you are not allowed?

Eight of the ten participants expressed a desire for more freedom to repeat material in their essays. For example, S2 wished to use figures of speech to emphasize a point. A3 highlighted the difference in IsiZulu and English rhetorics by saying: 'With IsiZulu you can repeat what you have said before just to emphasize the message that you are trying to pass.' S6 described feeling as though she was conforming to someone else's culture. S9 stated: 'I feel like I need to repeat myself continuously so that you, as the marker, will see that I understand,' and added that 'I could make a lot examples just to explain one thing… that's how I like emphasizing….' Similarly, S7 wants latitude to use repetition to provide emphasis, 'on certain points because you value them you think that they have weight' and added that 'it feels like you bring more clarity'. He does not do so, however, out of the fear of boring or displeasing the reader. S10 also wants to repeat for emphasis. She explains that: 'sometimes you write an essay and you finish it but you are not satisfied with it because you feel that you didn't emphasize what you wanted to say… you didn't say it loud enough so I think we are restricted in such a way.' These remarks recall Hinkel's comments (2001) on colloquial Arabic which: "relies on repetition of ideas and lexis … for rhetorical persuasion."

S8 also wants to repeat material for emphasis. She was clearly frustrated with a lack of guidance in how to acquire the required academic genre explaining: 'I am a bit angry at the fact that I can't find someone who will sit me down and give me … different types of essay and give me practice.'

The answers given to this question stand out from the others. Whilst most responses to previous questions expressed no challenge to the status quo, these answers demonstrate a widespread discomfort with this aspect of English academic rhetoric. Even if the practice meaning-making through repetition does not stem from widespread overt instruction in IsiZulu academic writing, it is perhaps so strongly a part of BICS oral community practices that there is a frustration with being constrained in this area. In addition to BICS oral practices, CALP-type discourse practices are often introduced to learners by teachers. Teacher talk often includes repetition, examples and paraphrase. Perhaps, then, the desire to repeat for emphasis in their writing is based on emulating what they have been exposed to in class through teacher-talk.

The desire to repeat stated here seems to be about the layering of the language with statements, examples and paraphrase when warranted by the importance of the idea. It is largely *not* based on a concern that they may not be understood if they only say it once, although there was one comment that suggested this. The data expresses a dissonance in this cohort around exactly how to create emphasis in their writing in a way that is commensurate both with the expectations of the institution and a deeply held disposition to creating meaning in this way. Please see the findings section of this chapter for further comments on this.

viii) When using conjunctions widely in your writing, do you ever feel that this will create a negative effect on the reader; that your point is obvious so it doesn't need be signposted so clearly?

I wished to check how comfortable the undergraduates were with the conspicuous signposting of text with conjunctions. In line with the argument in the literature review, it seemed that a tentative classification of IsiZulu as a reader-responsible language may lead to a resistance in the undergraduates to producing the type of writer-responsible text expected in academic English domains. In fact, there is very little evidence in this data that these undergraduates experience any such conflict. In fact, only one of the ten participants expressed that they were concerned that explicit signposting of a text may have a negative effect on the reader.

Four undergraduates expressed positive views on using conjunctions. For example, S1 felt: 'it makes your essay readable.' S9 believed: 'it makes sense since it gives your writing, whether in IsiZulu or English a form of direction.' S10 expressed the value of conjunctions in signposting counter arguments. Two participants expressed their belief that instruction given by institutions on conjunctions must be correct. For example, S5 said 'That's how we were taught!' This comment again constructs institutional practices at Wits as beyond criticism.

Although there was almost no concern about producing too explicit a form of text, there was some concern over how difficult it is to construct this type of text. S3 admitted that 'I just write everything that I want to write and then after that I have to reread the essay and add those words' and S4 was somewhat uncertain about when to use them. Interestingly, S1 also expressed that view that 'In IsiZulu we don't have those words' which may indicate the degree of exposure she has had to English conjunctions at the expense of instruction in IsiZulu cohesion, given their existence and widespread use in IsiZulu writing (Gowlett, 2004).

Overall, however, the comments indicate no conscious resistance to producing writer-responsible text based on fears around patronizing the reader. I considered whether credulity of the undergraduates in the institution and the potentially ambiguous role of the researcher limited how critical they were willing to be on this issue, given the sense that these textual practices are more or less unquestionable. However, their willingness to be critical at other times in the interviews, including in the following question, indicates that they are not concerned with being compliant to the given institutional norms. Therefore, I conclude that the use of conjunctions does not produce a rhetorical conflict for this groups, but remains a challenging aspect of academic writing for a minority.

ix) Could Wits University do more to be flexible in these matters?

In answer to this, four of the ten participants did not feel that the University had any responsibility to alter the parameters of what makes for acceptable academic discourse. For example, S1 stated that: 'Now we are here we have to write like they are writing. Many people have done it before. We are going to do it. The following generation will do it.' S5 had a similarly uncritical trust in the institution, stating: 'there is a reason for the way things are.' This was echoed by S10 who believes:

‘they didn’t just come up with these rules on how the school is structured overnight. People came together who actually know more than I do’.

The majority felt that something should be done by Wits; six of the ten participants held this view. S6 could envisage freedom to write in other organizational styles. S8 critiqued the status quo with the following: ‘I feel that the system they are using, it fits those who already know [it]... So just personally I feel like left out.’ She recommended extending practice of essay genres and practice assignments. In support of this, M7 felt: ‘If you do feel left out, the structure should be improved so that you could also be accommodated in that structure.’ He also stated proficiency in the language as a critical issue. Furthermore, S4 highlighted the difficulty in adjusting to the written rhetoric of a second language stating: ‘In African languages or in my culture, if you are talking to somebody, you don’t talk directly and say whatever you need. You first need to converse, then once the person is also in a conversation with you, then you start saying whatever you need to say. But with English [clicks fingers] you go straight to the point, so with African language you need first to build up on the conversation.’ This was the clearest statement in all the interview data of the potential difficulty for those habituated to African rhetorical practices to adjust to the demands of an explicit form of writing.

5.3 Summary of findings from data sets 2 and 3

5.3.1 Corroboration in data set 2

Data set 2 has confirmed and added to the findings from data set 1 in the area of identifying which rhetorical structures appear in the students’ writing. The interview data shows that only one of the ten students was instructed in writing academic IsiZulu in an overlay rhetorical style. The minimal amount of instruction received in this style is reflected in data sets 1 and 2. The majority of students recall explicit instruction in the linear structure of English academic writing, the results of which are evident in data set 1 and 2. None of the 12 texts in data set 2 had any overlay structure evident. The only evidence of overlay structure in the scripts comes in data set 1, where 4 out of 23 essays repeatedly used singular ideas as unifying motifs throughout the text. It now appears clear that linear forms of textual organisation are dominant in both the IsiZulu and English writing of both classes of participants.

Data set 2 corroborates the findings from data set 1 with regard to the high levels of accuracy with conjunctions and pronouns. In addition, in data set 2 provides some evidence that these students adapt their use of conjunctions to produce explicit, writer-responsible text when writing in English. The high level of accuracy with pronominal referencing in data set 2 corroborates the findings from data set 1.

5.3.2 Findings from data set 3

The students, who have largely been exposed to IsiZulu as the dominant de facto LOLT, find it easier to write in IsiZulu than English on the whole. IsiZulu also dominates as the language of thought although there is a degree of free switching between languages of thought. Whilst almost all of the students had had formal instruction in writing a linear essay format in English, very little instruction in writing academic IsiZulu had been recieved. Where there had been instruction, this was mostly in the same rhetorical style as the English instruction. One of the ten students had been taught an overlay rhetorical

organisation in IsiZulu. Most students appeared comfortable with a linear style of writing until questioned on the prohibition on repetition. Then, there was a broad expression of frustration on how to emphasize material without recourse to repetition. None of the students felt that writer-responsible texts with frequent use of cojnuctions would patronize the reader. The majority of the students felt that Wits could assist them by broadening what is considered acceptable academic writing.

5.3.3 Questions arising from the interview data

A question arises from the interview data which is difficult to answer. Namely, why is it that students seem mostly uncritical about the conventions of written English but, at times, connect with a deep frustration in conforming to them? The move from acceptance to criticism seems to occur suddenly as if there is some disconnect or fissure in the students' literate identities (Gennrich & Janks, 2013). For example, most students accepted the style of essay writing they had been taught and did not question the signposting of the text with conjunctions. Then, conversely, there was broad frustration expressed at being prevented to use repetition for emphasis, and a majority view that Wits should broaden what it considers acceptable academic discourse. There may be a dissonance at the heart of this: linear academic conventions are taught in English writing classes and BICS-type IsiZulu speech practices continue to be structured according to deeply-held rhetoric conventions. Both rhetorics are naturalized by the communities that instantiate them. The underlying difficulty in uniting these very different practices in the tertiary domain is not obvious to the participants for much of the interview. When they notice the disunity here, it generates a powerful response.

Another factor potentially influencing the participants' responses here is that *addition* is harder to perceive as a threat than *subtraction*. If the only written rhetoric on offer is the linear form, a student may perceive it to be an addition to their repertoire and not notice the opportunity cost of instruction in other rhetorics. However, when there is a prohibition, such as on repetition, they may then become aware that a major resource for meaning-making in the oral mode is being prevented from being transferred into the written and feel the loss more actively. Both adding and subtracting may be, in fact, be a means of excluding non-Anglo Saxon rhetorics, but the subtraction is more noticeable. Here, the cost of an 'additive' bilingual language policy to the identities of the students is perhaps revealed; where the privileged language (English), rhetoric (linear) and assessment mode (written) have few cohesive cultural and linguistic links to IsiZulu BICS practices. Potential means of addressing this issue are discussed in the following chapter.

Chapter 6: Conclusion

6.1 Introduction

This research report set out to generate knowledge on how IsiZulu speakers at Wits are using cohesion in their academic English. In this chapter, I firstly summarize how findings from this study relate to my key research questions. After that, the chapter is broadly divided into a *pragmatic* response and a *critical* response to these findings. The pragmatic response summarizes how academic literacy input on cohesion could address the developmental priorities identified in the data. This is a program intended to develop writing skills to assist in, '[initiating] students into the academic discourse community' (Spack, 1988:30) as that community is today. The later section critically addresses questions arising from the findings on how transformation in the academy could promote achievement for IsiZulu speakers writing in English. Finally, there are some ideas for further research opportunities arising from this study.

6.2 Findings pertinent to the key research questions

Chapters 4 and 5 have set out in detail how conjunctions, lexical cohesion, reference and ellipsis are operating in the writing produced by the two classes of participants. It is evident in this data that there are strong foundations in most of these areas. Only substitution and ellipsis appear underused as cohesive strategies used to link the texts. However, speech-type syntax influences the writing on many levels and additional development of cohesive strategies could assist in the production of denser, more analytical text. There are a significant number of papers with run on sentences where numerous clauses follow on from one another. Long stretches of paratactic language leave the reader with ambiguity over what the main point being made is. This has led to a number of specific proposals on how to facilitate development in this area.

The findings have established the dominance of English rhetorical organisation in both the English and IsiZulu writing of this group; it is clear that the 'overlay' rhetorical organisation is largely not influencing the writers' English texts. 'Overlay' appears not to be widely taught form of IsiZulu academic writing. Differences in the way IsiZulu and English are structured are largely not causing problems for these undergraduates when writing in English. For example, there were relatively low levels of errors with the definite article and high levels of accuracy when rewriting concords into pronouns. However, it is also clear that the convention to avoid repetition in writing is causing interference for these students who are used to employing forms of repetition as nuanced meaning-making strategies in their speech practices. This data, emerging from the interviews, suggests that these rhetorical resources from IsiZulu could be better valued and recognized by the academy.

6.3 Academic literacy input

6.3.1 Areas of focus

The table below is a summary of the areas that could be profitably addressed with academic literacy and writing skills input for IsiZulu speakers, and is intended as a pragmatic response to the developmental possibilities revealed in the data:

Reference	1. Clarify the use of the zero article
	2. Make ambiguous reference with 'they' more specific
	3. Identify ambiguous and non-ambiguous uses of 'this' as a reference

	4. Encourage increased frequency and specificity of [this + noun] structures with abstract nouns e.g. '*this idea*, *this principle*, *this process*, *this approach*' to refer to whole stretches of earlier language; to facilitate the production of more lexically dense text.
Conjunction	1. Develop the use of contrastive conjunctions, linked to the role of forming counter arguments.
	2. Compare the use of coordinating and subordinating conjunctions in order to illustrate how to emphasize and give prominence to one clause over another
	3. Develop the following cohesive devices: • [Conjunction + determiner]: e.g. *Because of this….* • [Conjunction + determiner + abstract noun]: e.g. *Despite this policy* • [Reference + abstract noun + conjunction]: e.g. *This inflation is due to…* • [Determiner + linking verb + conjunction]: e.g. *This was in spite of…*
	4. Identify fragments to reinforce required syntax around some conjunctions
Lexical cohesion	1. Provide practice of replacing key terms with synonyms across the text as a whole, especially when using a parallel progression to develop a previously stated rheme.
	2. Raise awareness of how to replace personal grammatical subjects with nominalisations in order to create denser lexical cohesion in a more analytical style.
Substitution	1. Highlight how to use 'one/s' to avoid repetition of nouns within a text.
	2. Give examples and practice of substitution of verbs and clause with 'do', 'so' and 'do so'.
Ellipsis	1. Provide opportunities to practice nominal and verbal ellipsis by asking students to identify parts of a sentence that can be removed to reduce redundancy.

As well as these features of Hallidayan cohesion, the following input on sequential and parallel progression could help develop both coherence and cohesion in the students' writing:

i)	Provide input designed to highlight the function of and increase the frequency of this kind of transition.
ii)	Offer punctuation exercises designed to clarify the coherence of longer run on sentences.
iii)	Show how the suggested input on lexical cohesion in the previous table applies to parallel and sequential progressions.

6.3.2 The structure of the academic literacy input

As shown in chapter 4, the papers evidence varying levels of development in cohesive strategies, so it may not be necessary for all undergraduates to follow the entire program proposed here. One way to allow for differentiation in this area would be to design the academic literacy input according to a blended-learning model. According to Garrison & Kanuka (2004:96) 'blended-learning' is a

combination of 'text-based asynchronous Internet technology with face-to-face learning'. The online component could assume the form of interactive exercises appearing on a web-based learning platform. Once the required online resources on cohesion had been developed, the blended learning model would allow undergraduates to focus on the material that most suited their developmental priorities. For example, the authors of the 7 scripts who made no errors with the definite article would probably not benefit from reviewing this aspect of cohesion but others would.

While working through this material on cohesion, feedback mechanisms such as 'polls' could allow the undergraduates to indicate if they need further input on a given issue. This feedback could inform the face-to-face program design. In this way, the blended mode could allow for a 'negotiated syllabus', which, according to Clarke (1991:abstract), 'allows full learner participation in selection of content.' In addition, the online content could, in part, help address the issue of increased time and financial costs (Berke & Wiseman, 2004) involved with increasing the extent of academic literacy provision for very large cohorts such as those to be found at Wits.

The suggestions in this chapter on how to develop cohesion deal with technical language skills. They are located within the 'study skills' model of academic literacy which 'sees writing and literacy as primarily an individual and cognitive skill … [and] focuses on the surface features of language form' (Lea & Street, 2006:228). It is not my intention to suggest, however, that only technical language skills should be addressed during academic literacy input. It would, in fact, be desirable that at least equal attention be paid to process approaches to writing, allowing for writers to explore meaning-making more freely as a complement to this more technical focus.

In addition, the overall package of input should also consider how the identity of the writer is inflected by the institutional practices that surround her. In interview, S7 expressed the following response to the conventions of academic writing: 'You end up not being … creative as a writer … I think they are constraining us.' Given that Li (2000) considers literacy, 'an essential part of a person's conception of his/her culture and personhood', analytic writing may be more difficult to produce for those who have not embraced *analytical practices* as a part of who they are. A course, then, composed entirely of technical input on cohesive writing techniques would be somewhat narrow in terms of allowing for new expressions of identity and meaning-making.

6.4 Transformation in the academy

6.4.1 Forms of rhetorical organisation

The interview data depicts students who are deeply concerned with having to structure *emphasis* in their writing in a way that is profoundly distant from their L1 practices. Notwithstanding the potential pragmatic value of the study skills approach, academic literacy programs which seek only to enable students to adjust to the expectations of the institution appear inadequate to address this concern. It would be inequitable to ignore the data which reveals what appear to be deep fissures separating the oral and written linguistic identities of the undergraduates entering this institution. If it does not make sense to this cohort that they cannot repeat for emphasis, the passage to acquiring the required conventions may be blocked.

How could this fissure be addressed? Linear organisation of academic text is the dominant mode of organisation across all of the data here. It is the dominant pedagogic discourse for academic writing

in both IsiZulu and English according to the interview data. Intriguingly, though, there remains some evidence of overlay organisation in the scripts from data set 1 and in one interview response. It seems like a minority written rhetoric potentially in danger of extinction.

Given the limited range of opportunities for publishing in IsiZulu and other African languages prior to 1994, it would be regrettable if the dominance of Anglo-Saxon rhetoric was eroding the potential for an alternative form of expression in academic African languages. Powerful discourses tend to, either consciously or otherwise, inculcate themselves into socio-linguistic cultures as the 'natural way of doing things' and this ought to be guarded against. As Phillipson & Skutnabb-Kangas explain (1996:433):

> 'The case for dominant languages is put constantly and reinforced in myriad ways, most of them covert hegemonic processes, whereas alternatives to the current linguistic hierarchies are seldom considered and tend to be regarded as counterintuitive and in conflict with a commonsensical, "natural" order of things.'

Instead of this English dominance, spaces could be created in which other means of representing knowledge in the written mode might be developed with much stronger connections to African community speech practices. A positive response to this language ecology issue would be to create a forum of experimentation to investigate African rhetorics. Perhaps a journal such as *Southern African Linguistics and Applied Language Studies* could publish a special issue calling for papers with African rhetorical characteristics. Papers could be written with a freedom to use paraphrase and provide multiple examples for emphasis, as well as an overlay-type repetition of key ideas. According to Makalela (2007:141): 'Indirect discourse patterns', are common oral practices in many African cultures. Perhaps as part of the above journal issue, features of circumlocution could also be included, whereby writers were given permission not to 'get straight to the point' (S4, data set 3). Alternatively, if no action is to be taken to challenge 'the natural order' of instructing Africans in Anglo-Saxon rhetoric, an IsiZulu academic rhetoric with evident potential for development may be entirely extinguished by its more powerful rival.

In addition, the macro-structure of the paper could follow an alternative organizational pattern. This could be done by removing the introduction section of the paper, and beginning with the literature review. This is an analogy to *general conversation* preceding *specific requests* in South African community oral practices (Makalela, 2015, Wits lecture). This would allow the writer to lead up to the key area of investigation, gradually establishing the grounds for the study by ranging across key issues in the literature. Such a format could assume the following form:

1. Literature review
2. Connection to an issue in existing praxis
3. Research design
4. Data Analysis
5. Discussion
6. Conclusion

Once this journal issue had been published, its constituent papers could be assessed by African academics. They could respond to the method of knowledge representation instantiated in the papers and assess its effect on the analytical tone of the papers. An experiment of this kind may also yield unexpected results and, given enough data, rhetorical features, unanticipated by this paper, may emerge that are both generalizable and teachable. Adjustments could then be made towards arriving at a model more conducive to scholarly African purposes than the dominant Anglo-Saxon model. This rhetoric might then be considered for adoption at the institutional level.

Such a rhetoric, with stronger analogies to African sociolinguistic practices, may promote a more robust inclusion of undergraduates who might otherwise struggle. In contrast to the present dissonance to be found in the literate identities of these students, such amended institutional practices might explicitly facilitate a deeper identity integration as students sense that all of their cultural-linguistic make up is valued at University. With a more internally coherent set of subject positions, the move towards producing analytic texts may not be so difficult.

6.4.2 Additions to the curriculum

If English is to be prevented from permanently imposing conventions from its academic genres onto BSAE, existing curricula may need to be amended. Curricula could be amended to explicitly teach more than one rhetoric. As it stands, the CAPS (2015:35) document for home language users, grades 7-9, advocates: 'Using a variety of rhetorical devices and persuasive techniques' in persuasive essay writing. This could be amended to include raising awareness of how rhetorical devices operate differently in English and African languages. Then, awareness of linear and overlay rhetorical organisation could be raised simultaneously in order to facilitate a kind of bi-literate awareness of rhetorics.

The following suggested methodology might contribute to developing technical skill with both forms of organisation. Learners could be taken through the following steps leading to the ability to recognise and produce each type of rhetorical organisation:

1. Students read essays written in both overlay and linear organizational patterns on the same topic, with the same content.
2. They are asked to identify similarities and differences in the type of organisation used in each case.
3. They are asked to identify the instances of ideas and the order in which they appear in each essay.
4. Students are asked to comment on which one feels more natural to them; which one they would prefer to write in etc.
5. Attention is paid to the domains in which each organizational style currently operates.

6.4.3 Transparent rubrics

It also seems pertinent to explore the confusion of the undergraduate who felt proud (data set 2) when handing in an assignment, only to find that it did not achieve the marks he had anticipated. He did not understand why he had not done well. His confusion raises the following questions: how

many marks are awarded for displaying technical language skills? How good are we at noticing analytic thought if it is not packaged in what we regard as analytic language? How many marks do you lose for using informal language in your essay? Are the students aware that figures of speech may be considered too informal in academic English? Are we still, to some extent falling victim to the notion critiqued by Labov (1970: abstract) that 'nonstandard [academic] English … is an illogical form of speech'?

This issue was raised at Wits International Language and Literacy Symposium (2015) where doubt was expressed at the reliability of many rubrics in circulation in tertiary education. It would be more equitable if both assessors and the assessed were clear on how many marks are allocated for conforming to the language norms of the genre and what marks are allocated for content and argument. Transformation of the academy in this area could involve an audit of rubrics currently applied to undergraduate assignments to ensure that the marks allocated for language proficiency and content / argument are explicitly shown.

6.5 Further research

The process of writing this research report has highlighted a number of issues which could be profitably addressed in further research. Given the similarities between IsiZulu, IsiXhosa and other Nguni languages, it would be instructive to see how consistent these finding would be with those arising from comparable data from other Nguni languages. The value of this would be to arrive at findings which are more generalizable. This would potentially allow for the development of institutional strategies capable of benefitting a larger number of students.

Further studies could add data from first year English native-speaker undergraduates to provide additional insights on how cohesion in this data set was similar or different to the findings of this research report. This could provide knowledge on how equitable the prevailing language policy is in terms of proving a level-playing field for each linguistic group in South Africa. Moreover, if similar areas for development appeared in the native-speakers' writing, perhaps the suggested input here may also be useful for this group.

The evidence of overlay structure being taught as a minority rhetoric for academic IsiZulu purposes comes, so far, from only ten interviewees. Further research with high school teachers in KZN and Gauteng could establish how widespread this practice is. This would give a clearer picture of what existing resources there are in this area in advance of any policy changes.

I have proposed a blended learning model as a mode of delivery for part of the suggested input on cohesion. A project could be conducted which assessed cohesion in students' writing both before and after participating in this skills development work. A control group could be used who receive no special attention to the development of cohesive resources. Evidence of cohesion in all the data sets could also be compared with grades achieved to assess how significant a contribution improved cohesion makes to overall achievement.

As stated above, issues of peer-reviewed journals whose aim is to publish papers in African rhetorics could be assessed for their effectiveness. The papers could be given readability scores by undergraduates and compared with articles from earlier issues written in Anglo-Saxon rhetoric.

Emerging rhetoric could be analyzed so that a list of its generalizable, teachable features could be drawn up.

6.6 Conclusion

This study has generated knowledge on how cohesion is being used by a group of IsiZulu speakers at Wits University. Knowledge of this has implications for IsiZulu speakers in tertiary education across South Africa and has led to suggestions on how academic literacy input could facilitate writing skills development for this language group. The investigation has also established the dominance of English rhetorical organisation in both the English and IsiZulu writing of this cohort. It has also shown that the imperative not to repeat material in essays is experienced as restrictive by these participants. I have provided both a pragmatic and a critical response to these findings. The pragmatic response is a set of suggestions on to develop language skills in the area of cohesion. In addition, I have proposed an alternative style of academic textual organisation with stronger links to IsiZulu oral rhetoric practices. It is hoped that the knowledge generated by this study will be accessed by academic literacy instructors in South Africa to promote academic achievement for this language group.

References

Ahmed, A. H. (2010). Students' problems with cohesion and coherence in EFL essay writing in Egypt: Different perspectives. *Literacy Information and Computer Education Journal*, 1(4), 211-221.

Braddock, R. (1974). The frequency and placement of topic sentences in expository prose. *Research in the Teaching of English*, 8(3), 287-302.

Connor, U. (1987). Research frontiers in writing analysis. *Tesol Quarterly*, *21*(4), 677-696.

Connor, U. (2002). New directions in contrastive rhetoric. *Tesol Quarterly*, *36*(4), 493-510.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 213-238.

Crystal, D. (2011). *Dictionary of linguistics and phonetics* (Vol. 30). John Wiley & Sons

Cummins, J. (1999). BICS and CALP: Clarifying the Distinction.

Crowe, C. (1992). "Error Patterns in Research Papers by Pacific Rim Students."

Danes, F. (1974). Functional sentence perspective and the organization of the text. *Papers on functional sentence perspective*

D'Angelo, F. J. (1986). The topic sentence revisited. College Composition and Communication, 37(4), 431-441.

De Klerk, V. & Gough, D. (1996). Black English in South Africa. *Language in South Africa, p.365-398*

Ferris, D. R. (1994). Rhetorical strategies in student persuasive writing: Differences between native and non-native English speakers. *Research in the Teaching of English*, 45-65.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The internet and higher education*,*7*(2), 9

Gee, J. P. (1990). *Social linguistics and literacies: Ideology in discourses*. Routledge.

Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method*. Routledge.

Gennrich, T., & Janks, H. (2013). Teachers' literate identities. *International Handbook of Research on Children's Literacy, Learning, and Culture*, 456-468.

Gowlett, D. (2004). *Zulu Newspaper Reader*. Dunwoody Press.

Grice, H. P. (1975). Logic and conversation. *Syntax and Semantics Volume 3: Speech Acts*.

Grimes, J. E. (1972). Outlines and overlays. *Language*, 513-524.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (1993). *How to design and evaluate research in education* (Vol. 7). New York: McGraw-Hill.

Halliday, M. K., and Hasan, R. (1976). *Cohesion in English*. London: Longman.

Halliday, M. K. (1994). Around the clause cohesion and discourse. (pp. 287-318). *An introduction to functional grammar*.

Hinds, J. (2001). Reader versus writer responsibility: A new typology. *Landmark essays on ESL writing*, *17*, 63.

Hinkel, E. (2001). Matters of cohesion in L2 academic texts. *Applied Language Learning*, 12(2), 111-132.

Hinkel, E. (2002). *Second Language Writers' Text: Linguistic and Rhetorical Features*. Mahwah, NJ: Lawrence Erlbaum Associates

Hlongwane, J. B., & Naudé, J. A. (2004). The rhetorical forms of Henry Rider Haggard's Nada the Lily in Zulu. *Southern African Linguistics and Applied Language Studies*, *22*(1-2), 9-25.

Janks, H., Dixon, K., Ferreira, A., Granville, S., & Newfield, D. (2013). *Doing critical literacy*. London: Routledge

Kaplan, R. B. (1966). Cultural thought patterns in inter-cultural education. *Language learning*, *16*(1-2), 1-20.

Kubota, R., & Lehner, A. (2004). Toward critical contrastive rhetoric. *Journal of Second Language Writing*, *13*(1), 7-27.

Labov, W. (1969). The logic of non-standard English. *Georgetown monographs on language and linguistics,* 22(1), 1-31.

Lea, M. R., & Street, B. V. (2006). The "academic literacies" model: Theory and applications. *Theory into practice*, *45*(4), 368-377.

Letseka, M., & Maile, S. (2008). High university drop-out rates: A threat to South Africa's future. *Pretoria: Human Sciences Research Council*.

Li, G. (2000). Family literacy and cultural identity: An ethnographic study of a Filipino family in Canada. *McGill Journal of Education*, 35(01).

Lillis, T. (2003). Student writing as 'academic literacies': Drawing on Bakhtin to move from critique to design. *Language and education*, *17*(3), 192-207.

Lillis, T. & Curry, M. J. (2010). *Academic Writing in Global Context*. London: Routledge

Linell, P. (2004). *The written language bias in linguistics: Its nature, origins and transformations*. London: Routledge

Magennis, S. (1997). The reader-writer responsibility scale as a basis for practice in the L2 composition classroom in Spain. *Some sundry wits gathered together* (pp. 137-144). Servicio de Publicaciones.

Makalela, L. (2007). Nativization of English among Bantu Language Speakers in South Africa. *Issues in Applied Linguistics*, 15(2).

Michael, K., & Venezia, A. (2001). Bridging the great divide between secondary schools and post-secondary education. *Phi Delta Kappan*, Vol. 83, No. 1, September 2001, pp. 92-97

Mohamed-Sayidina, A. (2010). Transfer of L1 cohesive devices and transition words into L2 academic texts: the case of Arab students. *RELC Journal*, *41*(3), 253-266.

Morgan, B., & Ramanathan, V. (2005). Critical literacies and language education: Global and local perspectives. *Annual review of applied linguistics*, 25, 151-169.

Mozaffari, A., & Moini, R. (2014). Academic Words in Education Research Articles: A Corpus Study. *Procedia-Social and Behavioral Sciences*, *98*, 1290-1296.

Ndlovu M. V. (2009). The accessibility of translated Zulu health texts: An investigation of translation strategies. PhD thesis, University of South Africa.

Ndlovu, M. V. (2013). Referential cohesion in isiZulu translated health texts. *Southern African Linguistics and Applied Language Studies*, *31*(3), 349-357.

Nzama, M. V. (2010). Error analysis: a study of errors committed by isiZulu speaking learners of English in selected schools. PhD thesis, University of Zululand.

Ong, W. J. (1982). *Orality and literacy: The technologizing of the word*. Routledge.

Palmer, J.C. (1999). Coherence and cohesion in the English language classroom: The use of lexical reiteration and pronominalisation. *RELC Journal*, 30(2), 61–85.

Parkinson, J., Jackson, L., Kirkwood, T., & Padayachee, V. (2008). Evaluating the effectiveness of an academic literacy course: Do students benefit? *Per Linguam: a Journal of Language Learning*, *24*(1), 11-29.

Patel, C. and Clarence, S. (2009). 'Teaching Grammar in the Writing Centre Context.' *Southern African Writing Centre Association* (IWCA-ZA)

Phillipson, R., & Skutnabb-Kangas, T. (1996). English only worldwide or language ecology?. *TESOL quarterly,* 429-452.

Qi, X., & Liu, L. (2007). Differences between Reader/Writer Responsible Languages Reflected in EFL Learners' Writing. *Intercultural Communication Studies*, *16*(3), 148.

Salager-Meyer, F. (2011). Scientific discourse and contrastive linguistics: explicitness and the concept of reader/writer responsible languages. *European Science Editing*, *37*, 71-72.

Schleppegrell, M. J. (1996). Conjunction in spoken English and ESL writing. *Applied Linguistics,* 17(3), 271-285.

Simmons, A. M. (2015). Responsible Grammar Rebels. *Journal of Adolescent & Adult Literacy*.

Simpson, J. M. (2000). Topical structure analysis of academic paragraphs in English and Spanish. *Journal of Second Language Writing*, *9*(3), 293-309.

South African Ministry of Education. (2002). *Language Policy for Higher Education*. Retrieved From www.dhet.gov.za/HED%20Policies/Language%20Policy%20for%20Higher%20 Education.pdf.

South African Ministry of Education. (2015). *Curriculum Assessment Policy Statements (CAPS).* Retrieved from www.education.gov.za/Curriculum/NCSGradesR12/CAPS/tabid/420/Default.aspx

Spack, R. (1988). Initiating ESL students into the academic discourse community: How far should we go? *Tesol quarterly*, 29-51

Statistics South Africa. (2011). *Census 2011: Census in brief.* Retrieved from http://www.statssa.gov.za/census2011/Products/Census_2011_Census_in_brief.pdf.

Stotsky, S. (1983). Types of lexical cohesion in expository writing: Implications for developing the vocabulary of academic discourse. *College Composition and Communication*, 430-446.

Street, B. (1988). Literacy practices and literacy myths (pp. 59-72). Springer Berlin Heidelberg.

Street, B. (2003). What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current issues in comparative education*, *5*(2), 77-91.

Swales, J. (1990). *Genre analysis: English in academic and research settings.* Cambridge University Press.

Tannen, D., Hamilton, H. E., & Schiffrin, D. (2015). *The handbook of discourse analysis*. John Wiley & Sons.

Thesen, L., & Van Pletzen, E. (Eds.). (2006). *Academic literacy and the languages of change*. A&C Black.

Tshotsho, B. P. (2013). Mother tongue debate and language policy in South Africa. *International Journal of Humanities and Social Science*, *3*(13), 39-44.

US Government Census. (2007). Language Use in the United States. Retrieved from https://www.census.gov/prod/2010pubs/acs-12.pdf

Van Dijk, T. A. (1985). Introduction: Discourse analysis as a new cross-discipline. *Handbook of discourse analysis*, *1*, 1-10.

Van Huyssteen, L. (2003). A practical approach to the standardisation and elaboration of Zulu as a technical language. UNISA. Retrieved from: http://uir.unisa.ac.za/xmlui/bitstream/handle/10500/1224/thesis.pdf?sequence=1

Vujević, V. M. (2012). Ellipsis and substitution as cohesive devices.

Walt, J. L., & Rooy, B. V. (2002). Towards a norm in South African Englishes. *World Englishes*, 21(1), 113-128.

Wikipedia (2015). Pre-Columbian Era. Retrieved from http://en.wikipedia.org/wiki/Pre-Columbian_era on 26/01/15

Wilmsen, D. (2009) Cooperation in conversational dissembling. *Information Structure in Spoken Arabic*.

Woodhouse, P. (1998). People as informants. *Finding Out Fast: Investigative Skills*.

Zulu-English Bilingual dictionary (2014). Accessed at: https://isizulu.net/

Appendix i – Samples from data set 1

In this appendix, I have included the 23 scripts marked up to show features of cohesion in the texts. In some cases, additions to the mark up shown here were made to paper copies of these scripts (not submitted).

Paper 1
I agree that we cannot ignore technology in the classrooms and that we must find ways to implement educational technology because technology whether we like ***it*** or not ***it*** is available and ***it*** will continue to change people's live especially learners in classrooms.
Pea, 1998, as cited in Miller, 2008 explains that technology changes constantly meaning that even the technology that we own in our classroom such as overhead projectors in few months or few years ***it*** [repeated sub.] will be replaced by something new, there will be new technology invented.
I agree that learners should be provided with ***these*** advanced tools such as computers, digital media and internet as long as ***it*** [ambig] will be carefully guided and not only used for entertainment by [but] as educational tools that will benefit both teachers and learners.
One method I have observed in one of the schools that has a computers centre, the classroom has 24 desks and 1 working station which is the main that has the network for all the learners' computers. Learners are free to use the internet for all school related research but the teacher's desk operates to observe all activities happening around learner's computers.
Technology can help answer many basic questions (Miller, 2008). A teacher can not always have the correct answers to give to the learner, therefore, technology play a vital role in answering ***those*** questions.
In conclusion, technology should be in the classrooms because we cannot ignore the technology that is changing our learners' lives in providing ***them*** with educational knowledge. All that can be done is to….

Paper 2
I disagree with the notion of technology in education to a certain extent. Technology is only useful for academic purposes only. However, students in schools do not only use computers for academic purposes only. Rather, ***they*** use ***those*** computers for ***their*** personal enjoyment.
Students and learners these days abuse the access of internet in classroom. By downloading music, watching youtube videos; facebooking either on twitter. [fragment] ***They*** take advantage of the use of computers.
Their capabilities of learning are distracted by ***this access*** of free internet. Technology is highest value to learning and teaching in societies at large. However, technology should be used strategically and correctly, for the necessary purposes.
Internet can block a child's capability to think and use ***their*** brain critically and analytically. ***It*** cannot promote creativity, intuitive and associational thinking in the classroom. I believe technology should be introduced in schools however only to a certain extent. In terms of free access to the internet [fragment]. Not all subject areas and aspects of education require the use of technology.
As Cuban (1998) state in Miller's article, 'we must have clear goals regarding the use of technology in classrooms.' As Miller states in ***her*** article that we should not be more concerned about our children being uneducated. Education is implicitly more complicated than the acquisition and application of particular skills.
In conclusion, with the use of technology in classrooms. ***This*** won't increase the rate of passing students, ***this*** won't make ***them*** more wiser. ***This*** won't enable ***their*** cognition. So let's rather use computers in classrooms for the beneficial purposes and research purposes. Than have the top of the art schools with all technological equipment you can find but not producing the satisfactory results at the end of the academic year. Due to these reasons of learners distracted by the free access of internet in schools.

Paper 3

This essay outlines the importance of using technology in ^ classroom. Technology which is the use of skills and resources.

When you use technology in class you are not doing something that is wrong because technology is essential in [our] class today as ***we*** make use of cell phones in class not to chat while the teacher is teaching but doing academic work such as reading on libraries using our cell phones. Teachers especially who are staying in rural remote areas can receive programme from leaders via sms on how to teach a certain subject.

Technology is also important in the classroom as nowadays [we] have iPads ^ we can use ***those*** iPads to text sms for taking notes in lecture rooms, emailing our lecture if ***we*** have just ***I*** in class and he/she is not there.

Technology can also be used in class by both teachers and learners as a teacher can send a reminder to learners / offer learner updates for the class with ***them*** sharing their experiences when ***we*** do not understand a question ***we*** post our questions to ***our*** tutors blog on Facebook.

Learners can also use cell phone to google information that is not represented in the classroom.

Technology can also help ***us*** answer questions that leads to fundamental breakthroughs in learning and education. Learners can also use celly to take notes, celly which is sms based grouping and they can also use study boosty which allows learners to study via sms. When technology is used in ^ classroom such as phones and laptops the must not be anything that will cause distraction that is why in my argument ***I*** also highlights the use of text instead of voice.

I conclude by saying technology plays an important role in today's classroom and ***that?*** cannot be ignored nowadays technology is essential in our classes.

Paper 4

I stand against the notion. We do not have to use technology in the classroom. I believe that it is important as a teacher to have a goal in a certain subject / education. Miller (2014) says that it is not every aspect of education that requires the use of technology.

I personally agree with ***that***. Education has been successful without depending on technology. It is not everyone that affords to keep up to date with the changing of technology. Dr Cuban (1998) asks if can ***[sic]*** the same goal be achieved [vague] at a less cost and the answer to ***that*** I would say yes. ***It*** has always worked before then what is stopping ***it*** now.

I agree with Merriam-webster definition of technology that ***it*** is the first practical application of knowledge. And [syntax] looking at the world we live in now, it is not everyone that can work with a computer.

If computers / technology was to be brought as full time in classrooms then there won't be a need of teachers. The computer will guide the children with what to do and with ***that*** [ambiguous] it is not every learner that will be able to understand what is said by the computer.

With technology in classroom, children have skills of creating blog pages. With texting in classroom there be a lot of distraction because there are some lesson where children do not understand why they are attending.

Prove has shown that those under the age of 18 text more and ***that*** is the time when children need to learn new words, focus on building ***their*** esteem, with cellphones and other technology appliances in classrooms or school fake characters are built and children end up not being able to communicate with other peers.

With cell phones spelling gets corrected automatically and with a pencil you learn your mistake. You as a learner get to know what you know and what you understand.

If we are to use systems like 'Polly Everywhere' then what happens to the self-esteem of children what happened to voicing out in class and be helped personally by the teacher.

Paper 5

Technology should not be used in ^ classroom. Every person needs to learn how to write, how are learners going to learn how to write if technology is implemented it classrooms?
The use of technology should be used in the personal domain and not the classroom. When you are a foundation phase teacher it would be impossible to teach using technology as well as letting your learners learn through technology. From a young age you need to learn how to read and a from a book and how to write because if you don't learn from the foundation then you will have problem of reading and writing when you grow older. As it states in Miller (2008) say that ***she*** believes that children at a young age should be using technology in primary grade as their cognitive development requires a multi-sensory approach.
By letting young children use technology at a young age ruins ***their*** development as children. I also believe children will not learn through using technology in class, because ***they*** need to learn how to colour in, write ***their*** names and so on. Technology will ruin the learning process for children in the foundation phase
Learner in higher education should also not be allowed to use technology in classrooms. As you know we have got a number of social networks. As it is ***these*** social networks are ruining the literacy skills of learners because of the 'slang' language ***they*** use when texting and on 'facebook'. Learners will not concentrate in class when using technology because most learners will be on the social networks and there will be less learning taking place for ***those*** students.
Therefore technology should be in the personal domain for personal use not the classroom.

Paper 6
Technology plays an important role in learning in the classrooms. Through technology learners can have more information and can gain more understanding of the given concepts **[….]**. For learners to have access to technology ***they*** do not need to have expensive tools or expensive computers. A simple cellphone can make a big difference. ***It*** [this – sic] does not mean that ***they*** have to have smart phones to access the internet, those cellphones that are not smart phones ***they*** [rep] have internet, ***they*** can google information with much cheaper rate.
With those small phones they can reach a world of learning easily for example [commas] in Ghana learners could reach for books that could be found in a library through the e-reader that is found using cellphone. Other children could be informed by teachers through a simple text-message (sms). Cellphones in the classrooms can be seen by others as distraction to learners but maybe if learners are given a chance to use ***them*** during learning time ***they*** can be of big value in teaching. Even if it is not cellphones only, also other handheld devices e.g. iPad tablets etc.
Students can use tablets to take notes during lecture time or when teachers is introducing or explaining the particular concepts. Using ***these*** devices can be faster that writing notes with your own hand, hands get tired for the fact **[sic]** you cannot keep up with the teacher using your hands to write.
As [ambiguous] technology use has changed overtime Miller states that "as we seek to give students the best, most advanced tools to gain and apply practical knowledge in particular areas, we must assess the implements available for each specific discipline and determine the most suitable tools" So I think that what I understand about ***this statement*** is that we should not rely on technology all the time as teachers we should identify the areas that needs technology the most and also identify ***those*** who [which] need not be used with technology. [run on sentence needing contrastive conjunction]

Paper 7
Technology has played the most important roles in our lives. ***It*** has also influence our education in many different ways. In my essay I am going to discuss about the importance of technology in our class and how **^** is going to be handled in to not disrupt the classroom, but being a very important and useful tool that will benefit both learner and a teacher.

A report from (project tomorrow) proved that more than half of middle and high school students own a cell phone (51 percent and 56 percent […] respectively). Our learners has found new way of engaging in writing but not by using pen but by using cellphones as a new habit of writing some of ***these*** cellphones have internet access, of which it will be easy for learners to be engaged in class by using the tool that they love and use everyday. (Melanie Eva Miller) believed that if we can use instruction and finding a way of how to use ***these*** cell phones in a classroom **^** can be very beneficially to both parties learners and teacher.
Melanie Eva Miller believed and support Dr Pea when he it will be a bridge to the school and world to establish new learning communities because it will easier for both learners and teachers by developing teachers assessment, and ultimately improve curriculum standards.
However Melanie thinks that even without technology **^** can carry on like the past we have graduate who have graduated without technology in their classroom how did that affected their lives. Melanie Eve Miler believed that it will be useless to have a technology in our classroom if **^** cannot handle a discipline and in other ways they will be too young to understand what is going on the computers and ***these*** software are costly.
All in all I believe that technology can grow our education. If only ***these*** things can be introduced to our learners at the young age. If children can grow up knowing the dos and donts […] in the classroom. I believed that if children can introduced and instructed correctly from the young age what are the expectations when using technology won't be a problem but it will be benefit all the three parties which is learners, parents and teachers. Like it or not technology plays a very important role in the development of our education it build self esteem, it can help those who are disable to fit in the world of work, even for teachers marking can be a very hard work but in these days computers can give fit backs at the same time […]. It also serve time for teachers to send their grading to district but they can use email to do that.
In my conclusion I will say technology is essential backing up Dr Roy. It is important in our education like everything it has ***it*** advantages and instruction will be the answer and a solution.

Paper 8
Using technology in the classroom can be beneficial and advantageous. Although digital cellphones might be seen as a disruption in a classroom situation, not all of the users use ***it*** [sic] for only one purpose of having fun browsing through the internet, some might use ***it*** **[sic]** for academic purposes and to enhance ***their*** interest in learning. With reference to text 2, it is stated that a library in Ghana that had no books on ***it's*** **[sic]** shelves, hand an e-reader giving the students of ***that village*** access to hundreds of books that could never be physically sent to the library **[…]**. ***This*** shows that the technology is essential in a classroom situation, despite the fact that some might utilise ***it*** to distract others.
The implementation of technology in classrooms can enhance the desire to learn as students / learners are going to be taught in a way that ***they*** use in ***their*** everyday lives. Miller also added in conclusion that ***she*** believes in Dr Pea's assertion that "We cannot ignore technology in the classrooms" but also signposted the fact we must find ways that are effective to implement educational technology in this information age.

Paper 9
Technology can indeed add value or […] enhance education in the classroom. Technology cannot be always ***that bad*** in the classroom since [we] know that humans or as humans we are different so as the things we do, we do ***them*** differently to some ***they*** can beneficial and ***they*** cannot.
First considering the mobile learning, I think ***it*** is great because get learn through mobile learning, ***it*** is much helpful when considering the example of the library in Ghana that has no books in ***its*** shelves but now has an e-reader giving students of ***that village*** access to hundreds of books that could never be physically sent to the library. But on the other hand, parents still believe that mobile

learning is more for distracting and disrupting which can be true because sometime teachers can think that learners are doing school work only to discover that ***they*** are far from doing schoolwork.
I also agree with the use of technology in the classroom when considering the use of the devices that are not as powerful as smart phones because [we] know that some students are not good at having skills of writing using the paper and the pen so I think the implementation of ***these*** devices that can help students take notes take quizzes can be helpful. Again when looking at ***these*** devices ***they*** also boost learning skills but on the other hand some students can use ***these*** devices ineffective since ***they*** are the owners of the devices and [others] are not moderation by any policy.
Technology must be strategically implemented so that best results or quality education is carried out or […] improved, I agree with Miller because really without technology education will not improve and skilled citizens won't be produced ***that much***.

Paper 10 Technology has ***its*** pros and cons just like most other things. ***It*** may distract learners in a classroom environment during learning thus causing learners to lose concentration in the classrooms.
Technology in classrooms can help learners because sometimes it happens that there is a certain word that a learner does not understand [run on] in that case, the learner can surf the internet and […] find the meaning of ***that*** word and ***that*** is advantageous and […] shows why technology should be valued. However, if learners keep on relying to the internet to search words that ***they*** do not understand, ***they*** may have a problem during exams because ***these*** technologies are not used when writing exams.
With technology, all students would type ***their*** notes, be it with ***their*** cellphones or laptops and it would be easy for teachers to read what ***they*** have written and ***they*** all would have written in good grammar. Nevertheless, the disadvantage […] would be that during exams and tests, ***they*** would have to handwrite ***their*** work and ***they*** would show poor writing skills as ***they*** would be used to typing not writing.
It would be good to have technology in ^ classroom, but, the biggest disadvantage […] is that the teachers would not be able to monitor all learners to see if ***they*** are really typing ***their*** best notes. So, it would be possible that the teacher would think that ^ learners are typing ***their*** notes, only to find that what the learners are doing is off-topic, texting each other, chatting on Facebook etc.
I think as much as technology possess some good things, when […] put in the classroom environment, ***it*** possess more cons than pros.

Paper 11
I believe that even though technology can be a distraction when ***it*** is taught in the correct way or used in the correct way productive learning can take place.
"Mobile learning can help reach marginalised populations" (Schwartz, 2013, p.6). People from all over the world can share information using their mobiles which makes technology an essential part of learning even on a global level.
The use of technology in classrooms makes it easier for the learner and educator to communicate on one on one sessions without having the student to put ***his*** or ***her*** hand up, the "pull everywhere" for example is a good way for learners to engage in class activities without feeling shy or being afraid that they will be embarrassed if ***they*** give an incorrect answer.
"If cellphones have internet access, students can use them to look up information online" (Technology, 2011, p.11). Therefore the use of technology gives students the opportunity to access information that ***they*** did not know before. Searching for information online increases ***their*** knowledge of concepts and things ***they*** learn.
I conclude with technology is essential in classrooms with the correct guidance and ways in which ***it*** is used. We should use technology wisely and do not abuse ***it*** than all that we aim to achieve will be successful.

Paper 12

I agree with the fact that technology plays an important role in education. The ***following*** essay will show my views on the value of using technology in the classroom with reference to Miller and source 2 listed in the question paper.

Technology gives us the opportunity to explore and […] discover all kinds of content based on school knowledge and academics. Through technology [***we]*** can be in touch with school based knowledge wherever ***we*** are. ***We*** do not need to be sitting with a textbook to learn and to prepare for the next lesson or to learn for a test because our cell phone laptops and smart phones connect to the internet which allows ***us*** to search for all kinds of information. As it is stated in the Miller article that [x] "we have at our fingertips, the most immense access to knowledge and information that any society has ever known."

However, [we] need to learn how to use ***it*** logically and critically to develop ourselves academically and in proper ways which correspond with education. As Dr. Pea says in the Miller article "We cannot ignore technology in the classroom" (Pea, 1998). ***We*** must find effective ways to implement educational technology in the information age.

Mobile learning is an example of a constructive way of using technology to our advantage with regards to education. The projects which facilitate and support mobile learning make positive impacts to people around the world. For example, UNESCO is piloting a program with English teachers in the Schawartz (2013) article. The feedback received from participating teachers […] says that they find it very helpful in their classes and […] to them as well. ***This*** program helps teachers by providing them with examples on how to teach English language teachers throughout the country. They received messages on the information required by them.

The article of texting in the classroom: not just a distraction is another example on how technology influences our education positively. Texting in the classroom does not cause a distraction in my point of view it has more good advantages [redundant] than bad. For example, the article makes / shows four good uses of texting. i.e. reminders which allows teachers to send text messages and emails to students to offer reminders of work done in class assignments. Celly which provides SMS based group messaging poll everywhere allows teachers to use cell phones for polling in class and studyboost which allows students to study via sms based quizzes.

I also agree with the fact that we can acquire knowledge without the use of technology but now that [***we]*** have ***it*** uses of ***it*** increase and […] are much more helpful so [***we]*** might as well use it.

Paper 13

Technology plays an important role in the classroom as ***it*** brings about new and effective changes in the education system.

I agree with Miller's argument that teachers must find a way to accept the use of technology in classrooms. ***This*** is because, there is a large number of things teachers and students will benefit such as communication, sharing information, updates, reminders. Furthermore, there are even organisations which have insisted and are working hard to include technology in the education system such as UNESCO.

"They (UNESCO) advocate for clear policies set at the state or national level to guide mobile teaching practices" (Schwartz, 2013, p.6). Therefore, all schools must have policies regarding the use of technological devices such as cell phones, computers and more. Nowadays, cellphones are widely used our society, thus ***they*** must be allowed in schools. "…cellphones a potentially very useful educational tool" (Tremblay, 2011, p.11). ***They*** can be used to get information fast and cheaper on the internet, ***they*** have calculators. Thus, there will be no need for students to bring or buy calculators as ***they*** have cellphones that have calculators.

Technology can also be used in phones which are cheap, […] has only a few features and numeric keypads. For example, text messaging is most used by students for personal and academic purposes. "…internationally mobile technology is revolutionizing learning too often without fancy gadgets" (Schwartz, 2013, p.5)

Paper 14

Technology is essential to both teachers and students in the classroom. The reason is that technology provides learners with skills and ***it*** provides more information to learners. Students enjoy learning online or learning using technology, by ***that*** technology enhance learning in the classroom. Technology gives teachers and learners the opportunity to learn from other people across the globe Scwartz (2013). Technology is very essential because teachers and learners get involved in blogs, help learners think critically, blogging promotes creative, intuitive and associational thinking (Miller). Technology are a large term ***it*** includes internet, with the use of the internet learners can be able to search for difficult terms in the internet to assist in ***their*** learning in the classroom.

I believe that technology is essential to both teachers and students in the classroom, because everything in the classroom is printed using technology, the worksheets are also products of technology. With that I conclude by saying that technology need to be strategically implemented in every learning area.

Paper 15

Using technology in the classroom is a good idea and […] can help develop children's skills in a particular way. ***They*** can get skills that ***they*** wouldn't get while using books and reading material. ***It*** can help ***them*** in studies like technology where ***they*** get to apply the knowledge […] ***they*** have learned practically. Technology can also give ***them*** a better view of the world at large. But using technology can be good to some extent. ***It*** can be a distraction somehow and [we] might not know that student use technology in the classroom for educational purposes only or for personal reasons too.

Using ***these*** gadgets results so much in the students having bad handwriting because ***they*** are not used to writing but pressing buttons and […] the gadgets doing all the work […] for ***them***, as it is said in the article is the cell phone the new pencil.

And in texting in the classroom: not just a distraction, it is said that the availabilities of technology does not mean that all cell phone usage is educational and texting in the classroom is on-topic. The teacher might be teaching and […] thinking that the children are paying attention or […] doing ***their*** work whereas ***they*** are just texting each other for personal purposes.

Using / implementing technology in the classrooms has ***its*** pros and cons, ***it*** can either be helpful or ***it*** can become a distraction if ***it***'s not implemented in the right way and if ***it***'s not managed properly. Like children using tablets instead of writing books, ***these children*** whenever ***they*** are given a task to do ***they*** will rush to finish ***it*** in order to play games or do ***their own*** stuff. Now ***this*** means that the work was not properly done and therefore making the use of the technology a distraction to education.

To conclude, if technology is implemented and […] managed correctly in the classroom then working with ***it*** won't be a problem but if ***it***'s not then ***it*** becomes a distraction to education and lessens the children's opportunities of learning.

Paper 16

Technology is good to use in a classroom. As long as you know what you are using ***it*** for, and you know what you want to benefit from ***it***. You can use technology in a classroom in subjects like geography and life sciences, when learning using slides. According to Miller (2008), ***he*** believes that quality education can be enhanced by technology; ***it*** is defined by ***it***. ***This*** is true because in some other areas the [?] learn without the use of technology.

With technology your life can be easier when using mobile learning. Schwartz (2013), Africa is the fasted growing mobile market and the second largest **[…]** after Asia. Vosloo says, there are most

mobile phone subscriptions that people in Africa, meaning some people have more than one **[…]**. [unclear] People in developing countries have developed love for mobile phones, some are using ***it*** [sic] for learning other for entertainment.
In Nigeria, UNESCO is piloting a program with English teachers. Program leaders send messages daily with examples of how to teach English language to teachers throughout the country, Schwartz (2013). ***This*** means technology is improving day by day.
The cell phone is the new pencil nowadays. Children have the poor writing skill and the writing effectively seems to be difficult. Teachers do not teach students to write formally, so suddenly students have found ***their*** way to write essays. Students are lazy to take a pen and paper to write notes, the [sic] prefere typing the notes rather than writing them.

Paper 17
My position in this argument is that technology should be used for teaching and learning in classrooms. Reason being is that there are far too many learners who are in high schools but has never touched a computer. ***That*** makes me want better technology to be included in classrooms. However computers and internet are not the teacher, teachers need to continue doing ***their*** jobs of teaching [rep] because ***this*** [inexplicit or unclear ref] leads to learners having to google everything. For example last year in my matric I went on town to do my assignment in a library but ***they*** did not have textbooks for what I wanted, ***they*** referred me to a computer and I did not know a thing about computers. As a result I did not do my assignment.
Technology should be used in the most appropriate manner where at school ***they*** have a period made for teaching the use of computers not that everything is done by a computer because computers are not teachers and pens. (Cuban 19998) agrees that education should be enhanced by technology not to be defined by ***it***.
However, technology in classrooms is not a bad idea but what will happen when ***it*** is no longer there. I suggest that ***this*** strategy [unclear ref] should be done is secondary grades and upward not in primary school. (Cuban, 1998) strongly agrees that the stages of learning and of cognitive development remains unchanged even in an increasing technological methods.

Paper 18
Technology has a role in some ways. This essay will show my argument. I agree that technology is somehow important but somehow not. There should be limits in usage of ***it***.
Technology should be used in classroom but ***it*** must have ***it*** [its] period. The way I see it is that ***it*** can waste time for teaching and learning hours because a student may be asked a word ***he/she*** doesn't understand then **[…]** go to the dictionary or google only to find out that in the meaning of the word there is another word ***he/she*** doesn't understand must ***he/she*** look for ***it*** time is wasted then. [run on]
Technology is also important in terms of applying some skills in a learner so that it could be easier for ***them*** to not struggle when ***they*** get to university. However, there should be limits and standards on how to teach ***them*** computer. Technology now increase the number of people to be lazy. ***They*** become lazy to think ***they*** often use technology as ***their*** source of information. No manager want employ lazy person all employers want a best thinker to develop ***their*** businesses [run on]
Technology must be questionable to all of us in terms of usage. ***It*** must not be exposed to learners too much ***they*** should learn to answer on their own. [run on]. ***This*** could lead ***them*** in problems not to think on ***their*** own.
A teacher could see that OK learners are now struggling to get an answer. ***He/she*** now must make ***it*** ***their*** homework allow ***them*** now to do ***their*** research anywhere including technology. [run on]
He/she must not allow technology to be used in class because I know ***those*** who will be always be praised for saying good answers are ***those*** carrying smart phones what about other learners struggling in ***their*** homes ***they*** also want to be praised. [cataphoric] [run on]

This could lead ***them*** to do bad things to get smartphones, like prostitution or robbery which is wrong. ***This*** will also create discrimination in class ***those*** who doesn't have smartphones will see ***their selves*** discriminated. I don't see the use of applying technology to young and fresh learners in primary grades. ***These*** children are young ***they*** don't need computers ***their*** mind is fresh beside ***that they*** are being taught basics and easy things. [run on] ***They*** don't need internet.
I can conclude by saying technology is important but ***it*** should be planned in standards and limits. Therefore I mean there should be days in which ***it*** can be used and some days not.

Paper 19
The use of technology have brought about large and interesting developments in the way we approach our school and everyday lives. We use technology everyday, ***this*** can be making a call or going shopping. We encounter ***these*** all the time.
The use of technology in our classroom has brought about big changes, as we are now able to access information. **The access** is not only limited to the school computers but now *it's* available to learners even when ***they*** are out of school. ***This*** is through ***their*** cellphones and home computers. Learners are able to do research on ***their*** studies more effectively because ***they*** can access the internet. ***They*** have a wide range of sources to locate ***their*** required information.
The use of technology has enabled ***them*** to access information which was previously impossible to get. ***They*** do not only rely on the textbook and the teacher. As we know some areas are struggling to access books.

Paper 20
Technology has been a source that makes life easier. Nowadays, ^ majority of the schools prefer or use technology in the classroom. As the main thing that guides teaching and learning.
Looking at the generation of today, I can say ***we*** have moved from being "generation why" to being the generation of technology. ***We*** are now exposed to things such as computers, laptops and mobile phones at an early age as compared to the generation of ***our*** parents.
Now, drawing from my everyday life. I would say I agree to the use of technology in classrooms nowadays. ***This*** is mainly because I am aware of how I use technology every day. For example, using a computer to research what I seem not to understand, both academically and personally.
However, I do not say that computers or digital media can replace teachers. Teachers will always be needed to instruct learners and control ***them*** as well. But, using computers in classrooms can improve the learners' performance. For instance, children tend to enjoy playing with gadgets or handling computers so if ***they*** get to learn with what ***they*** mostly interested in, ***their*** level of performance will improve.
Instead of listening to a teacher giving instructions or presenting a lesson orally that might have a possibility of being a bore to others the teacher and the learner. Schools may introduce the use of PowerPoint presenting, where a teacher gets to talk less and use videos to enhance learning.
Even Dr. Pea contends that ***we*** need not to ignore the significance and the role that technology plays in learning and teaching. Instead, ***we*** should find ways of implementing ***it***.
This suggests that ***we*** have teachers who are computer literate or have the technical computer skills.

Paper 21
Cellphones / technology may be seen as a distraction to students but ***they*** also can be seen as something essentially improving the literacy level and giving easily accessible information and communication between teachers and learners.
The access of technology to most students is a distraction because ***they*** most of ***them*** do not know / are not able to limit ***their*** use of internet. Most of the students text during class, ***they*** chat on social networks and […] end up not listening to what the teacher is saying / teaching in class.

Miller (2008) says that the solution to ***this*** is that the use of technology in classrooms must be carefully and strategically implemented in order to be of the highest value to both teachers and students.
In other words, the teachers must have clear goals on the usage of technology in classrooms.
(Cuban as cited in Miller, 1998) says that we must have clear goals and solutions for how to achieve particular outcomes in all disciplines, both with the presence and absence of technology.
(Webster as cited in Miller 2008) says that "technology is not optional, it is essential." In other words, technology has a meaningful value in classrooms.
There are quite a lot of things provided by technology that can improve the process of teaching and learning, for educational weblogs allow for opportunities to use technology in meaningful aspects, such as e-portfolios, collaboration, experimentation and development.
The opportunities mentioned are essential for learning, ***they*** will be of great value to the improving of the literacy skills that learners will gain.
It is stated, again, (Miller, 2008) that blogs promote critical and analytical thinking, so if teachers get students more involved in blogging for academic purposes, ***their*** pass rate will increase.
The use of technology is not optional but ***it*** is essential if teachers want to keep learners active and interacting in class, ***they*** should use technology, because ***that*** is what the youth enjoys being involved in nowadays. The teachers should monitor the use of technology and make sure that learning through written texts (books) still exists because ***it*** also important.

Paper 22
I am against the use of technology at school because some other learners use ***it*** in an ineffective way.
Some learners will use technology like cell phones to make distraction on classes. A student is *sitting at the back* of a classroom not paying attention to the teacher, busy texting to the learners *sitting in the front* […] and that causes distraction to the learners.
Learners use cellphones for social networks and ***they*** don't use a correct form of writing ***they*** use improper language when texting to others. We don't have to apply technology anywhere and not anyone is supposed to use technology.
People must use technology wisely and effectively. They must not use it by showing things that would be harmful to others. Playing videos music is not that useful because you are taking lot of time in wrong things instead of studying*, making some research about something* and get knowledge* [parallelism breaks down]

Paper 23
The type of technology used in the classroom has to be a kind that does not distract the lesson.
Technology in the classroom are a distraction.
When using a technology which is a cellphone in the classroom it is a distraction because learners would be busy texting while the teacher is teaching and the teacher can never be sure the learners are not off context if a technology it is allowed in the classroom. To keep track of ***that*** will be hard and time consuming.
For example when learners are allowed to use cellphones in the classroom discourse ***this*** can be ***a good thing*** to learners as they will be not writing but typing which is more simple and they will not have problem spelling because the technology devices auto-correct the spelling and they will have problems when they have leto write without the auto-correct spelling as they will suffer the spelling errors.
Technology in the classroom is not a good thing to be allowed in […]. Learners can socialise through the devices and not pay attention to the lesson being presented but on the other hand some learners concentrate well if they are texting and ***that is where*** they are able to obtain more information.

Learners will not use the technologies to do the school work only in the classroom an example would be when the learners are using the social media or application to communicate in the classroom they will talk about things which are not part of what they are learning and they can listen to music which is a big distraction in the classroom because learner or teaching happens when the teacher is teaching and the learners are listening without listening learning will not happen or will be distracted.

If technologies are used in the classrooms there should be a way to manage that the learners and teachers are both satisfied and get the purpose of the lesson done at the end of the lesson, which is very different with the use of technologies in the classroom.

With the above argument, I firmly believe that technology it is a distraction towards learning in the classroom and it is hard to maintain that learners stay on context when using cellphones in the classrooms.

Appendix ii – Samples from data set 2

Here is a sample of the analysis of data set 2. Pronoun references and conjunctions are highlighted. In some cases, additions to the mark up shown here were made to the paper copies of these scripts (not submitted). Following each script there is a table showing the main idea in each sentence in the English text.

Paper 1

My name is [S7], I was born in KZN Newcastle. I attended my lower and higher levels of education there. I am a second year student here at Wits.

My experience of using English as a language of instruction at university was not the best experience ever because coming from an all black community whereby **[?]** the only language of communication is IsiZulu had a negative impact on me in terms of academic results.

I struggled to construct essays and I was clueless about referencing. I failed to understand all the instruction with our assignments because I used to be informed and translated into IsiZulu by my previous or former school teachers.

I regret the fact that I have been so ignorant and only associated myself with my language speakers however, I am reading all reading materials, regardless of what it **[sing/plural]** may be and for the words that I do not understand, I check them on the dictionary.

I would not change English as a medium of instruction and switch to isiZulu because I know the experience it is not the best feeling for one at the end of the day. I always feel demotivated and stupid.

P1 S1 Name and place of birth
S2 Went to school KZN.
S3 2nd year student at Wits
P2 S1 Experience of English as LOTL is neg, from all black community with only language had negative impact academically
P3 S1 Struggled with essays and referencing
S2 assignments difficult to understand due previous translation of everything into IsiZulu
P4 S1 Regret of 'ignorance' of only speaking IsiZulu but reading all in Eng now and checking new words
P5 S1 Against changing LOTL to IsiZulu based on personal exp.
S2 S always feels demotivated and stupid.

Paper 2

I am for the use of English as the medium of instruction at the University. Firstly because it is not everyone at the University who understands IsiZulu if it was a medium of instruction. However English is more reasonable **[…]** and not difficult, but accommodates everyone in the nation. Another thing is IsiZulu can sometimes but difficult especially for those of us who grew up not speaking IsiZulu. Imagine then if IsiZulu was the medium of instruction, what about other races who are not familiar with IsiZulu.

My experience of coming to university and being exposed to English made me improve my English to be better. ^=^ As I was not very familiar with the language.

Another advantage of using English as a medium of instruction is that it reveals us to things we did not know. ^=^ As well as things we weren't familiar of. Either way, English is spoken anywhere you go, you need to be equipped with English.
Another advantage of using English as a medium of instruction is that it made me enable my skills of writing, reading and speaking English better [need for ellipsis]. My opinion is it is a great idea that English continues to be the medium of instruction at our university.
I am for the use of English as a medium of instruction.

P1 S1 For English as LOTL at varsity
S2 Not everyone would understand IZ as LOTL
S3 English not difficult and accommodates everyone
P2 S1 IZ can be difficult if not grow up using it
S2 So, if used as LOTL other 'races' would suffer
P3 S1 Varsity experience has improved their English
S2 Not familiar with Eng before
P4 S1 Another adv, Eng reveal new things
S2 Reveal things not familiar
S3 In any case, Eng is spoken everywhere
P5 S1 Another adv, enable skills of reading writing and speaking in Eng
S2 Good idea to continue with Eng as LOTL
P6 S1 For use Eng as LOTL

Paper 3
IsiZulu to us black people we take it as our mother tongue. There are many advantages that you can name if you were given an opportunity to name them. In the following paragraphs I will look at the advantages and disadvantages of studying in IsiZulu as language of instruction.
If you are a Zulu home language speaker there is nothing can confuse when using it as a language of instruction. You will say everything that you will like to say. You are not ashamed of yourself and it gives you that self-confident. You feel free when using your home language without being afraid of being fluent in it.
I saw English as a suppression language to us blacks because is the language that only use in school not in our homes. It will confuse us even if you know the answer but you will struggle to say it in English. The way ***they*** question us, it is very confusing for us.
Yes, I agree English is a universal language that can unite us. What I will say is let the white also study IsiZulu. Let them struggle like we do when we want to express ourselves in that way no one will laugh at each other because we see that they also struggle when they want to express themselves in our language.

Para 1
Sent 1 Zulu is our mother tongue
Sent 2 Many advantages of using Zulu
Sent 3 Following paper looks at advantages and disadvantages
Para 1
Sent 1 English is tool of suppression of blacks, only used in Schools
Sent 2 It confuses even students who know the answer
Sent 3 Questions from teachers are confusing
Para 3
Sent 1 English is a universal language
Sent 2 Let whites also study Zulu
Sent 3 If both sides struggle no one will laugh at the other

Paper 4

Using English as a medium of instruction has a positive and negative impact according to me. I will start with negative impact **[…]**. It is not easy to answer a question asked in English **if** there is a word that you don't understand well or not knowing the definition of the word, that makes it hard to answer the question because you don't know the exact definition of the word **[rep]** Secondly, what might not be positive by using English as a medium of instruction [ellipsis required] is that it is not our mother tongue and that is why we misunderstand at times. The positive impact about using English as a medium of instruction is that, as schooling is a way to prepare for working or jobs the use of English as a medium of instruction [ellipsis /substitution required] helps because even the interviews are conducted in English. Another important and positive impact of using English as a medium of instruction [ellipsis / ordering linker required] is that the way in which we communicate today is in English therefore if you have been taught in English it becomes easy for you communicate.

P1 S1 Pos and neg sides to Eng as LOTL
S2 Start with neg
S3 Difficult to answer qu if you don't know a word,
S4 Not mother tongue that is reason for misunderstandings
S5 Positive side is schooling in Eng prepares for jobs and interviews
S6 Communication today is in English so if that is LOTL, communicating will be easy

Paper 5

I am a Zulu speaking person and I grew up in a Zulu neighbourhood. I began learning in English from crèche up until I matriculated. I was in an English medium school but we did a little bit of isiZulu, which was first additional. We did not really go into deep parts of IsiZulu.

When I came to varsity I did not really have a problem understanding the language but I had friends who were struggling to understand, speak, or write English. I am not saying I know everything there is to know in English. When I got to varsity I learned a lot of new words and other things in English. The fact that I was in English school during my schooling year, I must say it gave me an advantage of understanding instructions, here at varsity. I was and still able to write in English and I could interact with English speaking people around campus. I could also understand what was being said in lecture notes.

I love my IsiZulu language and I am proud of being Zulu but it would not be right if IsiZulu was to be used as a medium of instruction in Universities simply because not everyone […] is Zulu speaking and we have other African language in SA. English is spoken everywhere in the world, not only in South Africa, that is why I say it must remain the medium of instruction in Universities.

Para 1
Sent 1 Zulu person in Zulu neighbourhood
Sent 2 Spoke English from Creche until matric
Sent 3 English medium school, Z as 1st additional
Sent 4 Not deep instruction on IsiZulu
Para 2
Sent 1 Varsity not prob for me but prob for friends

Sent 2 not claiming total knowledge of English
Sent 3 new words and other things in Eng at varsity
Para 3
Sent 1 English medium school advantage at varsity
Sent 2 Able to write and interact with people easily
Sent 3 Understand lecture [+] notes
Para 4
Sent 1 Loves language and culture but 'no' LOTL change to Zulu, as not everyone speaks zulu other afrcian languages
Sent 2 English is spoken all over the world so should remain lotl and uni

Paper 6

I felt bad after coming to this university because I had to use the medium of instruction which is English at all times. The other thing was that I couldn't grasp the content very well which was taught as they were using English in lectures. To add on that, I never got assistance when I went for consultation as I had to speak and understand what they say in English.

I believe it is better to use IsiZulu in our courses as language of instruction because from grade 1 to grade 12 all students in my school were taught in IsiZulu. This, therefore, will make it better for me to understand the content of what is being taught and I will be able to answer the questions as well.

Para 1
sentence 1: Change of LOTL causes distress
sentence 2: Consequence of LOTL change, content difficult to understand
Sentence 3: Additional consequence is difficult getting help in consultation
Para 2
sentence 1: Position statement: use IsiZulu as LOTL because it is used in schools
sentence 2: Favourable consequence of change to LOTL stated

Paper 7

I don't think it would be a good idea if we were to substitute English with IsiZulu because the rest of the world uses English as the language of communication. IsiZulu can help you in certain parts of South Africa but if you do not know English you are nothing to the world and your opportunities become limited.

Substituting English with IsiZulu limits ones opportunities of reaching their maximum potential in English. Ones chances of being successful at/in University are also very slim because everyone at this level is expected to know English.

Substituting one language with the other would mean that we would have to separate people because not everyone speaks this language of ours.

Para 1
Sent 1 Position statement, not a good idea to use IsiZulu as LOTL
Sent 2 Zulu helps in some places but not in the world at large
Para 1
Sent 1 Changing the LOTL to Zulu would limit progress in English
Sent 2 Another not to change, chances of success at University are limited
Para 3
Sent 1 Changing LOTL to Zulu would mean separating people

Paper 8

The advantages of using English as the language of instruction ^ has helped me a lot with regard to improving the way I spoke English when I was at high school and now. It has also helped me by communicating with people who speak different languages but to speak in English with them.
The disadvantage of using English as a medium of instruction is that I am improving influencially but in writing I am still making mistakes and lots of them. Especially when it comes to essay writing I make spelling errors and my sentences are not well connected. It would have been better if IsiZulu was also used in question papers, where they translate English to isiZulu.

Para 1
Sent 1 using English at varsity has help improve their English compared with high school
Sent 2 helps with communicating with other who speak other languages
Para 2
Sent 1 Downside, fluency improves but lots of written mistakes remain
Sent 2 in essay writing spelling mistakes and sentences not connected
Sent 3 Would prefer question papers as well as English on question papers

Paper 9
I use to live in KZN and I use to learn everything using IsiZulu including English as a subject. When I came to Wits it was difficult for me to adapt because I had to first try and understand what they were saying before I understand content knowledge of the subject.
On my own point of view I would want English to be changed as LOTL because English is a universal language and is used worldwide. English is not good for me but ***it*** is convenient for me.

Para 1
sentence 1: LOTL school background
sentence 2: New LOTL at Wits is difficult makes content difficult
Para 2
sentence 1: position stated: use English because it is universal
sentence 2: Contrast between what is good and what is convenient

Paper 10
English to us a Zulu it kind of some problem. I an issue too much because you find yourself answering what has not been asked. I usually see this as because it is not our mother tongue. If I look at many things they apply English even our methodology. For Zulu you find out it also contains English. I usually ask myself why aren't we be asked questions in our mother tongue so that we will pass like White people. Sometimes I find myself beating my chest saying I know I did well in an assignment of Education only to find out that I was lying to myself very very disappointing marks saying I did not did well. Also bad comments which makes me to feel very low and lose hope. Sometimes I try to use dictionary for finding a word meaning which I don't understand. I find myself not knowing its meaning even in a dictionary. I suffer and try to find it in Google only to find I get very lost and be left surprised.

Para 1
Sent 1 English is a problem for IsiZulu speakers
Sent 2 You sometimes answer questions you were not asked
Sent 3 Many things apply to English **(idea not expressed clearly)** even methodology
Sent 4 Zulu also contains some English
Sent 5 Why aren't we questioned in mother tongue so as to pass like white people?

Sent 6 Feeling of doing well in an assignments leads to disappointment
Sent 7 Critical comments are discouraging
Para 2
Sent 1 Use of dictionary to find word meanings
Sent 2 Dictionary work doesn't always provide comprehensible meaning
Sent 3 Using google doesn't always work either

Paper 11

The use of English only at University has a negative effect on my studies. This is because even though we have eleven official languages, the language of instruction is English only. This indicates discrimination or the preference of only one language over all the other languages. This brings or make **[this results in?]** people to be ashamed of their own languages. This is evident when you find two or more people who speak the same language, not using their own language but choosing or prefer to speak in English.

Another important point/fact is that, the use of English only adds pressure on the students from other languages other than English. The students face challenges in doing / completing their work. The reason for this is that there is no continuity of the language of instruction as they go to a home where a different language is spoken. This reflects him **[collocation]** in a bad light when you compare him to white students where there is continuity at university and home. This brings doubts and makes them feel inadequate or even stupid.

P1 S1 Eng LOTL neg effect on studies
S2 Out of 11 langs only English used
S3 This discrimination / preference of 11 language
S4 Result is people ashamed of their own language
S5 This is evident when 3 people with same lang choose to speak Eng instead
P2 S1 Another point, Eng add pressure to ss with other home lang
S2 They face challenges completing the work
S3 No continuity between home / school life
S4 Reflects negatively compared to whites who have continuity of home /school advantage
S5 Result is doubt and feeling stupid

Paper 12

The first thing I'd like to say is that I do not agree with the fact that we have to do all our courses in English.

Most of us did not get good marks last year especially in Education studies because our English is not that good. Even though we understand the content of our course we would not do well because of the way we write our essays. Most of us did English as a first additional language from primary until high school. I started doing English when I was in grade 4 and therefore I wasn't that familiar with it. When I first arrived at Wits I chose English as my major because I had a passion for language. But then, because of the fact that my accent / the way I speak English was different from the rest of the people my confidence became low. I also realised that the way they did literature was very too different from the way we used to do it in high school. Fearing that I would fail, I change to Zulu because I am a language person. Even though I am doing better now, I still am against the fact that we should be forced to learn in English.

Para 1

Sentence 1: Position statement – doesn't agree with English as LOTL
Para 2
Sentence 1: Low marks last year because of English
Sentence 2: They understood content but writing wasn't good enough
Sentence 3: Most people studied English as additional language til high school.
Sentence 4: Not so familiar with English due to starting it grade 4
Para 3
sentence 1: At first his/her major was English
sentence 2: Different accent / speech led to low confidence
Sentence 3: Different way of studying literature
Sentence 4: Changed to IsiZulu major fearing failure
Sentence 5: Doing better but against English as LOTL

Appendix iii – Interview schedule

Researcher's Question
1) Where did you go to school and what was the LOLT?
2) Which language is easier to write in: English or IsiZulu?
3) When writing in English, do you think first in IsiZulu then translate into English?
4) Have you been instructed to write using the 'introduction, claims, support, conclusion' type of essay format?
5) Does it feel natural to write in this genre or would you prefer to write a different way?
6) Were you taught to write academic IsiZulu? If so, was it the same format or a different format (as above)?
7) Do you ever feel like repeating material in an essay but do not do so because you are not allowed?
8) When using conjunctions widely in your writing, to do ever feel that this will create a negative effect on the reader: that your point is obvious so it doesn't need be signposted so clearly?
9) Could Wits University do more to be flexible in these matters?

Appendix iv - Key to mark up of data set 1

a) Lexical cohesion

Direct or close reference to these nouns are highlighted as shown:

Technology

Learner

Teacher

The classroom / learning process

Other chains

Indirect relation = Less direct references are shown in the same colour but underlined.

Lexis in citations not counted.

b) Referencing

Bold italics:

These problems are known to cause great difficulty.

[we] = ambiguous referent

c) Conjunctions

Colour of text changed to light brown (looks orange on some screens)

However,

Relative pronouns: which