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Editorial

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Defining 'plain language' in contemporary South Africa

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Abstract
Defining the concept 'plain language' has been hugely problematic since the origins of the so-called Plain Language Movement in the 1970s in the United States and elsewhere in the world. Definitions of 'plain language' abound, yet James (2008: 6) warns, in relation to plain language practitioners, that "we can't yet call ourselves a coherent field, let alone a profession, while we offer such varying definitions of what we do". Contemporary international definitions of 'plain language' are of three types: numerical (or formula-based), elements-focused, or outcomes-focused (Cheek 2010). In South Africa, protective legislation gave rise to a local definition of 'plain language' which was widely acclaimed for its comprehensiveness and practicality. From a textlinguistic angle, this article ruminates on the nature of the definition of 'plain language' in the National Credit Act (2005) and the Consumer Protection Act (2008), and critically appraises the value of the definition as a sharp and reliable conceptual tool for use by plain language practitioners – as applied linguists – in the absence of norms, standards or guidelines for the use of plain language in the consumer industry in contemporary South Africa.

Keywords: plain language, definition, readability, text processing, language policy

1. Introduction

Defining the concept of 'plain language' seems to be hugely problematic, and for this reason criticism is often levelled at plain language movements. 'Plain language' is often "[so] loosely defined that it can mean anything from the process of simplifying complex sentence structure to the wholesale rewriting of documents" (Schriver 1991: 1). However, there are those who argue that the vagueness and imprecision of plain language definitions do not necessarily pose a problem, as Kimble (1992: 14-15) argues in the following quote:

> […] It is no criticism that Plain English cannot be precisely, mathematically defined. Neither can 'reasonable doubt' or 'good cause'. Like so many legal terms, it is inherently and appropriately vague. And we have to settle for making it as clear and precise as possible. In fact, commentators recommend that Plain English laws not adopt the precise standards associated with readability formulas […] No one expects that every contract will be perfectly

> comprehensible, but we can expect that business and government will get off dead center and try to improve them.

But some seventeen years later, Neil James refers to the confusion that has accompanied the concept of 'plain language' for decades, and points to the large variety of definitions that exist and may well impact on the work of plain language practitioners when he remarks that "[w]e can't yet call ourselves a coherent field, let alone a profession, while we offer such varying definitions of what we do" (James 2008: 6). This points to a particular need for steadfastness or some measure of undeviating constancy without which "we would [lack] a theoretical and philosophical basis for distinguishing between various disciplines" (Weideman 2011: 5).

According to James (2008: 1), apart from definitional problems, there is also some confusion as to the place of 'plain language' in the wider field of communication. Drawing on Robert Craig's (1999) work on seven distinct communication traditions, James (2008: 1) argues that the rhetorical tradition may offer the most useful paradigm for dealing with communication problems that are experienced in, for instance, legal domains. The rhetorical tradition focuses on communication as practical discourse. 'Plain language' as a cultural discipline, with dimensions that are "characteristically human [and take the form of] the logical, the historical, the lingual, the social, the juridical" (Weideman 2011: 5), is not dissimilar to rhetorics, as both apply to the same contexts. Rhetorics practitioners usually prefer methods that place the audience of any public discourse at the centre in order to reach practical outcomes.

'Plain language' and rhetorics also share the same processes and methodologies, and it is these common aspects that are especially significant. The five canons of rhetorics, as identified by the philosopher Cicero (James 2008: 3), are still important in plain language work: *invention* relates to content and its accuracy, completeness and the logical construction of arguments; *arrangement* relates to structure and organisation, and the effective sequencing of information in a text's structure according to the purpose of the text; *style* relates to expression (including word choice), sentence construction and length, and tone; *delivery* originally related principally to the verbal presentation of discourse, but in recent times it also relates to design issues such as typography, layout and other visual elements; and *memory* related historically to techniques to memorise long discourses or stretches of text, but we now have storage systems such as databases, help files, content management systems, etc., that essentially serve the same purposes. Although the focus of some elements may have changed in modern times, they are in essence the same as those that appeared in the traditional paradigm. James (2008) points out how these elements are represented in the definition of 'plain language' in two important South African acts: the National Credit Act of 2005 (NCA) and the Consumer Protection Act of 2008 (CPA).

It is argued in this article that the success of plain language work will largely depend on how refined its conceptual tools are. The aim of this article is threefold: (i) to ruminate on the definition of 'plain language' in the NCA and the CPA (from now on referred to as "the NCA/CPA definition"), (ii) to categorise this definition in terms of the three categories of international definitions of 'plain language', and (iii) to critically appraise the NCA/CPA definition as a conceptual tool to guide plain language practitioners in their daily work. However, before the definition is discussed and appraised, it is suggested that textlinguistics, apart from rhetorics, may provide a useful theoretical framework for plain language work.

> which readily conveys its message to its audience. However, plain English is not concerned simply with the forms of language. Because its theme is communication, it calls for improvements in the organisation of the material and the method by which it is presented. It requires that material is presented in a sequence the audience would expect and helps them to absorb it. It also requires that a document's design be as attractive as possible in order to help readers find their way through it.

The International Plain Language Working Group, consisting of representatives and experts from the US, the UK, South Africa, New Zealand, Canada, Sweden, Portugal, Mexico, Hong Kong, Belgium and Australia, analysed a large number of definitions and divided these definitions into three ideal definition types, following James (2008). Definitions that essentially contain a list of guidelines for plain language writing were also considered. The three categories of definitions are (i) numerical or formula-based definitions, (ii) elements-focused definitions, and (iii) outcomes-focused definitions (Cheek 2010).

4.1 Definitions focusing on numerical aspects

Definitions in this category focus on specific elements that determine the readability of a text, such as word and sentence length, number of syllables, paragraph length, font size, etc. Mathematical formulas (such as the Flesch Reading Ease test, the Flesch-Kincaid Index, the Coleman-Liau Index, and the Gunning Fog Index) are applied to texts to measure readability and comprehensibility, and to link this to the reading skills of text recipients at a particular level of education (Bormuth 1966, Davison and Kantor 1982, Anderson and Davison 1988, Bruce and Rubin 1988, Zakaluk and Samuels 1988, and Jansen and Lentz 2008). An example would be the readability formulas which are included in the Microsoft Office Word and Outlook packages, two of which are described below (Microsoft Office 2015).

The Flesch Reading Ease test is the first example of a mathematical formula which may be applied to texts in order to determine their readability and comprehensibility. This test rates text on a 100-point scale where the higher the score, the easier it is to understand the document. For most standard files, the desired score would be between 60 and 70. The formula is: 206.835 – (1.015 x ASL[1]) – (84.6 x ASW[2]).

A second example of a mathematical formula used for the same purpose is the Flesch-Kincaid Grade Level test. This test rates text on a US school-grade level. For most documents, the desired score would be approximately 7.0 to 8.0, where a score of 8.0 means that an eighth grader can understand the document. In this case, the formula is: (.39 x ASL) + (11.8 x ASW) – 15.59.

There are a number of advantages and disadvantages attached to the use of formulas such as these. Cheek (2010: 5) lists a number of the advantages:

- Formulas are easy to use and computer software is available.
- No writing expertise is required.
- Formulas provide an objective standard.

[1] Average sentence length (the number of words divided by the number of sentences).
[2] Average number of syllables per word (the number of syllables divided by the number of words).

2. Textlinguistics as a theoretical framework for 'plain language'

Textlinguistics, as a science of texts, investigates the ways in which texts are produced and received. In this article, a textlinguistic approach to 'plain language' is adopted as, in addition to the production process, textlinguistics also focuses on the comprehensibility of texts.

According to De Beaugrande and Dressler (1981: 3), a text is a "communicative occurrence which meets seven standards of textuality". The seven principles are cohesion, coherence, acceptability, intentionality, informativity, contextuality and intertextuality. As 'plain language' is principally concerned with successful communication without unnecessary processing difficulties for the text receiver, any definition of 'plain language' should therefore be measured in terms of these seven principles of textuality. (These principles feature in section 8 of this article, where the NCA/CPA definition is appraised in terms of its theoretical underpinnings.)

3. The history of 'plain language' in the world

During the second half of the 20th century, and particularly during the 1960s and 1970s, pressure by consumer organisations in other parts of the world gave rise to the development of the Plain Language Movement. As a result, consumers in the United Kingdom (UK) and the United States (US) became increasingly aware of their right to receive functional documents in 'plain language' (Schriver 1991: 2). Movements soon followed in Australia, Canada, Ireland, Sweden, Denmark, France, Germany, Italy, India, Singapore, Hong Kong, Papua New Guinea, and New Zealand. For a comprehensive overview, see Asprey (2010).

The biggest impetus for 'plain language' in recent times is arguably the passing of the Plain Writing Act of 2010 in the US, which was signed into effect by President Barack Obama on 13 October 2010. The objective of this Act is to improve effectiveness and accountability in state agencies through clear communication that the public can understand and use (United States of America 2010: [1]). The Act defines 'plain language' as "writing that the intended audience can readily understand and use because that writing is clear, concise, well-organized, and follows other best practices of plain writing" (Center for Plain Language 2010: [1]).

The long history of 'plain language' around the world, and the development of 'plain language' movements in different parts of the world, inevitably gave rise to a multitude of definitions.

4. International definitions of 'plain language'

Myriad 'plain language' definitions have been suggested worldwide by individuals, organisations, associations, government agencies, etc. Probably the most widely cited definition of 'plain language'/'plain English' is the 1987 definition from the Law Reform Commission of Victoria in Australia (in Cheek 2010: 13). This definition also echoes the five canons of rhetorics outlined in section 1 of this article:

> 'Plain English' involves the use of plain, straightforward language which avoids these defects [listed earlier] and conveys its meaning as clearly and simply as possible, without unnecessary pretension or embellishment. It is to be contrasted with convoluted, repetitive and prolix language. The adoption of a plain English style demands simply that a document be written in a style

- Formulas indicate whether a text is easy or difficult to read.

However, the disadvantages identified by a number of researchers, in addition to Cheek (2010: 5-6), far outweigh the advantages:

- Formulas are very basic as they take only elements such as word and sentence length into consideration.
- Formulas cannot conclusively and determinedly indicate whether a document is easy to read.
- Formulas can be misleading or simply be wrong.
- Formulas do not indicate what makes a document difficult to read and therefore do not provide guidance on how the document can be improved.
- Formulas do not provide information about different target readerships, except for grade level or number of years of schooling.
- Readers' prior (or domain) knowledge, as well as their ability or inability to draw conclusions or to make complex inferences, are not taken into account (Jansen and Lentz 2008: 7).
- Formulas do not take into consideration structural markers on higher text levels, overall text organisation, and the nature of human language processing (Anderson and Davison 1988: 23).
- The application of formulas as a guideline for text production (where the producers of documents write to fit the formula) may lead to unnatural documents that may be even more difficult to understand than the original complex version. Formulas should only be used as tools for assessment to determine the readability of already existing documents (Bruce and Rubin 1988: 13).
- Formulas do not consider the motivation, interests, purpose, and social and cultural background and context of text producers and receivers (Bruce and Rubin 1988: 8, 19), and ignore differences in language users' decoding skills (Anderson and Davison 1988: 49).

Formulas provide mostly textual information, but no information about the writing and reading processes in which writers and readers engage. The Plain Language Working Group (Cheek 2010) therefore also considered definitions that are not "definitions" in the pure sense of the word, but are much rather a set of guidelines. In this way, the writing process is, to a certain extent, also brought to bear in the quest to define 'plain language' as a concept.

4.2 Definitions focusing on writing guidelines

This type of definition takes as a point of departure those text production techniques that aim at clarity, readability and comprehensibility, and often take the form of a list of writing guidelines. Elements-focused definitions, according to Cheek (2010: 8), are not definitions in the true sense of the word, as "they […] serve to set out a more complete set of elements that plain language practitioners work with". Aspects that are focused on typically include issues of structure, design, content and vocabulary.

Two examples of elements-focused definitions are reproduced here. The first example dates back to 1887 (McKay, cited in Cheek 2010: 7):

> Good drafting says in the plainest language, with the simplest, fewest, and fittest words, precisely what it means.

The second example takes the form of a list of questions, used by the Plain Language Commission (2011) in the UK, to determine whether a document meets the requirements of the so-called "Clear English Standard".

Purpose

- Is the purpose obvious or stated early and clearly?

Content

- Is the information accurate, relevant and complete, anticipating readers' questions and answering them?
- Are essential technical terms explained or defined?
- Is a contact point stated for readers who want to know more?

Structure

- Is the information well organised and easy to navigate through, with appropriate headings and subheadings?
- Is there appropriate use of illustrations, diagrams and summary panels?

Style and grammar

- Is the style appropriate for the audience, with a good average sentence length (say 15 to 20 words), plenty of active-voice verbs, and reasonably short paragraphs?
- Is the document free of pomposity, verbosity and officialese (no *aforesaids*, *notwithstandings*, *herebys*, *adumbrates*, *commencements* and *inter alias*)?
- Is the text grammatically sound and well punctuated?
- Is capitalisation consistent in text and headings?
- If there is a contents page, are its headings consistent with those in the text?

Layout and design

- Does the document look good?
- Is the type easily readable and is there enough space between lines of type?
- Is there a clear hierarchy of headings and spaces?

The following advantages are associated with elements-focused definitions (Cheek 2010: 6):

- They are wider in their application and use compared to readability formulas or numerical definitions.
- They are more likely to accurately reflect a document's readability.
- They provide guidance as to how a document's readability can be enhanced.
- A document can be revised for a particular target readership according to the guidelines these definitions provide.

Some disadvantages are also noted (Cheek 2010: 6):

- It is more difficult to follow [the elements-focused] approach and it is more time-consuming.
- Extensive judgement and text production skill are required.
- No numerical outcome of a document's success is indicated.

Redish and Rosen (1991: 83) point out that guidelines are merely suggestions, whilst rules prescribe:

> Guidelines distill research and good practice into chunks of useful advice. Guidelines, however, do not replace a writer's good judgment or the writer's understanding of the writing process. […] A writer or a team of writers can develop rules to implement a guideline within a specific context.

If guidelines are translated into measurable goals, the end result would be a readability formula. Style guidelines, such as "use the active instead of the passive voice" and "sentences should preferably be shorter rather than longer", are not inflexible rules. Rules are rigid whereas guidelines require or accept the use of good judgement; as such, guidelines often contradict one another, creating a particular tension. For example, replacing a nominalisation with a less densely packaged construction, such as an object or action verb, will result in a longer sentence (as more words are used). The judgement of the plain language practitioner should determine the best course of action when such tension arises.

4.3 Definitions focusing on the outcome of the reading process

Outcomes-focused definitions aim at determining how well readers can understand and use a text. The focus is not purely on the linguistic aspects of the text, but also on visual elements that may influence the readability and reception of a text. One aspect that is brought to bear in this category relates to evaluation or testing – of whatever nature – of the usability and success of a text. The following three definitions are examples of outcomes-based definitions:

> A communication is in plain language if the people who are the audience for that communication can quickly and easily:
> - find what they need
> - understand what they find
> - act appropriately on that understanding.
>
> Redish (1985, in Cheek 2010: 8)

> A well written text in plain language […] is one which enables the intended audience, whether expert or lay, to comprehend and use the text effectively.
>
> Schriver (1991: 4)

> [Plain language use is the] writing and setting out of essential information in a way that gives a cooperative, motivated person a good chance of understanding the document at first reading, and in the same sense that the writer meant it to be understood.
>
> Cutts (1996, in Cheek 2010: 9)

According to Cheek (2010: 6), the following are advantages of outcomes-based definitions:

- These definitions enhance the likelihood of producing documents that are easy to use.
- As these definitions involve testing, they are able to produce some statistical measure.
- Outcomes-focused definitions respond to variances between target readerships.
- These definitions provide guidance on how to improve a document.

A number of disadvantages are also cited by Cheek (2010: 6):

- These definitions constitute a more difficult approach to improving the quality of a document.
- Following an outcomes-based approach may be time-consuming and expensive.
- Testing a document may be impractical; documents are often produced under immense time pressures, leaving little time for building in a testing phase.

Often a single definition may display characteristics of two, or sometimes even all three, definition types. The International Plain Language Working Group proposes the following definition (Cheek 2010: 5) that is characteristic of the third definition type:

> A communication is in plain language if it meets the needs of its audience – by using language, structure, and design so clearly and effectively that the audience has the best possible chance of readily finding what they need, understanding it, and using it.

In section 7, the local definition of 'plain language', as contained in the NCA and the CPA, is categorised in terms of these three definition types. However, before the definition is categorised and analysed from a textlinguistic perspective, a brief description of the development of 'plain language' in South Africa is provided.

5. The relatively short history of 'plain language' in South Africa

In South Africa, advocacy for 'plain language' is a relatively recent phenomenon. Before 1994, the use of 'plain language' was not a priority (Viljoen and Nienaber 2001: 9). In more recent years, however, consumer protection in South Africa provided a strong impetus for 'plain language' in the form of legislation, most notably the National Credit Act 34 of 2005 (NCA) and the Consumer Protection Act 68 of 2008 (CPA). Burt (2009: 42) comments as follows on recent developments in the consumer industry:

> For plain language advocates around the world, having so many plain language laws may sound like winning the first, second and third prize all at once. Part of the reason is that, in South Africa, law as the tool for change is the only way to expedite remedies for the inequities of the past. We didn't have a culture embedded in the rule of law where unwritten constitutions govern how people

> behave. We didn't have a history of respect for human rights – a general morality based on seeing others as equals. We didn't have a process for lobbying for change.

6. Defining plain language in contemporary South Africa

The right of access to information in plain language is regarded as a basic human right in both Acts. In terms of sections 64(2) of the NCA and section 22(2) of the CPA, consumer documents must be in plain language, to the extent that:

> […] an ordinary consumer of the class of persons for whom the notice, document or visual representation is intended, with average literacy skills and minimal experience as a consumer of the relevant goods or services, could be expected to understand the content, significance and import of the notice, document or visual representation without undue effort, having regard to –
>
> (a) the context, comprehensiveness and consistency of the notice […];
> (b) the organisation, form and style of the notice […];
> (c) the vocabulary, usage and sentence structure of the notice […]; and
> (d) the use of any illustrations, examples, headings or other aids to reading and understanding.

7. Categorising the local definition

The definition of 'plain language' in the NCA and CPA displays characteristics of both elements-focused and outcomes-focused definition types, and also similarities with the rhetorical canons distinguished by Cicero (in James 2008: 3). The definition contains guidelines for readability and clarity in the form of a list of writing techniques and linguistic devices to be employed, but also suggests that testing could be an important consideration. Testing can indicate to what extent an ordinary consumer is able to understand effortlessly the "content, significance and import" of a consumer document. For this reason, the role that testing and evaluation can play in providing access to information should not be underestimated. Empirical testing and statistical results can inform the guidelines according to which plain language practitioners should write or rewrite consumer documents for lay audiences. Testing can eliminate subjectivity and guesswork that may be inherent in the phrase "that an ordinary consumer […] could be expected to understand".

8. The local definition from a textlinguistic perspective

In this section, the NCA/CPA definition of 'plain language' is analysed from a textlinguistic perspective. Implications for plain language practitioners are pointed out at appropriate junctures.

8.1 Cohesion

Cohesion refers to those "surface-structure features of an utterance or text which link different parts of sentences or larger units of discourse, e.g. the cross-referencing function of pronouns, articles and some types of adverb" (Crystal 2003: 81). Different cohesive devices, such as reference, substitution, ellipsis, conjunction and lexical cohesion, can be employed in a text to create connections between components of the surface text. The NCA/CPA definition requires

that the plain language practitioner ensures that consumer documents are drafted or revised in such a way that an ordinary consumer "could be expected to understand the content, significance and import of the notice, document or visual representation without undue effort" (Republic of South Africa 2005, 2008). The same warning that Carstens (2003: 29) issues to text editors is valid for plain language practitioners:

> If a text editor does not have the necessary linguistic knowledge (in other words, if he does not know about syntactical patterns, cannot apply anaphoric constructions or if he does not have the ability to make semantic links), he cannot effectively use these means to create a text that binds all the textual elements together.

The NCA/CPA definition reminds the plain language practitioner to pay attention to the "vocabulary, usage and sentence structure of the notice […]".

Cohesion helps with comprehension as it makes connections between sentences, and the propositions they carry, more explicit. Donnelly (1994: 96) explains further that "[…] cohesion makes textual connections explicit to a listener or reader". Plain language practitioners should employ the different cohesive devices referred to earlier to ensure effective communication and optimal comprehension, thereby lowering the amount of cognitive energy the ordinary consumer has to expend whilst reading. The NCA/CPA definition therefore acknowledges the important role of cohesion in textual communication.

8.2 Coherence

Coherence, according to Renkema (2004: 49), refers to "the connection that is brought about by something outside the text". The role of prior knowledge during text processing is now widely accepted. That "something outside the text" referred to by Renkema is what coherence is about:

> [Coherence] involves the study of such factors as the language users' knowledge of the world, the inferences they make, and the assumptions they hold, and in particular of the way in which coherent communication is mediated through the use of speech acts.
>
> (Crystal 2003: 81)

It is often the case that ordinary consumers do not have the necessary prior knowledge to cope with a complex legal document, and the NCA/CPA definition also makes provision for this. The definition refers to the possibility that a consumer may have minimal experience of the relevant goods and services, and therefore may not have entered into consumer agreements before. Coherence involves "[…] the ways in which the components of the textual world, i.e. the configuration of concepts and relations which underlie the surface texts, are *mutually accessible* and *relevant*" (De Beaugrande and Dressler 1981: 4, original emphasis).

If the ultimate goal is that the consumer should be able to understand a text without much effort, the plain language practitioner should employ those devices and techniques afforded by the language concerned to ensure that textual relationships are made explicit and that the actual links between words and sentences are clear. The consumer document must, of necessity, display textual unity and a logical underlying structure without any mental gaps. Reference in

the NCA/CPA definition to issues such as comprehensiveness, consistency, organisation, form, style, vocabulary, usage and sentence structure affirms the importance of coherence and also cohesion in a consumer document. The plain language practitioner is also reminded to consider other aids for understanding, alluding to the impact of document design issues on comprehension and readability.

8.3 Intentionality and acceptability

The producer has the intention that the document s/he produces forms a coherent and cohesive unit. If no intention can be recognised or identified, the sequence of words will be "not unlike the penmanship practice of elementary school pupils" (Renkema 2004: 50). The reader should recognise the intention of the text producer and accept the document as a textual occurrence with a message that needs to be communicated.

Following De Beaugrande and Dressler (1981) and Bell (1991), the NCA/CPA definition confirms text processing as consisting principally of two skilled activities, namely production (synthesis) and reception (analysis). The first part of the definition focuses on the interpersonal relationships between the participants in the communicative event. There is a producer and a receiver (the consumer) of a notice, document or visual representation. The definition therefore suggests a real reader that the plain language practitioner should have in mind during the production and/or revision process. This underscores the importance of compiling a profile of the intended target audience.

8.4 Informativity

Informativity refers to the extent to which information presented in the text is known (and therefore old) or unknown (therefore new), or whether the information is predictable or unpredictable. According to Bell (1991: 168), the balance between known and predictable information or new and unpredictable information will determine to what extent the text is readable and interesting. High levels of informativity place a higher demand on cognitive processing. The NCA/CPA definition warns against this with the phrase "[…] to understand […] without undue effort".

The NCA/CPA definition proposes that the information in a consumer document should be in line with the linguistic competence of the target audience. Furthermore, the definition implies that readers (consumers) should be able to construct meaning from the text, possibly upon first reading (i.e. "without undue effort"). In the case of a dispute regarding the use of plain language (or lack thereof), a court will have to determine whether the consumer "could be expected to understand the content, significance and import of the notice, document or visual representation". Knight (2006: 21) is of the opinion that the following three questions are relevant: (i) Can the consumer understand the content of the document? (ii) Can the consumer understand the credit arrangements in the document?, and (iii) Can the consumer understand the consequences the document has for the credit arrangements (and other aspects that may be of importance to the consumer)? These questions lead us to the next principle, namely contextuality.

8.5 Contextuality

Contextuality refers to "the factors which render a text relevant to a current or recoverable situation of occurrence" (De Beaugrande and Dressler 1981: 163). When the appropriateness of a text is evaluated, it is necessary to determine where the text will be used and what the function or purpose of the text is in that situation. Additionally, Carstens (2003: 26) notes that "[…] the quality and effect of the communication is determined by the contextual knowledge the participants share".

The NCA/CPA definition provides contextual information in the form of a profile of the reader (a context of use is therefore created for the consumer document): the reader is a member of a class of persons (i.e. consumers) for whom the notice, document or visual representation is intended. The average literacy skills of this class of persons are also of particular importance as is the fact that they have minimal experience as consumers.

This characterisation of the target readership is useful to the plain language practitioner as particular contextual information is provided. Two types of real world experience are alluded to in the NCA/CPA definition: reading experience and consumer experience. On this basis, the plain language practitioner can work on two assumptions: firstly, that the consumer has some reading experience, and secondly, that the consumer is not an experienced debtor.

8.6 Intertextuality

Intertextuality refers to "the ways in which the production and reception of a given text depends upon the participants' knowledge of other texts" (De Beaugrande and Dressler 1981: 182).

The NCA/CPA definition captures the essence of this principle by indicating that, in all probability, the reader has "minimal experience as a consumer". This means that readers are vulnerable consumers with little or no experience of credit agreements or knowledge of similar documents. Therefore, these consumers cannot rely on stored knowledge and, as a result, high levels of mediation are required. It is these consumers in particular that should enjoy the protection of the NCA and CPA.

Alternatively, some consumers may have some experience of consumer documents, but these experiences may have been negative, resulting in high levels of alienation due to the presentation of information (for instance, using extreme registers or information on the second and third levels of informativity). Information presented in the text should be carefully selected and possibly scaffolded in one way or another to bridge any gaps in the stored knowledge of the reader. The NCA/CPA definition "[…] reject[s] any notion of a text-based conception of communication and recognize[s] that meaning is not simply lying on the page, waiting to be absorbed, but rather is created in the minds of readers applying themselves to a document and the symbols encoded upon it" (Knight 2006: 20-21).

As is evident from the discussion in this section, the value of the definition of 'plain language' in the NCA and the CPA lies in its theoretical underpinnings. Knight (2006: 21) rightly asserts that the value of this definition is in its recognition that a consumer document is not a static artefact; the definition focuses on the interpersonal dynamics of written human communication.

9. Problems with the 'plain language' definition

Although the NCA/CPA definition is firmly grounded in textlinguistic theory, as indicated earlier in this article, some problems need to be pointed out. These problems relate mainly, but not exclusively, to factors external to the definition itself, such as issues of multilingualism and literacy. If these problems are not addressed, the optimal use of plain language in the consumer industry will not become a reality as envisaged by the NCA and CPA.

9.1 Language realities in South Africa

The hegemonic position of English seems to feed into the notion that 'plain language' means plain English. However, according to Alberts (2001: 92), a large portion of the South African population can only be reached through the use of indigenous languages, yet English is still used in virtually every public and private domain. In relation to law and commerce, Kahn (2001: 3) warns that "only Afrikaans, and then to a diminishing extent, owing largely to the concentration of blacks on English, has a place in law and commerce. […] The black languages are virtually non-existent in law and commerce". The NCA/CPA definition of 'plain language' ignores the linguistic landscape in South Africa, and provides no guidance on how multilingualism and multiculturalism should be dealt with in the consumer industry.

The NCA provides in section 63(1) that "[a] consumer has a right to receive any document that is required in terms of this Act in an official language that the consumer reads or understands, to the extent that is reasonable having regard to usage, practicality, expense, regional circumstances and the balance of the needs and preferences of the population ordinarily served by the person required to deliver that document".

Section 63(2) provides as follows:

> If the producer of a document that is required to be delivered to a consumer in terms of this Act is, or is required to be, a registrant, that person must –
>
> (a) make a submission to the National Credit Regulator proposing to make such documents available in at least two official languages; and
> (b) offer each consumer an opportunity to choose an official language in which to receive any document, from among at least two official languages as determined in accordance with a proposal that has been approved by the National Credit Regulator.

However, as in the case of the language provisions in the Constitution (Act 108 of 1996), a back door is left wide open with the phrase "to the extent that is reasonable". Burt (2009: 42) asks a very important question in relation to issues of language and literacy: "If a document is provided only in English and the consumer can only read Sesotho, will the consumer still be of 'average literacy'?". Schriver and Gordon (2010: 36-37) warn that research is mainly conducted in and on English, and that this practice yet again serves only the needs of those who speak English as a first language:

> Another quite different problem with the existing research is that it has been conducted mainly in English with native English speakers. Basic and applied research needs to be conducted with populations across many languages and

> cultures. It may be that some issues of plain language are unique to particular countries and/or particular languages.

The issue of literacy in the various South African languages is of crucial importance. There is a pressing need to reconcile language policy (in the broad sense) with plain language policy (in the narrow sense).

9.2 Determining average literacy

A second problem relates to the concept of 'average literacy' in the NCA/CPA definition. The definition allows for two interpretations of this concept: firstly, the reference may apply to the average literacy rate of all consumers in South Africa, and secondly, the phrase may refer to the average literacy of the intended target group of the particular consumer document. The latter interpretation suggests that the literacy rates of the target group must be determined in advance, most probably by using a literacy test of some sort. The majority of literacy tests in South Africa measure academic literacy as opposed to general literacy, and are also mainly available in English.[3] Determining the average literacy of a particular target audience is thus highly problematic and without proper guidance, the work of the plain language practitioner may be reduced to mainly guesswork.

9.3 The gap between theory and practice: Language policy

The third problem relates to the importance and the preparedness of the language profession to comply with the provisions of the plain language legislation. Plain language work requires specialist knowledge, and draws on theoretical insights gained from textlinguistics, cognitive science, reading research, sociolinguistics (language variation and language planning), and so forth.

'plain language', as an ultimate goal, can only succeed if plain language capacity exists and if plain language practitioners are able to reconcile plain language theory with plain language practice. Presently, there is no conclusive evidence to suggest that expertise currently exists on the scale that is required by the plain language provisions in the two Acts. As a result, a number of legal practitioners (i.e. lawyers) are now entering the market and working as plain language practitioners. However, this begs the question: do these legal practitioners have the required theoretical knowledge of text processing to successfully revise complex consumer documents for increased access to information for vulnerable consumers with limited literacy skills? The same question may be asked in relation to those plain language practitioners who indeed have a solid theoretical foundation in the discipline of linguistics but lack legal, financial or similar knowledge (i.e. knowledge of the subject matter of the complex consumer document).

If answers to these questions are not found, and the required capacity is not developed, companies, organisations and institutions may merely pay lip service to the plain language provisions in the NCA and CPA in an effort to avoid hefty penalties. Fines for non-compliance to the provisions of the CPA may be as high as 10% of the company's annual turnover or R1 million, whichever amount is the greatest (Marus 2010: 24).

[3] Personal communication: Prof. A. Carstens on 12 August 2011.

9.4 Lack of norms and standards for assessment

Lastly, the NCA/CPA definition creates a vacuum by not addressing issues related to plain language standards for assessment purposes. The Acts provide that the credit regulator (in the case of the NCA) or the consumer commission (in the case of the CPA) "may publish guidelines for methods of assessing whether a notice, document or visual representation satisfies the requirements of subsection (1)(b)". There is, however, still no indication of the methods that will be used to assess consumer documents. Burt (2009: 44) warns as follows:

> Plain language initiatives driven only by compliance run the risk of implementing superficial, objective criteria which do not necessarily give information that truly helps the consumer to make informed decisions.

From the late 1970s, the goal of plain language laws in some states in the US was to ensure that citizens were able to understand the rights, obligations and limitations of any agreement they entered into. The only (or best) way to determine comprehension is to test the consumer's ability to understand and use a document, but this may be expensive and time-consuming. As a result, lawmakers decided to identify alternative methods by providing guidelines for writing (see section 4.2) to ensure ease of use and comprehension.

The criteria that are used to assess a document's readability should be a good substitute for testing. Moreover, the criteria should not place an undue or additional burden on the drafters of consumer documents, as such a burden would discourage compliance in the consumer industry (Bowen, Duffy and Steinberg 1991: 22-23). Bowen, Duffy and Steinberg (1991: 23) warn as follows:

> Since the goal of plain language legislation is to ensure that a citizen who enters into a consumer contract can readily determine what his or her rights and obligations are, the type of legislation which best meets those goals should be determined. (By 'readily determine' we mean that the individual can read through the contract, pointing to and describing the rights and responsibilities that are essential in the agreement.)

The same authors suggest that answers to the following questions be sought when a document is assessed in terms of 'plain language':

> (i) Does plain language legislation help (or protect) the consumer and are simplified agreements easier to understand and use?
> (ii) Which language, layout and design features facilitate ease of use and promote comprehension the most?
> (iii) Which design and organisation features distinguish excellence from averageness?
> (iv) Which legal provisions have the biggest influence on the comprehensibility and usability of documents, with the lowest cost to the consumer industry?

In contemporary South Africa, with the implementation of the provision of the CPA still a fairly recent occurrence, there is little guidance on the issue of evaluation and assessment. The lack of norms and standards creates tension in the consumer and the language industry alike.

10. Concluding remarks

The implementation of protective legislation in South Africa, such as the NCA and the CPA, creates conducive conditions for optimal communicative success. Among others, these Acts highlight the importance of plain language and clear communication, particularly in documents that are given to consumers (such as binding contracts). It is a fundamental right of consumers to understand the contracts they enter into and it is the duty of the stronger party, e.g. a credit provider, to ensure that vulnerable consumers are able to understand, without undue effort, the risks and obligations under the contract. The role of the (plain) language practitioner here cannot be overemphasised.

There is no longer a place for the traditional style of legal drafting in the South African consumer industry. The development of new registers to convey important consumer information is now becoming increasingly pressing, especially since low literacy levels correlate with low levels of command of the extreme register associated with legal texts.

As pointed out, plain language practitioners in South Africa have a useful tool to approach their work with, in the form of the definition of 'plain language' in the NCA and the CPA. This definition draws on elements-focused and outcomes-focused approaches to 'plain language', and furthermore is firmly grounded theoretically.

The problems highlighted in the latter part of this article, however, need to be addressed to ensure optimal communication in the consumer industry and other sectors of the economy.

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Towards impact measurement: An overview of approaches for assessing the impact of academic literacy abilities

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Abstract
A variety of academic literacy interventions are used at higher education institutions to address the low level of academic literacy with which many students enter these institutions. Considering the increasingly resource-scarce higher education environment, it is becoming crucial for those who are responsible for such interventions to provide evidence of their impact on student success. The aim of the current study is to provide a broad overview and critique of studies conducted thus far that attempt to assess the impact of various academic literacy interventions. This study proceeds by identifying instruments that are commonly used when assessing the impact of these interventions. From the literature surveyed, it would seem that there are two broad aspects that are considered when evaluating impact, namely students' improved academic literacy levels between the onset and the completion of the course, and the extent to which these acquired academic literacy abilities are transferred to students' other subjects. The next step in this research project will be to propose a comprehensive evaluation design that could be used by a range of academic literacy interventions.

Keywords: academic literacy, programme evaluation, impact measurement

1. Introduction

It is generally acknowledged that the South African secondary education system does not sufficiently prepare students for higher education studies (Cliff 2014:322; Van Dyk, Zybrands, Cillié and Coetzee 2009:333; Higher Education South Africa 2008:3). One consequence of this is poor university throughput rates, with as many as 55% of all enrolled students leaving university without graduating, and only 27% of all students graduating their 3- and 4-year qualifications in the prescribed time (Scott, Ndebele, Badsha, Figaji, Gevers and Pityana 2013:43). A prominent factor identified among students who are underprepared for higher education studies is a low level of academic literacy. Researchers almost unanimously agree: adequate academic literacy (which includes, but is not limited to, language proficiency) is crucial to students being successful in their studies (Terraschke and Wahid 2011:173; Defazio, Jones, Tennant and Hooke 2010:34; Leibowitz 2010:44; Davies 2009:xi; Archer 2008:248).

Based on the aforementioned research, it would seem that a large number of students needs academic literacy support. This number grows each year, mainly due to the massification of higher education which inevitably implies more underprepared students gaining access (see Calderon 2012 and Teichler 1998 for a comprehensive discussion of this trend). Yet universities seem to have fewer and fewer resources available each year (see, for example, Hornsby and Osman 2014:712-713; Kwiek, Lebeau and Brown 2014:6). This is possibly why "attention has shifted [in recent years] from an almost exclusive focus on access to include a concern with graduation rates and with general efficiency and quality matters" (Yeld 2010:26). In order for the existence of academic literacy programmes to be justified in this resource-scarce higher education environment, they need to be able to show that they have a real and worthwhile impact on student success.

Impact assessment falls under the umbrella term of "programme evaluation" (De Vos, Fouché, Strydom and Delport 2011:453). Situating it in an educational context, Brown (2001:15) defines programme evaluation as "the ongoing process of data gathering, analysis, and synthesis, the entire purpose of which is constantly to improve each element of a curriculum on the basis of what is known about all of the other elements, separately as well as collectively". De Vos et al. (2011:449) argue that "[i]n an age of accountability, [stakeholders] demand that some evidence is provided in terms of 'what works', 'how it works' or 'how it can be made to work better'". This seems to be especially true in the resource-scarce South African higher education environment where the majority of students need effective academic literacy support. Academic literacy support can only be made more effective if we can determine which abilities are acquired most effectively by students and what academic literacy specialists are doing right to facilitate this acquisition, in addition to which abilities are not being acquired optimally. Only when academic literacy specialists can identify the weak points in a curriculum can they strive to responsibly improve their interventions.

When evaluating language programmes, Lynch (2003:1) points out that the areas of language assessment and programme evaluation usually overlap in that data from language assessment are often used as part of programme evaluation in order to make decisions and judgements, reflect, and ultimately take certain actions. Bachman and Palmer (2010:21) agree: "Evaluation involves making value judgments and decisions on the basis of information, and gathering information to inform such decisions is the primary purpose for which language assessments are used".

Two main specific purposes of programme evaluation in educational contexts are firstly to determine whether the programme is achieving its objectives, and secondly to determine which links exist between the processes of the specific programme and students' achievement (Lynch 2003:2). By doing this, it should be possible to determine how effective specific components of the intervention are (Lynch 2003:7), and thus to find ways of improving the programme being evaluated (Newcomer, Hatry and Wholey 2010:6). In fact, argues Brown (2001:15), one should probably view the evaluation process as an ongoing needs assessment so as to constantly improve the programme in question (cf. Bachman and Palmer 2010:25).

As mentioned before, impact assessment addresses a very specific, though central, facet of programme evaluation (De Vos et al. 2011:453). Programme evaluation could include a myriad of factors, such as cost-effectiveness and work satisfaction of teachers and lecturers. While evaluating the impact of a programme or intervention would almost always be part of programme evaluation, impact assessment is a distinct facet that needs to be examined separately.

It should be kept in mind that there are various challenges to determining the impact of academic literacy interventions. One such challenge is that these interventions come in all shapes and sizes, for example, generic interventions, subject-specific interventions, undergraduate interventions, postgraduate interventions, reading interventions and writing centres – examples of all of these are discussed later in this article. This wide variety of academic literacy interventions makes it difficult, if not impossible, to assess impact by using a uniform approach. A further challenge is that the use of control groups, which would be part of traditional experimental designs, is often unfeasible in the South African context where, increasingly, all students (at least at first-year level) are required to participate in some type of academic literacy intervention. Many studies attempting to assess the impact of academic literacy interventions must thus find other ways of providing reliable and valid results.

For the purposes of the current study, the terms "impact" and "effect" will be viewed as synonymous. De Graaff and Housen (2009:727) define these as "any observable change in learner outcome (knowledge, disposition or behavior) that can be attributed to an instructional intervention (possibly in interaction with other, contextual variables)". An intervention's effectiveness, then, "refers to the extent to which the actual outcomes of instruction match the intended or desired effects" (De Graaff and Housen 2009:727-728). It is, however, important to keep in mind the following observation by Cheetham, Fuller, McIvor and Petch (1992:9-10):

> Despite much apparently straightforward use of the word, 'effectiveness' is not something which has an object-like reality 'out there' waiting to be observed and measured. Like any other data, empirical evidence about the effectiveness of […] programmes is a product of data collection procedures and the assumptions on which they are based. The concept of effectiveness derives from particular ways of thinking and makes sense only in relation to its context. […] The challenge is to arrive at working definitions of effectiveness in specific situations, and hence of methods of studying it, which do not permanently lose sight of its conceptual context.

Keeping the above argument in mind, impact (or effect) will, for the purposes of the current study, be seen as i) the observable improvement in academic literacy abilities between the onset and the completion of an academic literacy intervention, and ii) the extent to which these abilities are necessary and applied in students' content subjects.

This article forms part of a larger study which aims at developing an evaluation design that could be used to assess the impact of academic literacy interventions in the South African context. The aim of this article is to provide an overview and critique of studies conducted thus far that have attempted to assess the effectiveness of various academic literacy interventions; this article is therefore conceptual in nature. The next step in this study will be to propose a conceptual evaluation design that could be used for various types of academic literacy interventions, based on the literature that is reviewed in the current article. This design will then be validated and verified in subsequent phases of this study by i) using it to assess the impact of an academic literacy intervention, and ii) asking academic literacy course/intervention coordinators across the country about the extent to which the proposed evaluation design meets their needs, and how it could be refined to be applicable for their specific contexts. After refining the design, a final evaluation design will be proposed.

2. Previous studies on the impact of academic literacy interventions

Before considering in detail the studies that have reported on impact, it is worthwhile to distinguish between "language programmes" and "academic literacy interventions". As the term implies, the focus of language programmes is on students' language, and very often these programmes focus on the language abilities of second language users. Academic literacy programmes, in contrast, include (but are not limited to) language ability (Van Dyk and Van de Poel 2013:53). This study accepts Van Dyk and Van de Poel's (2013:56) definition of "academic literacy" as "being able to use, manipulate, and control language and cognitive abilities for specific purposes and in specific contexts". Due to the dearth of studies measuring impact in either language programmes or academic literacy interventions, this article considers studies from both of these fields.

Studies measuring the impact of academic literacy and language courses are indeed few and far between (Mhlongo 2014:47; Terraschke and Wahid 2011:174; Carstens and Fletcher 2009b:319; Storch and Tapper 2009:208; Holder, Jones, Robinson and Krass 1999:20). Yet, argues Butler (2013:80), in addition to having a theoretical justification for the type of intervention that is developed, the intervention's success is ultimately determined by the impact it has on students' learning. Some South African as well as international studies have been able to effectively measure certain aspects of such an impact. As is seen in the survey below, most of these studies focus on only one or two aspects of impact. However, as Beretta (1992:19) states, no single methodology can provide a full picture when it comes to the evaluation of language programmes (for example, academic literacy programmes). A comprehensive, validated and verified evaluation design might assist researchers in choosing a more comprehensive range of tools in order to determine the impact of academic literacy courses. An overview of studies that have attempted to measure the impact of academic literacy courses, in one form or another, follows below.

Parkinson, Jackson, Kirkwood and Padayachee (2008) evaluated a course called "Communication in Science" taken by students in a science access programme at the University of KwaZulu-Natal. In their evaluation, a pre-test/post-test design was employed, using a placement test consisting of multiple-choice questions, cloze questions and writing elements. The test aimed to measure students' ability to read for meaning, extrapolate and apply information, infer information, separate essential and non-essential information in a reading text, and extract and interpret information from texts to use in an extended writing task. This test was also taken by mainstream students at the beginning of the year, though there was no post-test for these students. Secondly, a questionnaire was given to students at the end of the year to determine their opinions of the course. Perceived improvement was assessed by asking students whether they learned "a lot", "a little" or "nothing" with regard to several outcomes. Thirdly, students who had previously completed the course were given a questionnaire to determine whether they believed that the competencies acquired in the academic literacy course were of value in their subsequent studies. These students were asked the following question via e-mail: "Since completing the Communication course, in what ways have the skills you have learnt in Communication in Science been useful to you?" (Parkinson et al. 2008:23).

The results showed that access students improved significantly over the duration of the course, and in some cases even got scores close to those of the mainstream students at the beginning of the year. However, since no post-test was written by the mainstream students, it was impossible

to determine whether they had also improved equally despite not having undergone the intervention. As far as students' perceptions of the course are concerned, findings showed that students generally enjoyed the course, and believed that they had learned a lot in the various sections. Thirdly, more senior students who had completed the course previously mostly responded that the course had been beneficial to them. Even though a control group was not available in the Parkinson et al. (2008) study, the research design was strengthened in that more validity was given to findings through triangulation. However, certain aspects of the evaluation design could have been addressed more comprehensively. For example, students' perceptions might have been ascertained more effectively. The question that was asked could be considered to be leading as it did not allow students to state which abilities were not useful; more detailed and extensive questions could have been asked to determine which abilities addressed in the academic literacy course were used in further studies, and to which extent they were used. The placement test could also have been analysed to determine in which areas students had improved the most over the duration of the academic literacy course, and these findings could have been correlated with students' perceptions about how much they had learned in the course. Thus, triangulation could have been strengthened in various ways.

Van Dyk et al. (2009) took various steps to determine whether an academic literacy intervention in the Health Sciences at Stellenbosch University had an impact on students' writing abilities. Students firstly completed pre-, mid- and post-intervention writing assignments. Results were analysed quantitatively by correlating them with each other. Assignments were also examined by lecturers who noted the difference in execution between the pre- and post-assignments and listed typical errors for both of these assignments. Writing was considered at both the micro level (including language and word choice) and macro level (including paragraph structure, cohesion and coherence, and argumentation). Students' writing at both of these levels seemed to have improved between the pre- and post-intervention writing assignments. This qualitative feedback was the most useful feedback in this particular study; however, a weakness was that the evidence remained mainly anecdotal, consisting of lecturers' impressions. Finally, students completed feedback questionnaires on, amongst others, the relevance of material and the learning outcomes. This feedback consisted of many more positive than negative qualitative comments. A limitation might have been that the questionnaire took the form of an official student feedback form. This means that the questionnaire was designed mainly to measure students' perceptions of the course itself and the way that it was presented. Such official feedback forms are often the only tools available to lecturers to gauge perceptions on specific courses. However, they rarely allow lecturers to assess which aspects of the course students found most useful, and to what extent the course was likely to impact on their general academic success. The purpose of this study was to determine the impact that the course had on students' writing abilities, and thus a writing assignment was suitable. The different forms that the three writing assignments took, however, made it difficult to draw direct comparisons, as would be the case in a pre- and post-assignment scenario where two or more equivalent assignments with the same outcomes are used.

Van Dyk, Cillié, Coetzee, Ross and Zybrands (2011) reported on a study conducted at Stellenbosch University that focused on the effect of an academic literacy course in the field of natural sciences on students' reading levels. The study consisted of quantitative data in the form of a pre- and post-test (aimed at assessing students' reading abilities), an online questionnaire that aimed to determine which reading abilities students believed to be important in order to be successful in their studies, as well as official student feedback forms. The Test of Academic Literacy Levels (TALL) and its Afrikaans equivalent, *Die Toets van Akademiese*

Geletterdheidsvlakke (TAG), were used as pre- and post-tests. The test construct of these tests measures the following: understanding academic vocabulary; interpreting metaphor, connotation and ambiguity; understanding relations between parts of a text; interpreting and showing sensitivity to various text types; interpreting, using and producing visual information; making distinctions between various types of information; seeing sequence and order; understanding evidence used in texts; understanding the communicative functions of ways of expression in academic language; and making meaning beyond sentence level (see Weideman 2003:xi for a more detailed description). Qualitative data consisted of open-ended questions in the official student feedback forms.

Results showed that the impact of the academic literacy course becomes clearer after a year's intervention than after a semester's intervention, indicating that long-term interventions might be more beneficial to student success than short-term interventions. Feedback from student questionnaires indicated that students believed that reading abilities were important for a student to be successful in his/her studies, that the module achieved its outcomes, and that necessary academic literacy abilities were developed. In this study, the use of a valid and reliable academic literacy test enabled conclusions based on statistical analysis that were not possible in the Van Dyk et al. (2009) study. However, similar limitations as in the previous study exist. For example, official feedback forms are possibly not the most effective way of assessing the impact of a course. Furthermore, the study is limited to assessing reading levels, whilst other academic literacy abilities might also have improved over the duration of the course; thus, using a wider variety of assessment instruments might have been useful.

Mhlongo (2014) assessed the impact of an academic literacy intervention at the Vaal Triangle Campus of the North-West University. He made use of the same academic literacy test that was used in the Van Dyk et al. (2011) study – i.e. the TALL – but also drew on the perceptions of students as well as mainstream lecturers who taught first-year students by administering questionnaires developed for this purpose. He further drew a correlation between students' overall academic achievement and their academic literacy levels. A particularly useful aspect of this study was the use of a control group. All students who obtained below 50% for the TALL were required to participate in the academic literacy course, whereas students who obtained 50% and above were exempted – it would thus seem as though the formation of a control group might have been difficult. Mhlongo (2014), however, used two groups of students: those who obtained between 40% and 49% (and who thus participated in the intervention – the experimental group) and those who obtained between 50% and 59% (thus those who were exempted from the academic literacy course – the control group). By using two groups of students who obtained similar marks as experimental and control groups, certain statistical conclusions could be made about the impact of the academic literacy course on student success.

Mhlongo's (2014) study indicated that there was a statistically significant improvement in the experimental group's mean scores between the pre- and post-tests. Furthermore, his results indicated that there was no such improvement in the control group students' scores. Student feedback was generally positive, although some students indicated that the courses were not relevant to their studies. Some students also indicated that more time needed to be allocated to the modules. Feedback from content-subject lecturers indicated that these lecturers were largely unaware of the abilities addressed in the academic literacy course. Furthermore, they did not seem to think that the academic literacy course made a substantial difference to their students' academic literacy levels. In addition, lecturers felt that generic academic literacy courses were

not ideal, as they believed their own disciplines to be very different from other disciplines. They also did not believe that it was their responsibility to help students acquire academic literacy abilities.

Carstens and Fletcher (2009b) evaluated a subject-specific essay-writing intervention for history students at the University of Pretoria. The intervention was assessed by means of a pre- and post-test (in the form of an essay) as well as student responses regarding their perceptions of the course. A seven-point scoring rubric was used for the pre- and post-test, with percentages to give the assessor a clear idea of a benchmark for each mark allocation. The scoring instrument is based on three analytical rating scales that are internationally accredited. The following four dimensions are addressed by the scoring instrument: use of source material, structure and development, academic writing style, and editing. An N/A option was given for items which are not relevant in all types of writing (for example, referencing, legibility or layout). According to Carstens and Fletcher (2009b:324), "the success of academic literacy interventions are equally dependent on students' experience, which are co-determinants of motivation and skills transfer". Therefore, a survey was conducted to determine the opinions of the participants. The questionnaire uses a standard five-point Likert scale. This type of questionnaire would seem more useful in comprehensively determining perceptions than the purely open-ended questions that were used in some of the studies discussed in this review.

Results indicated that students improved in three dimensions between their pre- and post-test essays. These dimensions included their use of source material, structure and development, and academic writing style. Students' editing abilities did not seem to have improved over the course of the intervention. The opinion survey showed that students were generally positive about the effect of the intervention on their writing abilities. They were also in favour of the genre-specific approach that was followed in this intervention. Furthermore, the results indicated that more attention should be paid to formality and precision in academic writing, as well as developing self-confidence to challenge authority. One limitation of this study is that only ten students completed the course, making it difficult to reach statistically significant conclusions based on this small number.

Storch and Tapper (2009) assessed the impact of an English for Academic Purposes (EAP) course presented at the University of Melbourne that was aimed at developing the academic literacy abilities that are required for successful study at postgraduate level. Student writing was assessed by means of a pre- and post-test writing task. What sets this study apart from similar studies is the type of quantitative research design used in its assessment of student writing. The study measured students' fluency by looking at words per T-unit, their accuracy by counting errors in various categories, their use of academic vocabulary by comparing student lexis to Coxhead's (2000) academic wordlist, and their text structure and rhetorical quality by using a guide developed by the authors themselves. In addition to this statistical analysis, questionnaires were distributed to gather information about students' English language use and proficiency, as well as their perceptions regarding the usefulness of the course (one open-ended question was used to determine the latter).

Quantitative results from this study showed that there was no measurable effect on student fluency; however, statistically significant improvements were observed in students' grammatical accuracy and their use of academic vocabulary. Improvements were also observed in students' text structure and rhetorical quality. Qualitative outcomes indicated that the course

had made students more aware of various academic writing strategies. While assessing student writing quantitatively in this manner is certainly an interesting approach that merits consideration, especially when the aim is to determine a course's strengths and weaknesses, this study might have benefitted by comparing these results to those obtained from a more traditional writing rubric. Perceptions might also have been measured more effectively by asking more specific questions regarding the usefulness of the course.

Some studies evaluate impact by comparing the results of two or more courses with each other[1]. Harker and Koutsantoni (2005) compared the effectiveness of distance versus blended learning in a web-based EAP programme at the University of Luton. Students completed a diagnostic test that comprised a summary as well as a short essay as both pre- and post-tests. In addition, students completed formative feedback forms on what they found to be the most and least useful components of each lesson, as well as summative feedback forms on the course. Feedback forms contained both closed-ended as well as open-ended questions.

Both groups of students performed better in the short essay part of the post-test than they had in the pre-test. Blended learning students who attended more classes performed better than those who attended fewer classes. There was no significant improvement in the summary section between the pre- and the post-test. Both groups of students gave more positive than negative formative feedback. The summative feedback indicated that, when compared with the feedback from the blended learning group, the distance learning group agreed that the course addressed their needs to a greater extent, though the majority of both groups felt that they had learned valuable academic English skills. A possible weakness in this study is that the summative feedback form did not readdress the various abilities addressed during the course. There was thus no indication of how useful students considered the various abilities after having completed the entire course and having had time to reflect on these abilities. Furthermore, data from various sources were not triangulated to ultimately obtain stronger research results.

Carstens (2011a) used a quasi-experimental design to compare the pre- and post-test essay ratings of students in a generic academic literacy writing course with those of students in a discipline-specific writing course. The same scoring rubric that was used in Carstens and Fletcher (2009b) was used in this study. Carstens also used surveys to determine students' opinions of the course by looking at five dimensions: staged and scaffolded teaching and the learning model, purposeful social apprenticeship, a needs-driven syllabus, critical orientation, and skills transfer. Although both groups of students performed significantly better in the post-test than in the pre-test, students from the discipline-specific writing course outperformed those from the generic writing course. Furthermore, although both groups gave positive feedback about their respective courses, the discipline-specific group's feedback was significantly more positive than that of the generic group. According to Carstens (2011b), limitations of this type of quasi-experimental design include that the comparison might be jeopardised due to differences between the syllabi and presentation of the interventions, as well as differences between the two groups. Furthermore, the fact that the courses were presented consecutively rather than simultaneously might be problematic as designers as well as presenters might have learned from the first intervention, and thus applied corrective measures to the second intervention.

[1] Refer back to the discussion of Mhlongo (2014) for an alternative control group experiment.

A selection of other studies that compare the results of two or more courses are shortly summarised here. Kasper (1997), at the Kingsborough Community College, compared the language course results of English second language students receiving content-based instruction to those who were enrolled in generic language programmes. Murie and Thomson (2001) considered the impact of an academic literacy course by comparing the retention rates of the students who participated in the course to those of a control group. Song (2006) compared the impact of content-based EAP courses with that of generic EAP courses at the City University of New York. In this study, the following aspects of students' receptive abilities were assessed: comprehension of the text; ability to identify main ideas, purpose and tone; and ability to analyse information and to draw inferences. As for productive abilities, students were expected to submit a portfolio containing various examples of essays in different genres completed during the semester. Furthermore, they completed an in-class essay assessment.

While there are certainly clear benefits in using an experimental approach with a test and a control group, this type of study is not possible at many universities where no equivalent control groups exist. Furthermore, universities are often hesitant to allow the use of true experimental designs due to ethical considerations. Thus, while using control groups might be preferable, an evaluation design – specifically in the South African context – would have to be comprehensive enough to still allow valid conclusions to be drawn by means of triangulation, despite the lack of appropriate control groups.

At the University of Cape Town, Archer (2008) attempted to assess the impact of a writing centre on students' writing. She used a multi-faceted approach in which she collected data by i) ascertaining students' perceptions with regard to writing centre work, ii) collecting writing centre consultants' comments, iii) considering students' grades, and iv) comparing independently assessed first and final student drafts (marked by looking at organisation, language use, as well as voice and register). Archer (2008:251) reminds us that students' "perception of improvement may not necessarily translate into demonstrably improved writing". It is therefore also necessary to empirically assess such an improvement. Archer triangulated data by looking at students' perceptions, their writing, the grades they obtained for their writing, and consultants' perceptions of the writing.

Students indicated that the writing centre intervention assisted them in focusing on the task, improving their voice and register, and improving macro- as well as micro-structural issues. Furthermore, students seemed to have a greater awareness of their own writing after attending writing consultations, and were more able to articulate their writing processes. All students passed the assignments on which they had consulted. Finally, between first and final drafts, students improved in all three areas, but most pronouncedly in voice and register as well as organisation. It should be noted that writing centres generally do not consider the full range of academic literacy abilities – their focus on writing is reflected in the methodology employed in this study. Possible weaknesses of this study include that the consultants were students and not necessarily qualified language experts (though they have undergone thorough training); moreover, variables were not controlled for, perhaps because this is particularly difficult in a writing-centre context.

Several studies that assess interventions look at these interventions from limited perspectives. Some studies focus mainly on quantitative data. Van Wyk and Greyling (2008), for example, assessed the impact of using graded readers for low-proficiency students at the University of the Free State. Students' academic literacy levels were assessed by means of the Placement Test in

English for Educational Purposes (PTEEP) as a pre- and a post-test. These data were not triangulated with other data sources. Carstens and Fletcher (2009a) statistically analysed the improvement in students' writing abilities by looking at the pre- and post-test results of a cross-disciplinary essay writing intervention aimed at second-year students in the Humanities. Fouché (2009) described a writing centre intervention: a series of academic literacy workshops aimed at first-year students in UNISA's Science Foundation Programme. In this intervention, pre- and post-test results of an academic literacy test were compared and correlated with student attendance. The problem with this type of correlation study is that it is very difficult to control variables like student motivation; more motivated students who attend more workshops (in the context of this study, or classes in other contexts) might have outperformed less motivated students who attended fewer workshops, regardless of the number of sessions attended.

In contrast, some studies rely mainly on qualitative measures to determine course impact. Thompson (2011) evaluated an "English for Tourism" intervention, aimed at fourth-year students at a Thai university. The course was assessed using a student questionnaire to determine students' reactions to various course features, interviews with a variety of stakeholders to determine their perceptions of the programme, a teacher's log to document and reflect on various aspects of the course, and learning materials which were analysed. Similarly, Ngoepe (2007) evaluated an academic literacy course called "English and Study Skills" at the University of Limpopo. The course was evaluated by means of lecturer interviews, student questionnaires, an analysis of materials, and a survey of similar courses. Kiely (2009) evaluated English for Academic Purposes materials at a British university by means of an ethnographic study, which included interviews with students and teachers, an end-of-course questionnaire, field notes, and an analysis of learning materials. Butler and Van Dyk (2004) broadly looked at students' perceptions of an Engineering course at the University of Pretoria. They also mentioned anecdotal evidence from lecturers. Similarly, Bharuthram and Mckenna (2006) reported on students' perceptions (obtained by means of an evaluation questionnaire) of the success of a writer-respondent intervention at the Durban Institute of Technology. An important limitation of these studies is that no instruments were used to determine whether there was an improvement in students' academic literacy (or language) abilities between the onset and the conclusion of the various interventions. Also, in most cases, questionnaire and interview questions mainly focused on the course in general, and did not sufficiently consider various abilities addressed throughout the course.

Winberg, Wright, Birch and Jacobs (2013) also took a qualitative approach to evaluating the effectiveness of four discipline-specific academic literacy case studies, each of which was based on a collaborative effort between academic literacy and content-specific specialists. In the first case study, fourth-year undergraduate Science and Technology student teams were responsible for developing product prototypes. In this case study, debriefing meetings were held in which academic literacy and content-specialists reflected on what had been learned from the collaborative effort. Subject specialists had not provided any formative feedback in this case study, a factor which the authors identify as problematic. The second case study involved a collaboration between academic literacy and subject-content specialists to develop multilingual glossaries. In this case study, participants reflected on the effectiveness of these multilingual glossaries through observations at various stages during the collaboration. Furthermore, reflective semi-structured interviews were held with the subject-content specialists. These interviews were analysed qualitatively, looking for emerging themes. In the third case study, academic literacy and subject-content specialists collaborated in co-authoring a textbook aimed at giving first-year

students "linguistic access to content knowledge in an SET [Science, Engineering and Technology] discipline" (Winberg et al. 2013:95). This collaboration was evaluated by conducting structured interviews with the co-authors, which were again qualitatively analysed. During this case study, regular meetings were also held between academic literacy and subject-content specialists to provide participants with a "transactional space" (Winberg et al. 2013:96). The fourth case study reported on "aimed to provide linguistic access to disciplinary knowledge through interdisciplinary collaboration involving pairs [of academic literacy and subject-content specialists in Science and Technology disciplines]". In this case study, one academic literacy specialist was partnered with a subject-content specialist – in total, twenty lecturers participated. The collaboration "entailed dovetailing curricula, developing shared classroom materials, team teaching, and designing and co-assessing tasks" (Winberg et al. 2013:97). Feedback on the success of the collaborations consisted of narrative interviews, focus group sessions, and reflective writing – these were all qualitatively analysed.

The Winberg et al. (2013) study highlights the importance of obtaining feedback from primary stakeholders – in this case academic literacy and content-subject specialists – when determining whether interventions could be considered effective. However, the strong focus on the working relationships between academic literacy and content-specific specialists at the expense of additional data leaves one wondering whether the students actually improved as a result of these interventions. These case studies might have been strengthened by, for example, considering feedback from students involved in the interventions as well as analysing quantitative data so as to consider more comprehensively the success of these interventions.

Another way in which impact has been measured is by investigating how language ability measures correlate to general academic success. A recent study by Van Rooy and Coetzee-Van Rooy (2015), conducted at the Vaal Triangle Campus of the North-West University, focused on the 2010 intake of first-year students and found that the Grade 12 results of students who achieved an average of below 65% for all subjects could not, with confidence, predict academic success at university; the Grade 12 results of students who achieved an average of 65% and higher, however, could be used as a predictor for academic success. The study further found that academic literacy tests are not good predictors of success at university level. However, this study found that students' marks in academic literacy modules were good predictors of academic success. Mhlongo (2014) similarly found a significant correlation between students' academic literacy course marks and their marks in other subjects for the 2012 intake at the same university. One question that should be raised with this type of correlation is whether the positive correlation between academic literacy course marks and content-subject marks is because higher academic literacy levels (acquired in the academic literacy course) resulted in higher marks in content subjects, or whether stronger students naturally performed better in both measurements, and weaker students poorer in both. Thus, on its own, this measurement would not seem to be useful in assessing the impact of an academic literacy intervention. However, as part of a triangulated study (as was done in the study by Mhlongo), such a measurement could provide valuable insight into the impact of such interventions.

3. Discussion and conclusion

To summarise, various approaches to assessing the impact of academic literacy interventions can be identified in the literature. Two main aspects of impact stand out, namely determining

whether students' academic literacy levels had improved over the duration of the course, and establishing whether students transferred these abilities to their other subjects.

Two main approaches have been used to assess whether there was an improvement in students' academic literacy levels between the onset and conclusion of an intervention. The first is assessing whether there is an improvement in students' writing abilities[2] by using a rubric (e.g. Carstens and Fletcher 2009b, Storch and Tapper 2009, Van Dyk et al. 2009, Archer 2008, Parkinson et al. 2008, Song 2006) or statistically examining features of student writing (Storch and Tapper 2009). The second is by assessing whether there is an improvement in students' academic reading abilities, often by means of a verified and validated academic literacy test (e.g. Mhlongo 2014, Van Dyk et al. 2011, Fouché 2009, Parkinson et al. 2008, Song 2006).

In addition to assessing whether there was an improvement in students' academic literacy abilities, it is also important to determine whether these improved abilities were effectively used in students' other subjects. A seemingly effective way of determining whether an improvement in test scores can be attributed to a specific intervention is to use appropriate control groups (consider, for example, Mhlongo 2014; Carstens 2011a,b; Song 2006; Harker and Koutsantoni 2005; Murie and Thomson 2001; Kasper 1997). An additional and sometimes alternative method of determining whether the abilities acquired in a course were transferred to other subjects is by determining students' perceptions regarding the impact of a course (e.g. Mhlongo 2014, Van Dyk et al. 2011, Carstens and Fletcher 2009b, Kiely 2009, Storch and Tapper 2009, Van Dyk et al. 2009, Archer 2008, Parkinson et al. 2008, Bharuthram and Mckenna 2006, Butler and Van Dyk 2004). One danger, however, is that it is very difficult to determine the reliability of perceptual data – just because students say that they have acquired (and transferred) abilities does not mean that this is necessarily the case. Further methods of determining whether improvement in academic literacy levels can be attributed to the course include interviewing stakeholders (other than students) to determine their perceptions of the intervention (e.g. Mhlongo 2014, Winberg et al. 2013, Thompson 2011, Ngoepe 2007), correlating student performance with class attendance (e.g. Fouché 2009), and correlating students' performance in the academic literacy course with their performance in their content subjects (e.g. Van Rooy and Coetzee-Van Rooy 2015, Mhlongo 2014).

An important facet of the responsible implementation of academic literacy interventions is to assess whether these interventions have a significant impact. Merely offering academic literacy interventions to bow to national and international pressure for the establishment of such interventions is not enough. Universities, departments and units that offer academic literacy interventions are responsible for ensuring that these interventions have the highest impact possible. The studies discussed in this article have all attempted to do this to some extent, which indicates that some researchers are aware of the importance of assessing the impact of academic literacy interventions. However, the variety (and sometimes inconsistency) of approaches used raises the question of what the most appropriate way would be to assess the impact of academic literacy interventions.

[2] Although writing and reading abilities are referred to in this study, for the sake of convenience, they should be seen as broad categories that overlap, both addressing a variety of academic literacy principles. These include being able to interpret information, collaborating with the author or audience, using conventions, being aware of cultural knowledge, solving problems, and reflecting and using language appropriately (cf. Kern 2000:16-17).

Unfortunately, as Howes (2003:148) reminds us, "[r]esearch on impact in education is difficult, partly because there are typically many factors involved which are difficult to control, so that the impact of any one element in the system is hard to distinguish". This is certainly the case when trying to assess the impact of an academic literacy intervention, since there are many factors at play, for example, general exposure to academic literacy abilities in students' other subjects and possible feedback on academic literacy related issues from content-subject lecturers. Furthermore, forming a control group is not possible at many universities, as almost all students have some kind of academic literacy intervention as part of the credit-bearing programme offering. In order to meaningfully determine the impact of an academic literacy intervention, therefore, alternative research designs must also be considered.

Jick (1979) argues that a more certain portrayal of a phenomenon is provided when multiple and independent measures reach similar conclusions. Lynch (1996:60) agrees and states that "triangulation seems like an obvious strategy for strengthening the validity of evaluation findings". He adds that the possibility of bias always exists in any particular technique or source; however, using a variety of sources of evidence could potentially cancel "the bias inherent in any one source or method" (Lynch 1996:60). Therefore, by examining a variety of factors that may shed light on the agency of an academic literacy course in the ultimate improvement of students' academic literacy abilities, and the extent to which these abilities were transferred to other subjects, a more valid inference can be made regarding the causal relationship between such improvement and the academic literacy intervention.

Based on the literature discussed in the previous section as well as the definition of impact that was put forward in this article, this study proposes that in order to determine the impact of an academic literacy intervention, two broad aspects of impact on student success must be examined, namely the improvement (if any) in students' academic literacy levels, and the extent to which these abilities are used in and transferred to students' content subjects. However, as Mhlongo (2014) points out, "each tertiary institution faces unique challenges with regard to the specific needs of its students, which makes it essential that specific academic literacy interventions […] be assessed within the context of addressing such needs". Since academic literacy courses vary vastly in terms of, for example, content and purpose, any evaluation design for assessing their impact would have to be flexible. It is likely that such a design would have to include certain generic components that would address integral aspects that should be part of each academic literacy intervention[3]. However, the researcher would have to be able to adapt some research tools so as to most effectively assess the impact of each individual academic literacy intervention, as not all academic literacy interventions have the same foci or objectives.

This study has provided a broad overview of the instruments that have been used in the literature in assessing the impact of academic literacy interventions. Much more research in this field is necessary though. Future research will have to consider which are the most effective, valid and reliable instruments that could be used in academic literacy impact assessment. Nonetheless, this study hopes to have taken a first step in addressing the research gap in determining the effect of academic literacy interventions.

[3] Consider, for example, Van Dyk and Van de Poel's (2013:56) definition of "academic literacy" as "being able to use, manipulate, and control language and cognitive abilities for specific purposes and in specific contexts". Based on this definition, it would be vital that students' abilities to "use, manipulate, and control language and cognitive abilities" would have to be assessed using methods that can be triangulated.

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The use of digit and sentence repetition in the identification of language impairment: The case of child speakers of Afrikaans and South African English

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Abstract
There is a great need for an instrument that can accurately identify children with language problems early, regardless of the language(s) they speak. Certain tasks have been identified as potential markers of language impairment, including sentence repetition and digit repetition (Ziethe, Eysholdt and Doellinger 2013: 1). The purpose of this study was to compare the sensitivity of these two potential markers in order to compile an accurate measuring instrument for language impairment in Afrikaans and South African English (SAE). The participants were 20 typically developing (TD) Afrikaans- and 20 TD SAE-speaking 5-year-olds, as well as five Afrikaans- and five SAE-speaking 5-year-olds with language impairment (LI). Sentence and digit repetition tasks were devised, recorded on CD, and performed by each participant individually. Both groups with LI performed poorly, and significantly more poorly than their corresponding TD group, on both repetition tasks. For both languages, (i) sentence repetition distinguished best between the participants with and without LI, and (ii) some items proved to be more sensitive than others for the difference between the performance of the TD and the LI groups. These items may be appropriate for inclusion in a screening tool for LI in 5-year-olds. The availability of language screening tools in several of South Africa's languages can be of value to child language researchers and speech-language therapists. This study demonstrated that devising such tools could be a feasible endeavour. In contrast to diagnostic language assessment instruments, screening tools that employ repetition tasks can be devised relatively quickly and economically, and can contribute to the early identification of children with language problems in the interim, while diagnostic instruments are developed.

Keywords: sentence repetition, digit repetition, language impairment, Afrikaans, South African English

1. Introduction

It is widely acknowledged that there is a dearth of standardised language assessment instruments available for use with South African children (Demuth, Moloi and Machobane 2010; Pascoe and Norman 2011; Penn 1998; Solarsh and Alant 2006). In the absence of such

standardised instruments to identify language impairment (LI), speech-language therapists and other child language professionals often make use of informal assessment when attempting to differentially diagnose language problems in South African children. They base such assessment on clinical markers of LI,[1] where a clinical marker is a manifestation which is characteristic of a specific condition (Archibald and Joanisse 2009: 900). Two such markers identified for a range of languages in the international literature are low scores on sentence and digit repetition tasks (Ziethe, Eysholdt and Doellinger 2013: 1). The main aim of this study is to ascertain whether sentence repetition and digit repetition are indeed clinical markers of LI in Afrikaans and South African English (SAE), i.e., whether these types of repetition can differentiate between child speakers of these languages with and without LI. Further aims were (i) to ascertain whether different scoring methods affect the sensitivity of sentence and digit repetition tasks towards LI, and (ii) to determine which types of items are most successful at differentiating between children with and without LI in Afrikaans and in SAE. Although Afrikaans and English are the best resourced of all South African languages in terms of language assessment material, they were selected for study here because

(i) the available English materials are almost invariably in a non-South African variety of English (usually British or American English) and are thus lexically and often also syntactically and phonologically inappropriate for use with child speakers of SAE. In a repetition task, these are important considerations because if an unknown word from a different language variety is used, or if a known word is pronounced in an unfamiliar manner, then such a word could in fact be deemed a nonsense word, changing the nature of the task in that instance from digit or sentence repetition to digit or sentence repetition with elements of nonsense word repetition;

(ii) no standardised Afrikaans-medium repetition task yet exists, even though Afrikaans is the language with the third largest home language speaker base in South Africa and the majority language in the province in which the study was conducted (the Western Cape),

[1] The type of language impairment referred to here is so-called "specific language impairment". The term describes a significant impairment in oral language abilities (despite adequate exposure to language) where the cause of the language impairment is not always obvious or where the language impairment appears to be the primary impairment of the person (see Leonard 1998: vi, Stark and Tallal 1981). This impairment can affect more than one language domain, including phonology, syntax, morphology, pragmatics and the lexicon (Gallon, Harris and Van der Lely 2007: 435, Tattersall 2010: 2). It is a "relatively common developmental condition" (Archibald and Alloway 2008: 168), affecting approximately 7% of the total population (Conti-Ramsden and Durkin 2007: 147). Note however that the term "specific language impairment" has become contentious. As stated by Bishop (2014: 389), "if by 'specific' we mean that the child has no problems other than with language, then this is clearly an inappropriate term if ADHD or DCD [developmental coordination disorder, also termed "developmental dyspraxia"] is also present. If, however, we take 'specific' to mean 'idiopathic' or 'functional', i.e. with no known cause, then the term is still applicable, because the co-occurring condition is not an explanation for the language problems". It is in this latter sense that "language impairment" (instead of "specific language impairment") is used here: the presence of other conditions neither predicts nor precludes a diagnosis of language impairment. Whilst "specific language impairment" is widely used in academic or research settings, it is not as familiar a term in clinical or educational settings, and so we opted here for the more neutral yet somewhat non-descript "language impairment" instead of "specific language impairment", following the recommendation of Reilly, Tomblin, Law, McKean, Mensah, Morgan, Goldfeld, Nicholson and Wake (2014) instead of that of Snowling (2014). That said, we acknowledge that the term "language impairment" is not unproblematic either (see Leonard 2014: 437), nor is any of the other proposed replacements for "specific language impairment", such as "primary language impairment", "language delay", "language disorder", "developmental dysphasia", "developmental language disorder/impairment" or "language learning impairment" (Reilly, Bishop and Tomblin 2014: 457-460).

with 49.7% of those residing in this province using it as home language (Statistics South Africa 2012: 11-13).

2. Literature review: Digit repetition and sentence repetition

Conti-Ramsden, Botting and Faragher (2001) investigated the sensitivity and specificity of repetition tasks and tasks assessing grammatical morphology, the latter being another known clinical marker of LI (see Marchman, Wulfeck and Weismer 1999; Rice and Wexler 1996). They found that the repetition tasks were sensitive for LI in 11-year-olds (i.e., they identified children who are indeed impaired) but the grammatical morphology tasks were not. Similarly, Ziethe et al. (2013: 1) found that a group of 5-year-old children with LI performed worse than their typically developing (TD) peers on tasks involving sentence repetition and digit repetition. Furthermore, whereas digit repetition could identify those children with severe impairment, sentence repetition could identify those with less severe impairment as well. This indicates that sentence repetition has a higher sensitivity than digit repetition. Although digit and sentence repetition have also both been identified as clinical markers of LI in adulthood (Poll, Betz and Miller 2010: 414), sentence and digit repetition tasks are generally recognised in the literature as effective in the identification of children with LI (Fletcher, Leonard, Stokes and Wong 2006: 223). Relevant research findings pertaining to these two markers of LI are briefly discussed below.

2.1 Sentence repetition

Sentence repetition is a task in which a person is required to immediately repeat a sentence presented auditorily (Archibald and Joanisse 2009: 901). It provides information on the strengths and weaknesses of a person's language (Marinis 2010). There are indications that sentence repetition, in contrast to many other language assessment methods, is little affected by socio-economic status. It thus provides information on a child's language skills independent of the influence of environmental factors (Marinis 2010).

Sentence repetition provides insight into a range of language and language-related skills in various languages (Seeff-Gabriel, Chiat and Dodd 2010: 692). These skills include morpho-syntactic skills of children (e.g. Verhoeven, Steenge, Van Weerdenburg and Van Balkom 2011: 1801), short term memory of persons with dyslexia (Roach and Hogben 2007: 773), and general expressive language abilities (see Archibald and Alloway 2008: 170). According to Bernstein Ratner (2000: 293), there is

> general agreement by researchers working over the past 30 years that sentences constructed at a level slightly above that observed in the child's spontaneous speech are regularized in ways that reflect both the child's extraction of form and meaning and the child's productive linguistic capacity.

Archibald and Joanisse (2009) found that sentence repetition has a high sensitivity for language disorder, as did Conti-Ramsden et al. (2001). The latter group of authors found sentence repetition to have a sensitivity and specificity of 90% and 85%, respectively. Sentence repetition has also been shown to provide an accurate indication of LI in adults (Poll et al. 2010: 424). Sentence repetition differentiates well between English-speaking children of the same age with and without LI and, to a certain extent, between children with a primary LI and those with other diagnoses who also present with language disorder (Botting and Conti-Ramsden 2003;

Marinis 2010; Thordardottir, Kehayia, Mazer, Lessard, Majnemer, Sutton, Trudeau and Chilingaryan 2011: 582 and 591). According to Fletcher et al. (2006: 232), the ability to repeat sentences is, to a great extent, determined by the child's language abilities. This makes sentence repetition a good means of assessing for LI in children.

2.2 Digit repetition

Digit repetition requires a person to repeat in the correct order a series of digits presented auditorily (Rispens and Baker 2012: 687, Thordardottir et al. 2011: 587). Conti-Ramsden and Hesketh (2003) assessed four potential markers of LI, namely past tense production, noun plural production, nonsense word repetition and digit repetition, in English-speaking 5-year-olds with and without LI. They found that children with LI fared worse in word and digit repetition than did their TD peers, but not in past tense and plural production (Fletcher et al. 2006: 220). Ziethe et al. (2013: 9) obtained similar results amongst German-speaking 5-year-olds. As such, digit repetition was shown to be a good predictor of children's language skills.

Both sentence and digit repetition tasks have been performed in languages other than English (see e.g. Archibald and Joanisse (2009: 901) for Cantonese). In this study, the aim was to employ sentence and digit repetition with Afrikaans- and SAE-speaking 5-year-olds to ascertain whether these repetition tasks are sensitive for LI in these under-researched languages.

3. Research questions

In an attempt to determine whether digit and sentence repetition are sensitive to LI in Afrikaans and SAE, answers were sought to the following three questions:

Research Question 1:

For Afrikaans and SAE, which repetition task differentiates best between TD children and those with LI?
The hypothesis was that sentence repetition would differentiate better than digit repetition. This hypothesis was based on research findings in other language varieties, e.g. in French (Thordardottir et al. 2011: 591) and Canadian English (Archibald and Joanisse 2009: 901).

Research Question 2:

Which scoring method – percentage correct digits/words calculated per digit series/sentence, or raw score (item as a whole either correct or incorrect) – is more accurate in differentiating between children with and without LI?
The hypothesis was that raw scores would be more accurate in differentiating between children with LI and their TD peers. This hypothesis was based on the assumption that raw scores do not give children with LI any credit for those digits/words that they do repeat correctly; if one digit/word is repeated incorrectly, the whole response is deemed incorrect.

Research Question 3:

Which items, in the digit and sentence repetition tasks separately, differentiate best between Afrikaans and SAE children with and without LI?
The hypothesis was that the phonologically more complex items would differentiate best between TD children and their peers with LI. This hypothesis was based on findings reported in the

literature that increased phonological complexity negatively influences the performance of children on repetition tasks (Acheson and MacDonald 2011: 193, Archibald and Gathercole 2006: 979, Coady and Evans 2008: 16, Gallon et al. 2007: 450, Munson 2001: 779).

4. Methodology and study design

4.1 Purpose of the study

The aim of the study was to answer the three research questions in order to be able to develop a screening tool for LI for use with Afrikaans-speaking and SAE-speaking children. The steps taken to reach our aim were as follows:

(i) To devise a digit and a sentence repetition task in Afrikaans and in SAE;
(ii) To pilot the digit and sentence repetition tasks with a small group of TD Afrikaans-speaking and SAE-speaking children, and to make adjustments on the basis of the findings;
(iii) To conduct the two repetition tasks with Afrikaans-speaking and SAE-speaking children with and without LI;
(iv) To calculate for Afrikaans and for SAE the raw scores as well as percentage correct digits/words per digit series/sentence for the digit and sentence repetition tasks, respectively;
(v) To compare the scores on the two repetition tasks obtained by the TD children with those obtained by the children with LI, for Afrikaans and for SAE separately, in order to ascertain which repetition task differentiates best between children with and without LI in each language;
(vi) To compare the scores rendered by the two scoring methods (raw scores vs percentage correct) to ascertain which is more sensitive towards differences between the TD and LI groups in each language;
(vii) To determine which task items in Afrikaans and SAE best differentiate between children with and without LI.

4.2 General procedure

In this section, the general protocol followed is briefly presented. Several aspects of the protocol are discussed in more detail in the following sections.

Ethical clearance for conducting the study was obtained from the Research Ethics Committee: Humanities at Stellenbosch University. After obtaining the necessary permission from head teachers and daycare proprietors, parents were sent information letters via the schools and daycare centres inviting their children to participate in the study. With this letter were a short background information form and a consent form to be completed by those parents who wanted their children to participate. The background information form was used to determine whether the child met the selection criteria for participation in the TD group. Children with LI were recruited by contacting various speech-language therapists in private practices in and around Cape Town. Those therapists who had Afrikaans- or SAE-speaking 5-year-olds with LI on their case loads were requested to inform the parent of the study and to invite them to let their children participate. These parents received the same letters and forms as those of the TD participants; one notable difference was that the parents of the children with LI consented to the authors obtaining relevant information about their child's previous language assessments from the speech-language therapists.

After obtaining verbal assent from each potential participant, three TD Afrikaans-speaking and three TD SAE-speaking children were selected for participation in a pilot study. In this study, a digit repetition and a sentence repetition task (devised by the first author on the basis of the recommendations found in the literature) were piloted. After adjustments were made to the tasks, they were voice recorded for use in the main study.

A vocabulary test was administered to each potential TD participant in the main study. Children whose scores were age-appropriate were included as participants. The repetition tasks were then administered to each TD and LI participant individually. The first author (a mother tongue speaker of Afrikaans who is also fluent in SAE) administered the tasks to all of the Afrikaans-speaking participants and to some of the SAE-speaking ones (including all SAE speakers with LI). The remaining English administrations were conducted by a mother tongue speaker of SAE. After these procedures, parents were informed in writing that data collection had been completed. Parents were provided with the first author's contact details so that they could make more detailed enquiries about their child's performance if they so wished.

Responses to each task were transferred from the paper scoresheet to a Microsoft Excel spreadsheet after which data were prepared for statistical analysis. The statistical analysis included comparisons between the two scoring methods and the relevant participant groups. When recording and reporting on the analysed data, participant names were replaced by codes to protect the identities of the participants.

4.3 Participants

There were four participant groups. The first group (TD-A) comprised 20 TD Afrikaans-speaking 5-year-olds of whom nine were male (age range 5(years);3(months) to 5;11 – average age 5;7). Nine of these participants attended an Afrikaans-medium school with a national quintile[2] of 5. The remaining TD-A participants were in preschools (which are not appointed national quintiles) in the same neighbourhood as the school. The parents of two of the TD-A participants reported that their child also spoke a second language fairly well; in both cases, this was English.

The second group (TD-SAE) comprised 20 TD speakers of SAE (six male and 14 female) with ages ranging from 5;4 to 5;11 (average age 5;8). Seven of the participants attended an English-medium private school (which is not appointed a national quintile). The remainder were recruited from preschools in the same neighbourhood as the private school. Three of the TD-SAE participants were reported to speak a second language (Afrikaans) fairly well.

To ensure that the participants in the TD groups did in fact have age-appropriate language skills, a standardised vocabulary test[3] was administered to each: the *Afrikaanse Reseptiewe Woordeskattoets* ('Afrikaans Receptive Vocabulary Test' (Buitendag 1994)) for Afrikaans and the *Peabody Picture Vocabulary Test – Third Edition* (Dunn and Dunn 1997) for English. By considering the vocabulary test results in conjunction with the written background information

[2] National quintiles (ranging from 1 to 5) constitute a measure employed by the South African Department of Education to describe the socio-economic status of the community in which a school is situated. The higher the quintile, the more affluent the community. This measure of relative socio-economic status determines the funding that the school receives from the government, as well as whether or not the school may charge school fees.

[3] Because of the lack of suitable standardised Afrikaans instruments, a comprehensive test of a range of language skills could not be administered to these participants.

obtained from the parents, it was determined whether these children were indeed TD. As regards the background information, all TD participants were reported to be TD by their parents and class teachers in terms of language, hearing, intellectual functioning, and socio-emotional development.

The third and fourth groups comprised five Afrikaans-speaking and five SAE-speaking 5-year-olds with LI (LI-A and LI-SAE, respectively). In the Afrikaans group, there were two boys and three girls, and their ages ranged from 5;3 to 5;10 (average age 5;6). One of them was reported to speak English fairly well. All participants in the English group were male, and their average age was 5;8 (age range 5;2 to 5;11). The parents of one of the boys reported that he spoke Afrikaans fairly well. These 10 participants were diagnosed with LI by qualified speech-language therapists. Table 1 shows the linguistic basis upon which each child's diagnosis was made. All participants with LI were deemed to be from mid- to high-income groups based on the national quintiles of the schools they attended.

Table 1. Information on diagnosis of LI for Afrikaans- and SAE-speaking participants

Participant	Treated by speech-language therapist at time of study?	Assessed by	Assessment instrument(s) used	Results and other comments
LI-A 1	Yes	His speech-language therapist	*Afrikaanse Reseptiewe Woordeskattoets* (ARW; Buitendag 1994)	Standard score: 86 Informal assessment: delayed syntactic skills
LI-A 2	Yes	Second author[4]	ARW (Buitendag 1994)	Standard score: 82
			Afrikaans version of *Diagnostic Evaluation of Language Variation* (Seymour, Roeper and de Villiers 2005)[5]	Age equivalent scores: (chronological age 5;4) Pragmatics domain: 4;0 Syntax domain: 4;5 Semantics domain: 4;0
LI-A 3	No (referred post-study)	First author[4]	ARW (Buitendag 1994)	Standard score: 88 Informal assessment: deviant expressive syntax and morphology
LI-A 4	No (referred post-study)	First author	ARW (Buitendag 1994)	Standard score: 76 Informal assessment: deviant expressive syntax

[4] Both authors are qualified speech-language therapists with experience in administering speech and language tests to young children.

[5] See Van Dulm and Southwood (2008) for changes made to the original American English version of this instrument.

LI-A 5	No, but started post-study	First author	ARW (Buitendag 1994)	Standard score: 99 Informal assessment: problems with correct use of tense marking; very short, simple sentences Teacher concerned about language skills
LI-SAE 1	Yes	His speech-language therapist	*British Picture Vocabulary Scale – 3rd ed.* (Dunn, Dunn, Whetton and Burley 2009)	Age equivalent score: 5;10 (chronological age 5;9) Informal assessment: problems with regular and irregular plural past tense forms, plural forms, correct use of pronouns, omission of verbs
LI-SAE 2	Yes	His speech-language therapist	The *Test for Auditory Comprehension of Language – 3rd ed.* (TACL-3; Carrow-Woolfolk 1998)	Age equivalent scores: (chronological age 4;9) Receptive vocabulary: 3;3 Comprehension of grammatical structure: 4;6 Comprehension of complex structures: 4;0 Informal assessment: problems with plural forms, correct use of personal and reflexive pronouns, degrees of comparison, past tense forms, prepositions
LI-SAE 3	No (referred post-study)	First author	*Clinical Evaluation of Language Fundamentals – 4th ed.* (CELF-4; Semel, Wiig and Secord 2003)	Standard score: 75 Problems in all evaluated areas, including word structure, recall of sentences, formulating sentences and following instructions
LI-SAE	No (referred post-study)	First author	CELF-4 (Semel et al. 2003)	Standard score: 82 Problems especially in recall of sentences, formulating sentences and following instructions
LI-SAE 5	Yes	His speech-language therapist	TACL-3 (Carrow-Woolfolk 1998)	Age equivalent scores: (chronological age 5;0) Receptive vocabulary: 4;3 Comprehension of grammatical structure: 4;9 Comprehension of complex structures: 4;0

A shortened articulation screening test was administered to each participant in each of the four groups, because the results of the pilot study (discussed briefly below) indicated that articulation skills did influence participants' performance on the repetition tasks. The articulation screening test targeted only liquids and sibilants as these sounds were shown in the pilot study to influence repetition the most. If a participant showed non-target production of one of the sounds included

in the screener and these sounds were systematically substituted by others, such substitutions were not viewed as incorrect during data collection.

4.4 Data collection instrument

Sentence and digit repetition lists were devised by the first author after studying the available literature on sentence and digit repetition as possible markers of LI, specifically studies on the properties that the items of these tasks should have. A pilot study was then conducted in which the original list of items was presented live to three 5-year-old speakers of each of the two languages involved. In devising these lists, several linguistic factors that can influence performance on repetition tasks were borne in mind. These are briefly discussed below.

Regarding the items of the sentence repetition tasks, according to COST Action IS0804 Workgroup 1 (2011, 2012), one should control for length, grammatical properties and lexicality (i.e., lexical vs functional words) of sentence repetition items. A study by Acheson and MacDonald (2011: 193) showed that phonological properties of a sentence (i.e., the sound representation of each word in the sentence) influence the child's ability to recall the sentence. A sentence such as *She sells seashells by the seashore* with frequent sound repetitions might not only be difficult to pronounce but also difficult to understand, even during silent reading (Acheson and MacDonald 2011: 193). It was also found that sentences containing phonological overlap (e.g. *The baker that sought the banker bought the house* and the *She sells seashells by the seashore* example above) were repeated less accurately than sentences without such overlap (Acheson and MacDonald 2011: 202). Lastly, Marinis (2010) proposed that items of a sentence repetition task should include structures which children with LI in that particular language find problematic. In English, long actional and non-actional passive constructions as well as nouns taking complements should thus be included. In devising the items of the sentence repetition task for use in the present study, sentence length, grammatical properties of words and the lexicality of the items were controlled for by adapting the *School-aged Sentence Imitation Test* (Marinis, Chiat, Armon-Lotem, Gibbons and Gipps 2011) for use in SAE. Similar sentences were then devised for Afrikaans. The *School-aged Sentence Imitation Test* is based on three levels of complexity, each including five different sentence types. These are presented in Table 2.

Table 2. Sentence types and their levels of complexity in the *School-aged Sentence Imitation Test*

Level 1	1. Subject Verb Object (SVO) with one auxiliary verb or one modal verb 2. SVO with one auxiliary or one modal verb as well as negation 3. Short action passive constructions 4. *Who*- and *What*-subject questions 5. Biclausal sentences with coordination and infinitival clauses
Level 2	6. SVO with two auxiliary verbs or one auxiliary verb and one modal verb 7. SVO with two auxiliary verbs or one auxiliary verb and one modal verb as well as negation 8. Long actional and non-actional passive constructions 9. *Which* object questions and *Who(m)* indirect object questions 10. Biclausal sentences with subordination (subordinate conjunction): complement and adjunct sentences

Level 3	11. Object-object right-branching relative clauses 12. Centre-embedded subject-object relative clauses 13. Coordinating clauses with conditional elements 14. Object-split sentence with active construction and subject-split sentence with passive construction 15. Sentences with nouns that contain complements

For each sentence type, four repetition items were included in the pilot lists. These items varied with regard to the total number of syllables and the total number of words in each sentence. Both the Afrikaans and SAE sentence repetition items included sentences with eight to 14 syllables and seven to 12 words. For example, in Afrikaans, items were included with only eight syllables (*Hy is hard gedruk teen die grond* 'He was shoved hard against the ground'), items with nine syllables (*Die boek is na die kantoor geneem* 'The book was taken to the office'), but there were also items with ten or more syllables (*Sy vryf haar been, want sy het dit teen die muur gestamp* 'She is rubbing her leg, because she bumped it against the wall'). As stated above, sentences with different numbers of words were also included. In English, for instance, there was a sentence of seven words (*What did the princess buy last month?*), one of eight words (*Who did she give the beautiful rose to?*) and also sentences with nine or more words (*It was his son that the fireman saved from the house*).

Furthermore, the sentence repetition items of both languages each included one to five functional words and three to seven lexical words. An example of an English sentence with three lexical and seven functional words is *He will feed the cow before he waters the plants*, where the functional words have been underlined.

The items in the Afrikaans list were similar to those in the English list as regards sentence type and number of words, syllables and functional vs lexical words. The final number of items for sentence repetition in the pilot study was 60 per language, i.e., more than one example of each sentence type.

No published discussion could be traced on factors to be borne in mind when devising digit repetition tasks. We thus worked on the assumption that factors shown to influence performance on other repetition tasks (such as utterance length in terms of number of words) would also affect the accuracy of digit repetition. The *Test of Auditory Processing Skills* (TAPS; Martin and Brownell 2005), which was developed for use with speakers of English, was consulted during the creation of the digit repetition items for this study. This test uses a maximum of nine digits in no specific order. We thus decided to also use items with one to nine digits per item. However, the TAPS does not control for the total number of syllables per item. Because we predicted that number of syllables would influence performance on digit repetition, as had been shown to be the case for nonsense word, real word and sentence repetition, items with one to 14 syllables were included in a controlled manner. By doing so, both number of syllables and number of digits per item were controlled for. Digits with lengths of one to four syllables were included, e.g. *two*, *nineteen*, *seventeen* and *twenty seven*. The Afrikaans and SAE digit repetition tasks each originally comprised 59 digit series.

The preliminary sentence and digit repetition tasks were performed with three TD Afrikaans-speaking and three TD SAE-speaking 5-year-olds. All items were read to the children in a clear manner. After each item, the child was expected to repeat the sentence or digit series verbatim.

Responses were recorded on self-devised scoresheets and were scored by the first author together with a consulting speech-language therapist in order to increase accuracy of scoring.

The results of the pilot study were used to determine how long the repetition tasks took to administer and to decide whether (i) the instructions to the participants were clear enough and (ii) any problem items needed replacement. Instructions and item clarity proved to be unproblematic, but the tasks were found to be too long to perform comfortably with 5-year-olds. The sentence repetition task was reduced to 30 items, with two examples of each sentence type (one with more and one with fewer syllables). The digit repetition task was reduced to 35 items, five examples for each of the series lengths (one to seven digits per series). In the final instrument, the number of syllables in digit repetition items was not considered as the pilot study indicated that it was number of digits rather than number of syllables that influenced performance. Tables 6 to 9 contain the final versions of the two tasks per language used as the data collection instrument in the main study.

The final sentence and digit item lists were recorded on CD in a recording studio, using the voice of the first author. Recordings rather than live voice were used during data collection in the main study because Schöler and Brunner (2008: 39) found that children with LI fared significantly better on repetition tasks when items are presented to them with live voice than via a recording. The use of a recording thus potentially increases the difference in performance of groups with and without LI, thereby increasing the sensitivity of the task.

4.5 Data transcription

The responses of each participant on each of the two repetition tasks were scored online paper-and-pencil style by the first author. All responses were also recorded with a digital voice recorder so that the accuracy of the online transcriptions could be verified. The second author independently transcribed and scored the responses of a number of participants: two TD Afrikaans-speaking and two TD English-speaking participants and all participants with LI (a total of 14 of the 50 participants). Where there were differences between the two transcriptions or scores, these involved at most one word per sentence. Interrater reliability was greater than 99% for percentage scores and 100% for raw scores.

4.6 Scoring methods

Several scoring methods have been proposed for sentence repetition tasks (see Fletcher et al. 2006: 225). For the purposes of both the pilot and the main study, two methods were used here. Firstly, each item repeated correctly was awarded one point and each not repeated correctly in all respects was awarded no points. The total number of correctly repeated items then served as a raw score. Secondly, the number of words produced correctly was counted so that the percentage words correct could be calculated. For instance, if the sentence *The cat sits on the mat* (comprising six words) was produced as *The cat sits on bat*, the percentage correct words would be 67%: one word (*mat*) was mispronounced/replaced and another (the second *the*) was omitted, so 4/6 words were correct. Where a participant added a word (as in *The cat sits on the big mat*), one point was deducted (which would render 83% (5/6) in this case). The average percentage words repeated correctly was then calculated for each participant individually.

In the available literature, no specific scoring method for digit repetition is proposed; therefore, that of the TAPS (Martin and Brownell 2005) was used. Participants were awarded two points if they repeated all digits and did so in the correct order. Where the participant repeated all digits but in the incorrect order, one point was awarded. No points were awarded to repetitions in which one or more digits were omitted, replaced or added. Both a raw score and a percentage score were calculated for each participant.

4.7 Statistical analyses

The data in the main study constituted 20 sets of responses for each of the two potential markers of LI for the TD Afrikaans- and SAE-speaking participants (thus 40 TD sets in total) and five sets of responses for each of the two potential markers for Afrikaans- and SAE-speaking participants with LI (thus 10 LI sets in total). The raw scores and percentages were analysed by a statistician (using the Mann-Whitney U test) in order to ascertain whether there were any significant differences between the groups and between the scoring methods.

5. Results and discussion

In the following subsections, the results of the four participant groups are discussed for each potential marker of LI, after which the research questions are addressed.

5.1 Sentence repetition

Table 3 contains a summary of the raw scores and percentages obtained by each of the four groups on the sentence repetition task. The performance of each group is discussed below the table.

Table 3. A descriptive comparison of the results of the four participant groups for the sentence repetition task

	Group			
	TD-A (n = 20)	**TD-SAE** (n = 20)	**LI-A** (n = 5)	**LI-SAE** (n = 5)
Minimum raw score (/30)	5	4	0	0
Maximum raw score (/30)	23	26	4	2
Average raw score (/30)	13.5	12.9	1.6	0.8
Minimum % words repeated correctly	73.23%	67.42%	24.21%	49.83%
Maximum % words repeated correctly	95.09%	98.21%	66.38%	67.02%
Average % words repeated correctly	86.69%	84.72%	49.63%	59.39%

Participants in the **TD-A group** had raw scores from 5/30 to 23/30, with a group average raw score of 13.5. Eleven of the 20 participants had percentage correct scores ranging from 88.1% to 95.1%; the remainder had scores of 73.2% to 86.5%. Sixteen of the participants had an average percentage correct score of more than 80%. The average percentage words repeated correctly was 86.7% for this group. Sentence constructions that the TD-A group found difficult to repeat included:

(i) object-split sentences with active constructions and subject-split sentences with passive constructions. For example, *Dit is haar blonde dogter wat deur die brandweerman*

gered is ('It is her blonde daughter that was saved by the fireman') was repeated as **Dit is die blonde dokter wat hy by die brandweerman gered is* ('It is the blonde doctor that he was saved at the fireman');

(ii) biclausal sentences with subordination: complement and adjunct sentences. For instance, *Die seun glo dat die kind fluit speel* ('The boy believes that the child plays the flute') was repeated as *Die kind wat by die skool fluit speel* ('The child that plays the flute at school');

(iii) long actional and non-actional passive constructions. For example, *Sy is vanoggend in die winkel gesien* ('She was seen in the shop this morning') was repeated as *Sy het vanoggend in die winkel gesien* ('She saw in the shop this morning');

(iv) SVO with two auxiliaries or one auxiliary and one modal. For instance, *Die kat sou nie die rooi lekker geëet het nie* ('The cat would not have eaten the red sweet') was repeated as *Die kat het nie die rooi lekker geëet nie* ('The cat did not eat the red sweet').

The **TD-SAE group** obtained raw scores of 4/30 to 26/30. The average raw score for this group was 12.9 and the average percentage words repeated correctly was 84.7%. As was the case for the TD-A group, only four participants had an average percentage words repeated correctly of less than 80%. Like the TD-A group, the TD-SAE group found the following constructions difficult to repeat accurately:

(i) object-split sentences with active constructions and subject-split sentences with passive constructions. For example, *It was the boy that the man splashed in the sea* was repeated as *It was the boy he had splashed in the sea*;

(ii) biclausal sentences with subordination: complement and adjunct sentences. For instance, *The man said that he combed his hair* was repeated as *The man said he cont* (sic) *his hair*;

(iii) SVO with two auxiliaries or one auxiliary and one modal. For instance, *John won't have talked about it with his father* was repeated as *John talked about it with his father*.

In contrast to the TD-A group, the TD-SAE group found object-object right-branching relative clauses difficult to repeat rather than long actional and non-actional passive constructions. For instance, *The monkey stroked the horse that the worm frightened* was repeated as *The monkey did strake* (sic) *the horse that the worm strightened* (sic).

The **LI-A group** had an average raw score of 1.6/30: two participants obtained 0/30, and one each obtained 1/30, 3/30 and 4/30. The group's average percentage words repeated correctly was 49.6%, with individual scores of 24.2%, 49.6%, 53.3%, 54.7% and 66.4%. The sentence type on which this group fared the best (three of the five repeated it correctly) was the *Who*- and *What*-subject questions, e.g. *Wie het die man in die water gegooi?* ('Who threw the man in the water?'). The participants found the repetition of the other sentence types challenging. Examples of repetition errors include **Die meisie het gesien wat die seun dit steel* ('The girl saw what the boy stole it') instead of *Die meisie het gesien hoe die seun dit steel* ('The girl saw how the boy stole it') and **Die groot man sal hele sap opdrink* ('The big man will drink up whole juice') instead of *Die groot man sou die hele bottel sap kon drink* ('The big man would have been able to drink up the whole bottle of juice').

Turning to the **LI-SAE group**: Two participants had a raw score of 0/30, two of 1/30 and one of 2/30. The average raw score for the group was 0.8 and the average percentage words repeated

correctly was 59.4%, with individual averages of 49.8%, 56.9%, 58.8%, 64.4% and 67.0%. All sentence types were difficult to repeat; there was no sentence type on which the LI-SAE group fared better than on the rest. Examples of incorrect repetition include **The books couldn't take from the office* instead of *The books were taken to the office* and **The cat is hit the rat down the stairs* instead of *The kitten could have hit the rattle down the stairs.*

To summarise, the two TD groups obtained similar raw scores and similar percentage scores for sentence repetition. Both groups found the repetition of the following challenging: (i) object-split sentences with active constructions and subject-split sentences with passive constructions, (ii) biclausal sentences with subordination, and (iii) SVO with two auxiliaries or one auxiliary and one modal. Participants in these two groups most often replaced rather than omitted words. By contrast, the groups with LI fared notably more poorly on the sentence repetition task than did their TD peers, and found all sentence types difficult to repeat. This concurs with the findings of Thordardottir et al. (2011: 592), who worked with French-speaking 5-year-olds and concluded that sentence repetition is an accurate marker of language impairment.

5.2 Digit repetition

The results for the digit repetition task are presented in Table 4. A discussion of these results follows the table.

Table 4. A descriptive comparison of the results of the four participant groups for the digit repetition task

	Group			
	TD-A (n = 20)	**TD-SAE** (n = 20)	**LI-A** (n = 20)	**LI-SAE** (n = 20)
Minimum raw score (/70)	28	30	16	26
Maximum raw score (/70)	45	51	30	34
Average raw score (/70)	36.55	38.6	25.6	31.2
Minimum % digits repeated correctly	40%	42.86%	22.86%	37.14%
Maximum % digits repeated correctly	64.28%	72.86%	42.86%	48.57%
Average % digits repeated correctly	52.21%	55.14%	36.57%	44.57%

In the **TD-A group**, 13 participants had raw scores of more than 34/70 and seven of 28/70 to 34/70. Similarly, 14 of the **TD-SAE** participants had scores of more than 34/70 and six of 30/70 to 34/70. The average raw scores of these two groups were 36.6/70 and 38.6/70, respectively, and the average percentage scores 52.2% and 55.1%, respectively. Both TD groups made the highest number of errors from 5-digit series onwards. For example, *ses – een – drie – agt – twee* ('six – one – three – eight – two') was repeated as *drie – sewe – agt – twee* ('three – seven – eight – two').

The **LI-A group** had notably lower scores that the two TD groups: individual raw scores were 16, 26, 28, 28 and 30/70, and the group's average raw score was 25.5/70. The average percentage series repeated correct was 36.6%. Although the **LI-SAE group** also had lower scores than the two TD groups, their scores were somewhat higher than those of the LI-A groups: individual raw scores were 26, 31, 32, 33 and 34/70 (group average 31.2/70), and the

average percentage series repeated correct was 44.6%. The two LI groups could repeat most items correctly up to and including 3-digit series.

In summary, the two TD groups fared similarly on digit repetition and fared better than the two LI groups who in turn fared similarly to each other. The TD groups most often began to repeat incorrectly when there were five digits in a series, whereas this threshold was four digits in a series for the two LI groups. When repeating the longer, more difficult series, most participants in all four groups omitted digits and offered only one to three digits per repetition attempt. It was clear that the number of digits rather than the syllable length of the item influenced participant performance. Digit series consisting of five digits and five syllables (e.g. *six – one – three – eight – two*) were more likely to be repeated incorrectly than were series consisting of six syllables but only three digits (*twenty one – seven – nine*).

5.3 Answers to the research questions

Research Question 1: For Afrikaans and SAE, which repetition task differentiates best between TD children and those with LI?

The first hypothesis was that sentence repetition would differentiate better than digit repetition. When considering the raw scores obtained by the TD-A and LI-A groups, sentence repetition differentiates best between 5-year-olds with and those without LI ($p = 0.000771$; see Table 5). Although results show that digit repetition can also be employed to differentiate between these two groups, it appeared that digit repetition was less sensitive than sentence repetition ($p = 0.001583$). Similar results were obtained when the percentage words repeated correctly was considered: the sentence repetition task differentiated better between the Afrikaans-speaking groups with and without LI ($p = 0.000771$) than did the digit repetition task ($p = 0.001583$). Similar results were obtained for the SAE groups: whether considering raw scores or percentages, sentence repetition differentiates better between 5-year-old SAE speakers with and without LI ($p = 0.000771$ in both cases) than does digit repetition ($p = 0.019088$ in both cases). The first hypothesis was thus proven for both Afrikaans and SAE. These results concur with those of Fletcher et al. (2006: 222) and Thordardottir et al. (2011: 591).

Table 5. P values for the groups with and without LI for the sentence and digit repetition tasks (per language)

Task	**Comparison**			
	TD-A vs LI-A		**TD-SAE vs LI-SAE**	
	Raw score p value	**Percentage score p value**	**Raw score p value**	**Percentage score p value**
Sentence repetition	0.000771	0.000771	0.000771	0.000771
Digit repetition	0.001583	0.001583	0.019088	0.019088

Research Question 2: Which scoring method – percentage correct digits/words calculated per digit series/sentence, or raw score (item as a whole either correct or incorrect) – more accurately differentiates between children with and those without LI?

The hypothesis was that raw scores would be more accurate in differentiating between children with LI and their TD peers because raw scores presumably do not give children with LI any

credit for those parts of the item that they do repeat correctly. In order to test this hypothesis, the p values for the raw scores as well as the p values for the percentage correct scores were compared among groups (see Table 5), where the lower of the two p values indicates the more sensitive scoring method. For both digit and sentence repetition in both Afrikaans and SAE, there was no difference between the accuracy of the raw scores and that of the percentage correct scores. Based on this finding, any one of these two scoring methods can thus be used. The second hypothesis was therefore refuted.

Research Question 3: Which items, in the digit and sentence repetition tasks separately, differentiate best in Afrikaans and SAE between children with and without LI?

As stated earlier, the hypothesis was that the phonologically more complex items would differentiate best between children with and without LI. In the digit repetition task, the number of digits within a series did influence the accuracy of the series to differentiate between TD children and their peers with LI. No significant differences in results between the two groups were found for 1-digit and 2-digit items, but items with three or more digits could indeed differentiate between the two groups. For sentence repetition, there was no single factor – e.g. phonological complexity or number of syllables – that influenced the ability of the items to differentiate between the two groups of children.

For items 1, 2, 3, 4, 5, 6, 8 and 24 (eight in total; see Table 7 for the Afrikaans items and Table 9 for the SAE items) of the digit repetition task, there was no difference between the groups with and without LI. All sentence repetition items in both languages, however, revealed a difference between the TD and LI groups. In terms of digit repetition, but not sentence repetition, the hypothesis was proven.

Those items from each task that differentiated best between the groups with and without LI were identified, i.e., those with the smallest p values (< 0.05). These items appear in bold with p values in grey cells in Tables 6 to 9, and are the items that could be considered for inclusion in a screening test for use with Afrikaans-speaking and with SAE-speaking 5-year-olds.

Table 6. Afrikaans sentence repetition items that best differentiate between children with and without LI

Item	**p value**
1. Die meisie het gesien hoe die seun dit steel.	0.1225
2. Sy het die pan op die stoof gesit.	**0.0403***
3. Die meisie wil nie die pynappel eet nie.	**0.0024**
4. Die seun het nie in die karavaan geklim nie.	**0.0391**
5. Die boek is na die kantoor geneem.	**0.0464**
6. Die kat word in die groot huis gejaag.	**0.0123**
7. Wie het die man in die water gegooi?	1
8. Wie het hy by die skool gesien?	**0.0011**
9. Dirk eet brood en Susan speel klavier.	0.2887
10. Sy vryf haar been, want sy het dit teen die muur gestamp.	0.1215
11. Die meisie sal die brode kan bak.	**0.0464**
12. Die groot man sou die hele bottel sap kon drink.	1
13. Ons moes nie die vrugte gepluk het nie.	0.1225

14. Die kat sou nie die rooi lekker geëet het nie.	1
15. Die katte word deur die honde gejaag.	**0.0149**
16. Sy is vanoggend in die winkel gesien.	1
17. Watter boek lees die vrou met die lang rok?	0.6146
18. Watter storie het sy by die skool gelees?	0.3217
19. Die seun glo dat die kind fluit speel.	1
20. Hy sal die hond kos gee voordat hy die kar was.	0.5494
21. Die meisie ken ’n seun wat van rugby hou.	0.2743
22. Die aap eet die piesang wat die kind gegooi het.	0.1602
23. Die waentjie wat die seun trek, ry oor sy een voet.	0.2743
24. Die kat wat die meisie vryf, lek haar hand.	0.0613
25. Die kind sal ’n roomys kry as hy die speelgoed wegpak.	**0.0464**
26. As die seun ophou kla, sal hy ’n geskenk kry.	0.544
27. Dit was die seun wat gister deur die hond gebyt is.	0.2887
28. Dit is haar blonde dogter wat deur die brandweerman gered is.	No value
29. Hy het planne gemaak om die huis te verf.	**0.0047**
30. Die belofte om lekkers te kry maak hulle bly.	0.2887

Table 7. Afrikaans digit repetition items that best differentiate between children with and without LI

Item	**p value**
1. een	No difference between the two groups
2. nege	No difference between the two groups
3. sewentien	No difference between the two groups
4. een-en-twintig	No difference between the two groups
5. drie	No difference between the two groups
6. een – drie	No value
7. een – nege	No difference between the two groups
8. nege – sewe	No difference between the two groups
9. sewentien – nege	0.2
10. een-en-twintig – sewe	0.2
11. twee – vyf – drie	0.0698
12. drie – nege – een	**0.0333***
13. twee – nege – sewe	0.2
14. agt – sewentien – nege	**0.0333**
15. een-en-twintig – drie – nege	0.1664
16. agt – drie – vyf – twee	**0.000395**
17. nege – sewe – twee – vyf	**0.0403**
18. sewentien – drie – nege – twee	**0.0159**
19. vyf – sewe – een-en-twintig – agt	0.2887
20. drie – nege – een-en-twintig – sewe	0.1462
21. ses – een – drie – agt – twee	1
22. een – ses – vyf – nege – sewe	0.6352
23. nege – drie – een-en-twintig – tien – ses	1
24. tien – twee – sewentien – nege – een-en-twintig	No difference between the two groups
25. een – ses – vyf – nege – sewe	1

26. tien – drie – twee – vyf – een – vier	No value
27. een – nege – twee – sewe – vyf – drie	No value
28. nege – sewentien – vier – ses – agt – tien	No value
29. drie – sewentien – ses – een-en-twintig – vyf – een	No value
30. sewentien – ses – een-en-twintig – sewe – vyf – nege	No value
31. ses – agt – drie – tien – een – vier – twee	No value
32. drie – een – vyf – sewentien – vier – ses – twee	No value
33. een – sewentien – twee – agt – drie – nege – sewe	No value
34. agt – een – nege – een-en-twintig – sewentien – vier – ses	No value
35. tien – vyf – sewe – twee – vier – ses – agt	No value

Table 8. SAE sentence repetition items that best differentiate between children with and without LI

Item	**p value**
1. The kitten is chasing the rat up and down.	**0.0391***
2. She can bring the glass to the table.	**0.0011**
3. The man wasn't driving the lorry to town.	0.1225
4. The farmer couldn't ride the horse in the river.	0.2887
5. The books were taken to the office.	**0.0055**
6. The child was helped in the sweet shop.	0.2887
7. Who did the monkey splash near the water?	**0.0464**
8. Who have they seen near the steps?	0.1399
9. His sister ran and his father walked.	0.3123
10. He went to the coast, but he didn't swim in the sea.	0.1333
11. The policeman has been looking at us.	**0.0149**
12. The kitten could have hit the rattle down the stairs.	0.1399
13. John wouldn't have talked about it with his father.	No value
14. We shouldn't have been picking the flowers.	**0.0391**
15. The sandwich was eaten by the postman.	0.1225
16. She was seen by the doctor in the morning.	**0.0391**
17. Which drink did the milkman spill in the house?	0.544
18. Which picture did he paint at home yesterday?	0.0613
19. The man said that he combed his hair.	0.5494
20. He will feed the cow before he waters the plants.	**0.0464**
21. The monkey stroked the horse that the worm frightened.	1
22. The mum baked the meal that the children are eating.	1
23. The horse that the farmer pushed kicked him in the back.	0.544
24. The bee that the man swallowed had hurt him.	0.1399
25. The people will get a present if they clean the house.	0.544
26. If the kids behave, we will go in the garden.	0.1225
27. It was the boy that the man splashed in the sea.	0.1399
28. It was his son that the fireman saved from the house.	0.2887
29. The builder had the idea to dig the hole.	0.1225
30. The promise of going to Paris made them happy.	0.2887

Table 9. SAE digit repetition items that best differentiate between children with and without LI

Item	**p value**
1. one	No difference between the two groups
2. thirteen	No difference between the two groups
3. seventeen	No difference between the two groups
4. twenty seven	No difference between the two groups
5. three	No difference between the two groups
6. one – three	0.2
7. one – thirteen	No difference between the two groups
8. thirteen – seven	No difference between the two groups
9. seventeen – thirteen	No value
10. twenty seven – seven	No value
11. two – five – three	No value
12. three – thirteen – one	No value
13. two – thirteen – seven	No value
14. eight – seventeen – thirteen	0.2
15. twenty seven – three – thirteen	**0.0192***
16. eight – three – five – two	0.2
17. thirteen – seven – two – five	0.6544
18. seventeen – three – thirteen – two	**0.0464**
19. five – seven – twenty seven – eight	0.3217
20. three – thirteen – twenty seven – seven	0.0682
21. six – one – three – eight – two	0.149
22. one – six – five – thirteen – seven	0.2887
23. thirteen – three – twenty seven – ten – six	No value
24. ten – two – seventeen – thirteen – twenty seven	No difference between the two groups
25. one – six – five – thirteen – seven	0.3857
26. ten – three – two – five – one – four	1
27. one – thirteen – two – seven – five – three	1
28. thirteen – seventeen – four – six – eight – ten	1
29. three – seventeen – six – twenty seven – five – one	No value
30. seventeen – six – twenty seven – seven – five – thirteen	No value
31. six – eight – three – ten – one – four – two	No value
32. three – one – five – seventeen – four – six – two	No value
33. one – seventeen – two – eight – three – thirteen – seven	No value
34. eight – one – thirteen – twenty seven – seventeen – four – six	No value
35. ten – five – seven – two – four – six – eight	No value

6. Summary, conclusion and recommendations

The main aim of the study was to compare the sensitivity of sentence repetition and digit repetition in the identification of children with LI. This was done to obtain information that could be used to develop an accurate screening tool for LI for use with Afrikaans-speaking and

SAE-speaking children. To this end, repetition tasks were devised and administered to five Afrikaans-speaking children with LI and 20 without as well as to five SAE-speaking children with LI and 20 without.

On sentence repetition, the children with LI fared significantly worse than did their TD peers. Whereas the former group experienced difficulties with repeating all sentence types included in the test, the latter struggled mainly with (i) object-split sentences with active constructions and subject-split sentences with passive constructions, (ii) biclausal sentences with a subordinate conjunction, and (iii) long actional and non-actional passive constructions.

On digit repetition, the children without LI also performed better than those with LI, although the difference in performance between the children with LI and their TD peers was larger for sentence than for digit repetition. The TD children made most errors on items containing five or more digits, whereas the children with LI made most errors on items containing four or more digits. When required to repeat longer, more difficult digit series, most children (regardless of language or LI status) omitted digits, repeating only two or three digits per series. In an attempt to repeat the correct number of digits in long series, some children gave three digits and then counted on from the last digit, seemingly until they felt they had repeated a sufficient number of digits to render their version and the target equally long. The results also indicated that the number of digits and not the number of syllables in the item influences children's performance on this task.

The general conclusion of the study is that sentence repetition is the more sensitive of the two repetition tasks for identifying Afrikaans- and SAE-speaking 5-year-olds with LI. On the basis of the results per item, it was possible to indicate which items could be included in a screening instrument making use of repetition tasks for the identification of LI in Afrikaans-speaking and SAE-speaking 5-year-olds.

The study had several methodological limitations, including small sample sizes in only one age band, using parental and teacher reports rather than audiological screening to determine hearing status, relying on parental reports to determine which children were TD rather than employing IQ and other testing, and including only two of the languages spoken in South Africa. These limitations should be addressed in future studies on repetition tasks. In addition, carefully devised real and nonsense word repetition tasks should be included in such further research. Finally, future studies should investigate the sensitivity and specificity of repetition tasks among children with language impairments associated with other conditions, such as autism spectrum disorder.

In South Africa, there is an underprovision of speech-language therapists and other child language professionals (Pascoe and Norman 2011: 2). There are not enough child language specialists to do language screening as part of the school readiness assessment battery. There is also little or no culturally and linguistically appropriate diagnostic or screening instruments with which child language professionals can identify language problems in children (see Van Dulm and Southwood 2013). This study examined the sensitivity of two repetition tasks in order to determine which of their items could be included in a screening test that is both quick and easy to administer. The results of the study indicate that such a screening test is indeed feasible. Whereas such a test would be welcomed by child language practitioners (especially if there were to be African language versions that could be administered without the assistance of an

interpreter), it would not reduce the need for diagnostic instruments that can provide intervention guidelines. That said, it is hoped that screening instruments involving repetition, such as those proposed in this study, would also be developed for African languages, so that they can be used as interim measures until appropriate diagnostic instruments (that are typically developed at a slower rate and at higher cost) become available.

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Formulation of court interpreting models: A South African perspective

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Abstract
In South Africa there are no models of court interpreting to serve as a guide for court interpreters when performing their task. This is because there is no proper definition of the role of a court interpreter. Models of court interpreting define and describe the process by stating what court interpreters are actually doing when carrying out their task. The absence of these models presents challenges to South African court interpreters as they are expected to follow international models which are formulated culturally, using English metaphorical language which differs from that of indigenous South African languages. As a result, the metaphorical language is likely to be misinterpreted by South African court interpreters as English is not their first language. The application of international models is likely to cause challenges when applied in the South African context, hence the need to formulate models of court interpreting which can be applied to the South African linguistic context. The study follows a qualitative research approach and uses multifaceted theoretical frameworks, namely descriptive translation studies (DTS), cognitive process analysis, and content analysis in collecting and analysing the data.

Keywords: court interpreters, cognitive teaching approach, court interpreting models, the role of court interpreters, court interpreters' workshops

1. Introduction

Research into court interpreting in South Africa has indicated, among other things, that poor performance by court interpreters is a result of a lack of proper training. This situation has led to scholars such as Steytler (1993: 221), Du Plessis (1997: 8) and Moeketsi (1999: 135-136) calling for an urgent need for proper training of court interpreters.

This study is a response to this particular call. The author and some colleagues in the Department of Linguistics and Modern Languages (Translation and Interpreting Studies) at the University of South Africa (Unisa) began to conduct workshops for the training of court interpreters from 2011 to 2012, offered as part of a community engagement project known as "Chance 2 Advance" which was initiated by the university in 2010. Community engagement refers to the voluntary outreach by academics and other university employees in response to the social, economic and political

needs of communities. Some of the goals of this initiative are to promote the culture of learning within the community, bridge the knowledge gap between the educated and the uneducated, address skills development and social justice issues, and encourage lifelong learning. Through this initiative, the university aims to empower the community by offering workshops in different fields to help members acquire certain skills that will make them employable and improve the careers of those already in employment.

The workshops were presented at the university campuses in Pretoria (Gauteng province) and in Polokwane (Limpopo province). Later, these workshops were moved to the Diepsloot community centre in Gauteng province. The aim of the workshops was to improve court interpreters' existing skills and to help them develop more confidence and proficiency in interpreting. One way of doing this was to teach them to formulate models of interpreting for the South African linguistic context using the cognitive process approach.

Wilcox and Shaffer (2005: 135) observe that a model of interpreting demonstrates how interpreters perform their role and guides them towards improving their performance. It is from this point of view that South African court interpreters need to be familiar with different models of interpreting to enable them to understand their role and the implications of their task. This will enable them to define their role and perform their task satisfactorily, in accordance with the expectations of the legal fraternity as well as those of the recipients of the interpreting service. It has been argued by scholars that the interpreter may assume several roles during interpreting and that this may be subject to, among others, a variety of codes of ethics or other formulations, whether originating from within the judicial system, a professional association or elsewhere (Morris 1999: 1). The author takes cognisance of the fact that the role of court interpreters is a contentious issue among both international and local scholars. Angelleli (2004: 13) observes that interpreters have been prescribed and dictated to without the complexity of their role being understood, which has led to a distortion of the reality of interpreters' work. She states that this is evident from different settings in which interpreters work and the people for whom they interpret, the latter who impose different constraints and needs on the interpreted communicative events that interpreters facilitate. Such conduct results in the role of interpreters being subjected to constant change in order to satisfy those needs and constraints (Angelleli 2004: 13).

In South Africa, although the issue of the role of court interpreters has been researched and discussed by scholars such as Moeketsi (1999) and others, no approach has been suggested which could assist in better understanding the role of court interpreters. As a consequence, the current study aims to address this deficiency by asking court interpreters to describe and define the concept of 'interpreting' using their South African indigenous languages. In other words, they were made to think critically about the process they carry out when interpreting. This approach allows room for interpreters to express their opinions and experiences without fear of judgment. It is hoped that such an approach could ultimately lead to the formulation of court interpreting models which could be applied in the South African context and thus enable court interpreters to better understand their role during interpreting, thereby improving their confidence and proficiency.

The study follows a qualitative research method of investigation and is informed by multifaceted theoretical frameworks, namely descriptive translation studies (DTS), cognitive process analysis and content analysis. This research method and these theoretical frameworks are favoured in this

study as Toury (1980: 80) observes that translation and interpreting practices are not merely the outcome of speculation, but are observational facts that take place in the real world and for which the DTS theoretical framework, among others, is able to account.

2. Overview of models of interpreting

In an interpreting setting in a courtroom, a situation arises where two or more courtroom participants are faced with the problem of being unable to communicate with each other because of their language differences. As a result, an interpreter is needed to facilitate communication between these individuals. Between these participants, there is always a need to share certain information and also to help the court to hear the matter brought before it for adjudication. During court proceedings, there is the likelihood that these parties may agree or disagree on certain shared information. In the event of this happening, there will be a need for parties to question and respond to one another's questions, be it directly or through legal representatives. However, even if they want to communicate among themselves and with the court, they are unable to do so because they do not understand one another's languages. The problem faced by these participants is an unavoidable reality which requires a solution. Intervention by someone with the ability to bring about mutual intelligibility is therefore needed in order to remedy this situation. The question, however, remains: Who is responsible for defining and describing the task in which this individual is involved? The next question that needs to be answered is: Who can best define the task performed by this individual?

In response to these questions, it is the author's contention that the person who carries out the task of interpreting is the one who can best define and describe the processes involved therein. However, as pointed out by Padilla, Bajo and Padilla (1999: 61), these processes are complex, are not purely linguistic, and must also be understood within their social, cultural and – above all – their psychological contexts. This understanding can therefore be shown by the individual who carries out the task of interpreting through a comprehensive analysis of this particular task. It is for these reasons that the author maintains and argues that the definition of the role and models of interpreting can best be described and defined by court interpreters themselves, as they are familiar with the interpreting process. They should not be dictated to by those who lack knowledge of what court interpreters actually do when involved in the process of interpreting.

This view is supported by Eighinger and Karlin (2001: 5) who observe that many of the definitions of interpreting and metaphors used to describe successful interpreting are at odds with what occurs in practice. It is the author's contention that this is due to the fact that these definitions are supplied by individuals who are not interpreters and, as such, cannot fully understand the process. Interpreters are in the best position to provide these definitions since they are involved in the process. Eighinger and Karlin (2001: 6) further maintain that interpreters must weigh up and manage their own ethics and values, and that such an approach will allow them to recognise their role. This way, the author contends, they can succeed as they would be guided by their understanding of the interpreting process which they carry out.

Wilcox and Shaffer (2005: 135) observe that models of interpreting have been developed over the years, from an early view in which the interpreter was seen as a passive mechanical conveyor of information much like a telephone, to more modern conceptions, such as communication-facilitator or bilingual-bicultural specialist, which acknowledge that interpreters are important agents in the process of interpreting. The authors maintain that

interpreting is an active process of constructing meaning based on evidence provided by speakers, and is essentially about communicating. They further argue that models of interpreting are based on assumptions of how human communication works. As a result, they propose a cognitive process model of interpreting and explore the implications of this model for the preparation of interpreters and how interpreters function in their daily work (Wilcox and Shaffer 2005: 27-28). Angelelli (2004: 32) concurs with the view that interpreting is about communicating and states that "in a court setting the defendant, plaintiff or other officer of the court and the interpreter come together in the course of a trial to communicate about a specific issue, as well as to collect information about it". According to Angelelli (2004: 7), the basis of the role of interpreters is to facilitate communication. However, she observes that a discrepancy exists between the role that is prescribed for interpreters and that which unfolds in practice (Angelelli 2004: 2). This study is based on the latter, as court interpreters are asked to describe what they do in practice and to define the concept of 'interpreting' using their own South African languages. Mullamaa (2009: 148) endorses this approach and suggests that the role of the interpreter could be described through notions that help us better to grasp the multifaceted nature of the interpreter's task and identity, and that these two aspects could be introduced to analyse the interpreter's role. That is exactly the approach that this study endeavours to take, namely allowing court interpreters to define interpreting in terms of what they do in practice and not in terms of what they are taught. Through their definitions, the nature of an interpreter's task and identity can be analysed and more fully understood.

Colonomos (1992: 1) defines a model of interpreting as "a representation and description of the process an interpreter should complete in order to successfully, accurately and efficiently interpret a message from a speaker in a source language to an audience in a linguistically acceptable target language". She describes a variety of the following processing considerations: firstly, and most obviously, the model is a linguistic one as it addresses two languages; secondly, it is a cognitive model in the sense that it describes the mental process involved during an interpretation; thirdly, it is cultural as the model goes beyond the mere linguistic consideration of the two languages by addressing their respective cultural considerations; fourthly, the model is psychological as it examines the interpreter as an individual with his or her own perceptions, feelings and knowledge base, as well as the impact an interpreter may have on the communication process; finally, the model is cyclical as the interpreter continually goes through all stages of the process during interpretation.

Cokely (1992: 2) draws on some elements from Colonomos' definition above, and defines a model as "a hypothetical representation of a process or object, that serves to verbally or geographically display an event, object or series of events". Colonomos' model of interpreting is relevant to the cognitive process model as it considers aspects relating to the communication process, of which interpreting is one. Court interpreting is a method of communication in its own right and takes into account issues pertaining to two languages, considers aspects of culture, and considers the presence of the interpreter as having an influence on the nature of the communication between parties involved in the interpreting process.

In his discussion of models, Pöchhacker (2010a: 84-85) states that, in principle, models of interpreting can be envisaged for any of the purposes previously mentioned by Colonomos (1992: 2). He adds that, as is evident from the evolution of ideas regarding interpreting, the phenomenon is of such a complex nature that it eludes attempts at constructing a comprehensive predictive model. In his opinion, most models of interpreting are of a descriptive kind and are

pegged to a particular level of analysis. In dealing with issues of models regarding their nature, form and purpose, Pöchhacker (2010a: 84) states that:

> A model can be described as some form of representation of an object or a phenomenon. Models usually indicate the type and number of components which are assumed to form part of the object or phenomenon under study, and reflect the way in which the components fit together and relate to one another. In essence then, a model is an assumption about what something is like and how it functions, so that modelling can be regarded as a particular form of theoretical endeavour.

Pöchhacker's statement is relevant to this study, as the definitions and descriptions of the processes that court interpreters are involved in during interpreting become a representation of what they actually do when interpreting, which ultimately informs a model of interpreting. This aspect becomes clear as Pöchhacker (2010a: 85) further states that models can be used for various purposes of enquiry and that, as a basic form of theorising, they can express intuitive assumptions and ideas about a phenomenon. He supports the approach followed in this study and states that models constructed on the basis of more immediate observations and empirical data are used for the purpose of describing some aspects of reality and can be used for explaining how and why a phenomenon occurs (Pöchhacker 2010a: 85).

3. The relevance of models for court interpreting

Pöchhacker's (2010a: 85) sentiments described above become relevant for court interpreting, as through the process of defining or describing a model, an interpreting phenomenon can be explained. In other words, a person is able to account for the process of interpreting in terms of how interpreting is carried out, and also for all the elements that are involved in the process itself. For example, the model of interpreting explains interpreting as a form of communication because it involves aspects of two languages and some elements of culture.

The discussion of the origins and developments of interpreting models in this study is relevant as it helps to explain exactly what South African court interpreters are doing when interpreting. In other words, one needs to understand the process involved during interpreting because interpreting is about communicating messages (Wilcox and Shaffer 2005: 135). The models of interpreting are therefore used in describing the interpreting process and they serve as guidelines or directives for interpreters. The formulations of these models are based on the role descriptors that clearly describe what court interpreters do during the process of interpreting (Wilcox and Shaffer 2005: 135). This view is supported by Roy (1993: 347) who maintains that models of interpreting were formulated from metaphorical descriptions of the role of interpreters because these descriptions were used in understanding what the interpreters were doing. Lakoff and Johnson (1980: 133) concur with this view and state that metaphorical terms determine the way phenomena are conceptualised and they serve as a way of understanding.

Setton (2013: 365) supports the views of Wilcox and Shaffer (2005: 135) but approaches models of interpreting from a different point of view, stating that models fall into two categories, namely relational and cognitive models. Relational models deal with patterns of interactions in interpreted events, and focus on the social and behavioural determinants of the activity which embed interpreting within a broader framework such as human social

communication or even a general theory of activity. Setton (2013: 365) further states that relational models draw attention to the interpreter's role, and this role is not always straightforward. This is especially so in the less conventionalised and more frequent face-to-face settings and configurations of community, public service, legal or media interpreting. On the other hand, cognitive models focus on the mental activity of the individual interpreter, considering issues of memory, attention and bilingual neurolinguistic organisation or processing capacity (Setton 2013: 365).

Roy (1993: 131) observes that, as a result of the changing circumstances, one model was replaced by others. To date, legal practitioners and interpreting scholars around the world still dispute which is the best, most appropriate and acceptable model of interpreting (Mullamaa 2009: 145). In the following section, different models of interpreting are discussed by legal practitioners, interpreting scholars and practitioners of interpreting in general, including those who practise in the courtroom setting.

3.1 The helper model

According to this model, sign language interpreters (for the deaf and hearing impaired) were regarded as helpers by the court, and even in other settings, in defining and describing the role of such interpreters. Bar-Tzur (1999: 1) observes that the helper model came about before interpreting was even recognised as a profession, where hearing children of deaf adults acted as interpreters to help their parents communicate with those who could hear. These children were forced into learning sign language at home in order to be able to communicate with their deaf parents. Later, clerics or social workers also acted as interpreters for deaf people because a few of the former had a cultural obligation to attend events for the deaf. These interpreters often felt that they brought salvation to many other cultures and minorities, ultimately giving the world direction. They thought of themselves as essential for deaf people's functioning, while deaf people felt that they needed these interpreters' help in order to survive in the world (Bar-Tzur 1999: 1). These interpreters used the consecutive mode of interpreting, which means that the interpreter waits for the speaker to complete an utterance before interpreting, and they would often summarise and edit as they saw fit. In order to help, interpreters would share confidential information with people in authority (Bar-Tzur 1999: 1). A practice such as this is in conflict with the National Association of Judiciary Interpreters and Translators' (NAJIT) "Code of Ethics and Professional Responsibilities" which states that interpreters are not allowed to divulge confidential information obtained during proceedings (NAJIT 2005).

Although this model was defined and described by those not personally involved in interpreting, interpreters viewed their role in this way. An important aspect that needs to be considered with respect to these interpreters is that they did not receive any training or interpreting qualification, and this may have influenced their decision to agree that their role was that of a helper. Lack of training regarding communication processes – such as the consideration of working with two languages, the fact that interpreting is communication, and that cultural aspects need to be considered – may have had an influence on their perception of their role. In terms of their self-perception as helpers, it would seem that these interpreters defined their role in this way because they offered help to the deaf by way of intervention at a time when there was a breakdown of communication. However, there is nothing that indicates that they consider the interpreting process as communication by, for example, taking into account the more complex aspects pertaining to communication, as indicated in the discussion above.

Clifford (2004: 94) concurs with Bar-Tzur (1999: 1) and states that deaf people have long relied on "helpers" to communicate with the hearing world. These helpers were often hearing friends and family members who had some knowledge of both sign language and the spoken language in question. Helpers were free to act as they saw fit and many offered advice, made decisions for the deaf person, shared confidential information with authorities if they thought it was in the deaf person's best interests, and selected and edited the information they interpreted according to their perception of the deaf person's understanding. The helper's behaviour underscored an attitude that the deaf were incapable of making decisions and taking care of themselves, and this attitude was sometimes internalised by the deaf themselves with obvious negative repercussions (Roy 1993: 127). The helper was a role which allowed for the extreme personal involvement of interpreters.

Renmen's (1999: 1) view of help is that when you help someone, you may inadvertently take away from people more than you can ever give them, and this can diminish their self-esteem, sense of worth, integrity and wholeness. This statement supports Roy's (1993: 127) contention, mentioned above, that the helper's behaviour implies that the deaf are incapable of autonomy. This is indicated, as Roy (1993: 127) observes, by the fact that in other instances interpreters would take decisions on behalf of those for whom they were interpreting. However, in a court interpreting setting, Renmen's view of help is the opposite as, in practice, people who are unable to communicate in the language used during court proceedings rely solely on interpreters in order to communicate. The court interpreter functions as the saviour of this situation. Two questions now arise: How do people who receive interpreting services view the interpreter who acts in order to remedy the situation where there is a communication breakdown? Would the interpreter be viewed as the helper who will "save" the situation? In South African courts, one often hears magistrates asking the accused persons whether they would need the "help" of an interpreter. From such utterances, it would seem that some magistrates do indeed view the interpreter's role as that of a helper.

The definition of the role of the court interpreter as a helper was later declared inappropriate as it denied the people involved any autonomy. It led to the view that there was no distinction between a helper and an interpreter, and as interpreting began to be recognised as a profession, there was a sharp move away from the helper model (Clifford 2004: 94). Two key events were cited as the hallmarks of this transition: firstly, the founding in 1964 of the Registry of Interpreters for the Deaf, the principal professional organisation that represented sign language interpreters in the United States; and secondly, the publication in 1965 of the Registry's first manual for interpreters, called "Interpreting for Deaf People" (Clifford 2004: 94).

These two events signalled the advent of a new level of professionalisation, one that was incompatible with the unequal status implied in the notion of the term "helper". According to the Registry, the relationship between interpreter and client had to be one between equals. As such, there were calls to reject the emotional and personal involvement of the helper model, and to strive instead to regard the interpreter as neutral, invisible and uninvolved. This led to the interpreter being described metaphorically as an inanimate device or a machine, such as a telephone wire that served as a conduit for information flow (Clifford 2004: 94-95). Because the profession of interpreting had to consider models of professional behaviour other than that of a helper, this led to the origin of the "conduit model" (Clifford 2004: 95) which is discussed in the following section.

3.2 The conduit model

According to Lee (2009: 36), the first leading case to introduce the conduit model to Australia was Gaio v R (1960) 104 CLR 419. In this case, the High Court judges define the interpreter as a "conduit" because the interpreter has to translate (i.e. interpret) everything. Morris (1999: 8) refers to this model as the "invisible pipe" model. The legal practitioners perceive the interpreter to be an "invisible pipe", with words entering in one language and exiting completely unmodified in another language. In this model, the interpreter is a mechanical instrument that can be used as the court deems fit (Morris 1999: 8). In the conduit model, the court interpreter is not expected to provide or ask for clarification and, as a result, judges believe that this would be a way of avoiding hearsay when obtaining evidence through the interpreter (Lee 2009: 36). This model was developed as a technical solution to avoiding subjective elements as the interpreter was merely to serve as a conduit pipe, providing semantic equivalents from one language to another (Laster and Taylor 1995: 11). The conduit model provided a way of distancing the emerging professional interpreter from the unethical and unsatisfactory practice of the "bad old days" (Laster and Taylor 1995: 12).

According to Bar-Tzur (1999: 2), the conduit model was developed with the intention of avoiding the injustices that stemmed from the helper model and to return control to deaf people. Interpreters felt that they had to be invisible, neutral and uninvolved, and they saw themselves only as an instrument for information flow. The conduit model brought with it two important aspects, the first being the birth of standards and ethics for interpreters, and the second that deaf people were receiving representations of the words and not of interpreters' subjective reformulation of the meaning (Bar-Tzur 1999: 2).

In South African courts, the conduit model could cause communication problems because speakers, mostly adult participants, tend to use metaphorical expressions that are specific to their primary language in their communication. If these metaphors are not fully understood by the interpreter, they could lead to stilted communication because they usually do not have equivalents in the English language. Even if interpreters seem to accept the conduit pipe role, there is a great possibility that they might be seen to be deviating from such a role when, in the interests of clarity, they provide explanations for certain utterances. Steytler (1993: 208) supports this statement and argues that interpreters do not necessarily interpret their role as simply being a conduit for verbal information, but that they often redefine their role when unforeseen difficulties arise. For example, there are instances where legal concepts do not have equivalents in the target language, and the interpreter may need to explain these to the participants. While such action might lead to successful communication, it would conflict with the conduit model which would not support the interpreter's intervention in providing explanations.

The conduit model was challenged by courts and tribunals as well as by interpreting scholars and practitioners for its risks of message distortion and miscommunication. The contention is that a court interpreter is a facilitator of communication and not merely a translation machine. The courts seem to have realised that interpreting is not only about translating messages from one person to another, but also that issues of communication need to be taken into account. In other words, interpreting has to be viewed as a means of communication between people who do not share the same language.

There have been landmark cases in Australia that have set the tone for redefining the role of the interpreter in legal settings. According to Lee (2009: 37), the cases of Gradidge v Grace Bros Pty Ltd (1988) 93 FLR 414 and Perera v Minister for Immigration and Multicultural Affairs (1999) 92 FCA 507 prescribed the role of the court interpreter as removing barriers and placing the non-English speaker in a position that would be as close as possible to that of an English speaker. By implication, this means that the court interpreter cannot function merely as a language converter, but needs to be fully involved in the process of communication. His or her involvement means making accurate communication possible by removing any barriers that may compromise understanding. The conduit model prevents this from happening and, as a result, the court deemed it fit to reject this model and replace it with the communication facilitator model which is discussed below.

3.3 The communication facilitator model

In her investigation of the role of the court interpreter, Berk-Seligson (2006) found that in many legal proceedings, judges and attorneys perceive the role of the interpreter to be that of a facilitator, intercultural mediator and even advocate. They are of the view that the role of the interpreter is to facilitate communication where one party is not conversant in the language of the court. Lee (2009: 38) observes that while the term "facilitator of communication" is used as the appropriate role descriptor for court interpreters in some of the literature, other researchers consider any facilitative role to be inappropriate, and compare it to filtering or embellishment. While the helper model denies the deaf autonomy by allowing too much involvement by the interpreter, the conduit model on the other hand denies the court interpreter the right to make communication possible by restricting him or her to a word-for-word interpretation. Therefore, the communication facilitator model seems more appropriate for court interpreting because it views interpreting as communication. However, this model was also criticised for its facilitative role, according to Lee (2009: 38), and was replaced by the bilingual-bicultural model which will be discussed in the following section.

3.4 The bilingual-bicultural model

By the early 1980s, most of the descriptions of interpreters acknowledged that interpreters must be sensitive to the fact that they communicate across cultures as well as between languages (Roy 1993: 134). This was based on Cokely's (1992: 140) notion that "before an individual can interpret between two languages or cultures, he must be bilingual and bicultural where he must be aware of regional or dialectal differences in language, nonverbal differences, and different attitudes toward time, different forms of personal address and other differences".

According to Bar-Tzur (1999: 2), this model came about because interpreters sought to understand the cultures of both participants involved in communication in order to find equivalence as far as possible so that both sides are able to see the other's perspective. In doing so, interpreters become culture brokers (Bar-Tzur 1999: 2). This could be visualised as a double-helper model, where both deaf and hearing people require help and the interpreter is the one to give it to them. Bar-Tzur (1999: 2) sees the positive and the negative aspects of this model: the positive aspect is that interpreters can find greater semantic equivalence, and the negative aspect is that interpreters may overstep the bounds of their interpreting role by trying to be experts in everything.

Unlike the helper-, conduit- and communication facilitator models, the bilingual-bicultural model takes the role of the court interpreter further. This model cautions that court interpreters need to consider issues of culture when interpreting for people who speak different languages. Language is embedded in culture and unless one understands the cultural aspects of a particular language, there is the risk of miscommunication. What something may mean in one language may mean something different in another. It is therefore important that the court interpreter has knowledge of the languages as well as the culture in which he or she interprets. If not, the likelihood that there will be miscommunication is strong. However, scholars such as Bar-Tzur (1999: 2), Kondo (1990: 60), and Gonzalez, Vasquez and Mikkelson (1991: 240) criticised the fact that the interpreter should act as a cultural mediator as he or she might be seen as assuming the role of cultural expert, which could be viewed as overstepping the role of interpreting. Kelly (2000: 132) concurs with this view as there are dangers in the cultural intervention of the interpreter and especially the court interpreter. She suggests that the role of the court interpreter be redefined rather than be regarded as the bilingual-bicultural mediator. It was the criticism above that led to the replacement of the bilingual-bicultural model with the language facilitator model, the latter which is discussed below.

3.5 The language facilitator model

Lee (2009: 37) explains that a court interpreter is a "language facilitator" or "language conduit" whose participation allows an individual who does not speak or understand English (or the language of the court proceedings) to participate meaningfully in a judicial proceeding.

An interpreter conveys the meaning of a word or group of words from a source language into the target language. Colloquial expressions, obscene or crude language, slang, cultured or scholarly language all have to be conveyed in accordance with the usage of the speaker. A court interpreter's job is not to tone down, improve or edit any statements; he or she must maintain the same register, level and style of the language spoken (Lee 2009: 37).

The language facilitator model is similar to the model of communication facilitator because both models call for successful communication. The meaning and understanding of messages are crucial points according to these models. In a courtroom situation, it is important for participants to understand the meaning of any utterance in order to be able to participate fully in the proceedings. If interpreters carry out their duty in this way, the chances of misunderstandings between the parties involved will be reduced. Like other previous models, the language facilitator model was also challenged by scholars like Hale (2008: 100), who considered any facilitative role by the interpreter to be inappropriate and compared it to filtering or embellishment. Lee (2009: 38) supports this view and states that, in court interpreting, provision of opinion or extra information is generally regarded as overstepping the bounds of the court interpreter's role. The criticism of this model, as well as others preceding it, led to court interpreters defining their role and also formulating their own models of interpreting. The following section examines how court interpreters have defined their role.

3.6 The channel or bridge model

According to Roy (1993: 130), court interpreters have used metaphorical language to describe their role as that of "the person in the middle". They assert that they serve as a kind of channel or bridge through which communication between two people can occur. Court interpreters see

themselves as a means to communicate, and this concept of 'connection' is clear in the words "channel" or "bridge". What this channel does is complex: interpreters are required to reproduce a message from one speaker to another faithfully, accurately and without emotional or personal bias entering into the interpretation. In other words, interpreters must simultaneously render messages without changing the message's intent, and they must do so with exceptional accuracy while maintaining a stance of impartiality and neutrality (Morris 1999: 9). Specifically, interpreters may not introduce or change topics, ask questions of their own, interject their opinion or give advice, and most importantly, they must keep the entire transaction confidential. The performance of this role has been compared to a machine, a window, a bridge and a telephone line, among other metaphors, in trying to compress the complexity of the role into a simple, singular analogy (Roy 1993: 133). This model seems to be similar to the conduit model in certain respects because, like the conduit, the court interpreters view themselves as a means of making communication possible. However, in the channel or bridge model there is a greater emphasis on accuracy which is in line with the communication facilitator- and the bilingual-bicultural models. This model eschews the element of personal involvement and stresses the qualities of impartiality and neutrality in the interpreter.

The discussion in this section has provided an overview of how models of interpreting were formulated. It shows that these models were formulated according to how the role of interpreters was viewed by scholars and also by judges before whom interpreters were performing their duty. This model formulation was done by using different metaphorical language to define and describe the task which interpreters were carrying out during interpreting. All court interpreters were expected to abide by the model applicable at the time because the model was made a rule of law. These models served as guidelines for all court interpreters who were expected to perform according to how their role was conceptualised and defined.

4. Workshops for training court interpreters

4.1 The profile of the workshop participants

Invitations for the workshops held at Unisa were sent to principal court interpreters who were asked to distribute these invitations among their subordinates and to make arrangements for those who were interested in attending. The invitations were well received and there was a good response from interpreters who indicated their willingness to attend. The first workshop was presented on the university campus from 31 January to 4 February 2011, and was attended by practising court interpreters and novice interpreters. There were 17 participants registered for the workshop but only 12 attended. The second workshop was presented on the university campus from 10-12 August 2011. In this workshop, 20 court interpreters were expected but only 10 attended. The third workshop was presented on the university campus from 22-24 August 2011. This workshop targeted about 20 participants because, after the first two workshops, the good news regarding the quality of the workshops had spread widely among court interpreters all over the country. We received many calls from interpreters in different provinces who were interested in attending. The third workshop was attended by 31 participants. The fourth workshop was held from 26-28 September 2011 at the Unisa campus in Polokwane. It was attended by 59 participants who were practising court interpreters in Limpopo province. Its success in terms of participation resulted partially from the support given to court interpreters to attend the workshop by the Department of Justice and Constitutional Development (DoJCD) regional office in that province.

The workshops were attended by practising court interpreters who were appointed on a permanent basis in the DoJCD, and also by freelance foreign language court interpreters who served in the DoJCD on a casual basis. Among the freelance interpreters, one was a Unisa student who was studying towards a BA Honours in Linguistics (Translation and Interpreting Studies). The court interpreters who attended this workshop were from magistrates' courts in East London, Gauteng, the Free State, Limpopo, Mpumalanga and North West provinces. Looking at the numbers of court interpreters who attended these workshops, and also the fact that they were from different magistrates' court offices in different provinces, it may be said that this was a good representation of court interpreters across the country. Among them were interpreters who could interpret from English and Afrikaans into other South African languages, and vice versa. Others could only interpret from English into other South African languages. Foreign language court interpreters had no knowledge of Afrikaans and were interpreting from English into their respective foreign languages.

The different groups of participants included a female inspector of court interpreters, principal court interpreters, senior court interpreters, junior court interpreters, and beginner court interpreters. The participants attended workshops on different dates and at different venues. These court interpreters had served in the DoJCD for different periods, ranging from one year to more than 20 years. Many of them held the qualification of a matric certificate and only three had obtained a diploma in legal interpreting from Wits University. Few were in possession of diplomas and degrees from different institutes which were not related to court interpreting.

4.2 The design of the workshops

The workshops were structured in such a way that the aspects covered were prioritised according to the author's experience and research in the field of court interpreting, which was appropriate for the teaching and training of court interpreters. The workshops covered the following aspects:

- interpreting theory
- theory of interpreting process: Giles' model and turn-taking
- modes and types of interpreting
- components of the interpreting situation
- note-taking and memory skills
- the role of interpreters in general and of court interpreters
- public speaking
- interpreters' professional ethics in various settings.

Participants were also subjected to practical interpreting which was conducted in a moot court. This was done to see if participants could implement the theory that they were taught. The author's experience is that interpreting cannot only be taught theoretically; putting into practice what one is taught in theory is of utmost importance.

4.3 Facilitation approach

The approach to teaching was such that court interpreters were made to think critically about the practical aspects of interpreting, rather than merely being fed information. As a result, participants were encouraged to draw from their own practical experiences and understanding

of the process involved during interpreting. This approach was based on the author's experience as a former court interpreter in the DoJCD, his research conducted in the discipline of court interpreting, and his experience in teaching translation and interpreting at the university. The teaching began with the participants being asked what their view was regarding the models of interpreting and how these models were impacting their interpreting task. For a moment, all of the participants were silent. They were then asked whether they knew about the models of interpreting and they confirmed that they did. The participants were then asked what they understood by the concept of 'interpreting' and to define this concept in their own South African languages, with the focus on the process they use during interpreting. Lesch (2011: 359) refers to this approach as a dialectical relationship towards research, done by the trainer in collaboration with the learners. He asserts that it should be considered as a way of empowering and introducing the learner to the theory of interpreting. This approach gives participants the opportunity to develop their understanding by exchanging logical arguments when presenting their different definitions. Furthermore, Lesch (2011: 359) views this approach as important and states that "without any theoretical sessions much can be gained from the practice-oriented instruction by experienced interpreters whom one can regard as masters of the craft".

Pöchhacker (2010b: 3) refers to the facilitation approach as "evidence-based teaching", and mentions that it is extremely important as it builds and extends the knowledge base on which sound instructional practices rest. The definition of this concept would also cover the role description provided by the interpreters themselves of what they do in practice. This is evidence-based, and this role description would finally lead to the formulation of the model.

In order for the participants to respond to the question of what their views are regarding the models of interpreting and how these models were impacting their interpreting task, they were then given the following scenario: "If your grandmother were to ask you 'What is it that you do when you are interpreting?', how would you define the process of interpreting to her?". They were asked to work in groups, where the participants in each group shared the same language, in order to respond to the question. This was done in order to have a good representation of each language from different participants who were from different provinces, and also to ascertain whether the participants understood what is involved in the interpreting process. This is crucial because if interpreters understand the process, they are in a better position to perform quality interpreting. However, it is acknowledged that even if they understand the process, it would not be unusual to find instances where there are deviations from the application of the process. These could be instances where court interpreters are ignorant of their task and compromise it by encroaching on the duties of other court officials, like magistrates (Lebese 2011: 343). However, if the process is better understood, such deviations could be minimised.

5. Participants' responses

The following section contains responses provided by participants to the question posed above, i.e. "If your grandmother were to ask you 'What is it that you do when you are interpreting?', how would you define the process of interpreting to her?".

5.1 Sepedi-speaking participants

In answering this question, the participants gave definitions in their own languages. Some of those who were Sepedi (Northern Sotho) speakers agreed that, to them, interpreting meant *go hlalosa*

se se boletšwego ka leleme le lengwe ('to explain what was said in another language'). They argued that when a person interprets, he or she explains to the speaker of the target language what the speaker of the source language has said. They elaborated by saying that when a person interprets, he or she is explaining the speaker's words to the listener. They argued that if this is not the case, then why would the interpreter speak after the speaker? This argument remains valid if we agree that the interpreter first listens to the speaker and thereafter interprets what the speaker has said. This definition relates to the conduit model because the message is made available in another language. The first issue to be considered here is that the term "explain" is problematic. There is a possibility that the interpreter might explain what he or she understands and this might not be what the speaker intended. This definition also does not encompass consideration of issues of culture and making the communication understood by the target language speaker, as suggested by the scholars in the earlier discussion.

Other Sepedi speakers agreed that in the interpreting process *o fetišetša se se boletšwego ka mo lelemeng le lengwe* ('you convey what was said into another language'). They argued that the person hears what is being said by the speaker and passes it on to the speaker of the other language so that he or she can understand what has just been said. These participants' argument was based on the fact that, as an interpreter, a person facilitates communication between two people who do not speak the same language. This definition clearly fits the conduit model as the interpreter acts like a pipe because he or she interprets the message into the other language.

Sepedi speakers from another session answered the question by saying that interpreting is *go bolela se se boletšwego ka polelo ye nngwe* ('to say what was said into another language'). These participants mentioned that the speaker says something and the interpreter tells the other person what the speaker has said.

Other Sepedi-speaking participants defined the interpreting process as *go boeletša mantšu a seboledi ka polelo ye nngwe* ('to repeat the words of the speaker into another language'). These participants explained that, to them, interpreting meant repeating spoken words in a different language. The definition provided here also fits the conduit model as the interpreter repeats what was said but in the target language.

Another group of Sepedi speakers defined interpreting as go *fetiša molaetša/bohlatsi magereng ga mmoledi le molatofatšwa ka ntle le go oketša goba go fokotša* ('to convey the message/evidence between the speaker and the accused without adding or subtracting'). This definition also fits the conduit model, which holds that the interpreter should not add or omit any information in conveying the message. It also approximates the bridge or channel model.

5.2 Southern Sotho-speaking participants

Southern Sotho-speaking participants defined interpreting as *mokena-dipakeng malemeng a fapaneng hobe le molaetsa o nepahetseng, o sa oketse le ho fokotsa* ('a go-between for different languages so that there must be a correct message, without adding or subtracting'). This definition also resembles the channel or bridge model, where an interpreter acts like an instrument that makes communication possible.

5.3 IsiNdebele-speaking participants

The participants from the isiNdebele language group defined interpreting as *ukundlulisa umlayezo o vela kumangali ukuya ku msolelwa ngaphandle ko ku ongeza no ku khipa inkulumo yabo* ('to convey the message from the complainant to the accused without adding to or subtracting from their speech'). The definition provided here is the same as that given by the final group of Sepedi-speaking participants in section 5.1.

Another definition of interpreting given by this group was *kurhelepa abantu abeza ekundleni yemilandru ukuzwisisa konke okwenzekako, ukudlulisa imilayezo nokwenza abantu bazizwe bakhululekile* ('to assist people coming to the court that deals with offences to understand all that is happening, to convey messages and to make people feel free'). This definition encompasses the helper-, the conduit- and the communication facilitator models. It is also worth noting that the definition also contains the element of "making people feel free" which may be associated with the helper model.

5.4 Xitsonga-speaking participants

Xitsonga-speaking participants defined the interpreting process as *ku hlamusela hi ririmi ri n'wana* ('to explain in another language'). Their explanation of this process was that the interpreter explains to the listener what the speaker has said because the listener does not understand the language of the speaker. Another definition of interpreting given by this group was *muhlamuseri wa timhaka* ('the one who explains messages' – this English definition was provided by the group itself). This definition relates to the explanation provided by some of the Sepedi-speaking participants.

5.5 Setswana-speaking participants

Participants who were Setswana-speaking defined interpreting as *go fetisa molaetsa, o o fetisetsa go yo a sa utlwisiseng puo e e buiwang* ('to convey the message to someone who does not understand the language that is spoken'). Another Setswana-speaking participant defined interpreting as *go tlhalosa molaetsa go tswa mo lelemeng le lengwe go ya go le lengwe ntle le go fokotsa le go oketsa* ('to explain the message from one language into another language without subtracting or adding'). This definition is similar to that provided by some of the Sepedi-speaking participants.

5.6 IsiZulu-speaking participants

The participants from the isiZulu group defined interpreting as *uku ncedisa abantu aba cabanga ukuthi inkundla yindawo ethusayo, ukuthi behlise umoya bakhululeke* ('to assist those who think that court is a place that makes people nervous, so that they can relax'). This group gave a further definition of interpreting as *ukucacisela abavakashi okwenzekalayo enkundleni* ('to explain to the court visitors what is happening in court'). The other definition of interpreting given by this group was *uhlathulula kolwimi oluhlukene ukuya kolunye* ('you explain from a different language into another'). The definitions provided here are similar to those of the Sepedi- and IsiNdebele-speaking participants. However, the first and second definitions have an additional element: the role of the interpreter in helping to reduce anxiety in the speakers

and familiarising them with court procedures, i.e. helping the speakers to feel comfortable in a strange situation.

5.7 IsiXhosa-speaking participants

IsiXhosa-speaking participants defined interpreting as *isithethantonye/ntetha solwimi ukucacisela omnye umntu* ('a person who conveys or makes a repetition for another person in a language that one understands' – this English version was given by the group itself). A qualified translator translated the phrase as "a person who substitutes a meaning using another language to explain that meaning to someone else". This definition relates to that provided by the Setswana-speaking participants.

5.8 Tshivenda-speaking participants

The participants from the Tshivenda-speaking group defined interpreting as *ndi u amba zwo ambiwa nga muambi wa zwi pfukisela kha tshikhuwa u songo engedza kha honoyo mulaedza* ('it is to speak what was said by the speaker and convey it into English without adding to what was said in the message' – this English version was given by the group itself). However, the author requested a translation of this phrase from a qualified translator who translated it as "to say what the speaker said and translate it into English without adding anything to the message". The latter definition is similar to that of the IsiNdebele-, Setswana- and IsiXhosa-speaking participants.

6. Findings

The findings reveal that court interpreters are interpreting according to their own preferences without using a common model (or several common models) of interpreting. Such a situation could compromise the notion that "justice must be seen to be done" to courtroom participants relying on the services of court interpreters.

The findings indicate that the cognitive teaching approach is beneficial to the training of court interpreters. As far as the workshops are concerned, participants were able to provide not only different, but also similar definitions of what interpreting entails. The definitions provided were the descriptions of the process of interpreting which explain in clear terms what court interpreters actually do. The cognitive approach has also proven its ability in the formulation of models of interpreting. Through this approach, court interpreters are sensitised and helped to understand the processes involved in their task. Once these processes are understood, the chances are better that they will have a clearer sense of their role and, as a result, will perform it more confidently.

However, due to the unclear wording and inconsistent descriptions provided by court interpreters, it is crucial that the judiciary – including other legal officers like lawyers and advocates – be involved in assisting with a clear formulation of the role of court interpreters.

7. Discussion of the findings

The teaching approach used during training proved that a cognitive approach to teaching and training court interpreters is very useful in helping them formulate models of interpreting. As stated in the findings, definitions of interpreting with similarities and also differences were

provided by the various groups, and it would appear that the definitions provided seem to stem from the manner in which the participants were asked to approach the definition of interpreting.

The point of departure of the training – the cognitive process approach – seems to be one of the best teaching methods of training practising court interpreters. This was indicated by the definitions and explanations of interpreting they provided. The approach used during teaching raised their awareness of the process involved in interpreting, and this awareness could guide them in what they need to do when called upon to interpret. This can be seen in the way they had to think carefully about the process involved in interpreting, which was evident during their responses. Such an approach could certainly help shape court interpreters' understanding of their role.

From the participants' responses, some important and unique aspects emerged, indicating totally different approaches to the process of interpreting by South African court interpreters. I refer here to the South African context because the participants were asked to define and describe the phenomenon of interpreting in their South African languages. They defined interpreting in terms of their understanding of communication in the South African context and based on their own perceptions of what they actually do when interpreting. Among the six terms used to define and describe the process of interpreting, the two terms most commonly used were "explain" and "convey", both of which relate to the conduit model. It would appear that the "explaining" and "conveying" of messages is what court interpreters perceive themselves to be doing during their task of interpreting. This is evident from the additional points some participants made to foreground their argument in relation to their definitions and descriptions of what they do when they interpret. It also confirms that court interpreters are the ones who can best explain what they actually do when interpreting, as they are the ones who carry out the process.

8. Recommendations

Being aware of different models of interpreting is important in helping court interpreters understand their task, and they should be taught about these models. This will help them to conceptualise the interpreting process, as demonstrated in the discussion of the findings, which they could afterwards put into practice. This study therefore recommends that models of interpreting be formulated using an approach similar to that used during the workshops discussed in this article, and that these models are not blindly imposed on court interpreters. The formulation of models of interpreting by court interpreters *themselves* would make sense, as they are in the best position to describe the process which they carry out. The study also recommends that further research be conducted on the area of models of interpreting, as it forms the core of interpreting practice. It is also crucial that awareness of different models of interpreting be made part of the training of court interpreters.

9. Conclusion

The findings of the workshops for the training of court interpreters employed by the Department of Justice and Constitutional Development reveal that court interpreters do not receive training on the models of interpreting. The workshop participants provided different definitions and descriptions of what the process of interpreting entails. Through an approach employed during the workshops which entailed making court interpreters reflect critically on their interpreting role,

this study has indicated that cognitive teaching could be one of the best approaches in the teaching and training of court interpreters in South Africa. Such an approach raises awareness and understanding of the interpreting task. It would be highly beneficial to include learning about different models of interpreting as part of the training of court interpreters.

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Mentoring for text editors: Fit for purpose in the era of freelancing, more so than alternative development strategies

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Abstract
In this article, the supportive role that mentoring relationships currently do and should play in the development and careers of text editors is described against the background of the particular circumstances of these service providers in a sector experiencing great organisational and technological changes. This is a group that is much neglected in the literature on mentoring. Since the mentoring of text editors is distinct from other forms of mentoring in a number of key respects, this article draws together what the literature has to say about both conventional and online or distance mentoring as performed in a range of contexts. I consider the application of Knowles' (1970, 1984) adult learning theory and Bandura's (1977) self-efficacy mechanisms to be important potential contributors to the success of mentorships, in particular those involving adult text editors. The article also critically analyses how mentoring for text editors can be distinguished from alternative development strategies such as coaching, training, teaching and counselling. It shows that mentoring is fundamentally different from these strategies according to ten criteria, and is better suited to text editors' need for professional development as a form of lifelong adult e-learning. The lack of any form of assessment of mentees, in particular, is regarded as a weakness of the currently available mentorship programmes aiming to professionalise adult text editors through a process of lifelong learning.

Keywords: lifelong adult learning; mentee, mentor, mentorship programme; professional; self-efficacy; text editor

1. Introduction

Text editors who are members of five professional associations in Australia, Canada, South Africa, the United Kingdom (UK) and the United States (US) have access to the mentoring programmes provided by these associations. The programmes form a component of the professional bodies' total professional development offering. Besides mentoring, the labels these associations use to describe the various programmes include coaching, training and even counselling. This article describes and compares these development strategies with a view to understanding why mentoring, as defined in the literature, could be the most appropriate intervention for text editors. Given the circumstances in which they operate as freelance

practitioners, the dearth of face-to-face mentoring opportunities in the sectors they service and the extent to which they have embraced information technologies, text editors should experience this form of distance learning as both conveniently accessible and able to raise their level of professionalism.

What we know about these mentoring programmes has to be gleaned principally from the websites and internal documentation of the professional associations, this sector being much neglected in the literature on mentoring. The mentoring programmes differ in some key respects, apart from association membership, the most significant being the barriers to entering a mentorship: from almost none (Australia: "some exposure to the basics of copy-editing and proofreading", through either work or training (IPEd 2015b)) to substantial (UK: "you must have had some initial training. You're normally expected to have successfully completed two SfEP training courses (in either copy-editing or proofreading) [and] show the necessary aptitude and sufficient knowledge to make the best use of mentoring, with a command of English well above average" (SfEP 2015a)). As a practising text editor and mentor in this sector, I have access to such information, and intend to use this intelligence to devise a model for web-based mentoring that includes a battery of suitable assignments and a system of assessment of mentees that will contribute to the standardisation of mentorships and their outcomes. Establishing the type of mentoring that best suits the needs and profile of text editors is the first step towards producing the model.

After describing the background to the need for the mentoring being offered by professional associations of text editors, this article describes the adult learning theories of Knowles (1970, 1984) and Bandura (1977) that synergise with the type of professional development offered by the mentoring programmes aimed at this group of practitioners. The article then focuses on distinguishing between mentoring, coaching, counselling, teaching and training as development strategies by comparing and contrasting them according to ten criteria (see below). Although it may comprise elements of these criteria, mentoring is shown to be a different intervention from the others in a number of respects. It is argued that mentoring is the most suitable strategy for developing text editors professionally, whether face to face or online. Citing the literature and the mentoring guidelines of the five professional associations (Canberra Society of Editors, Editors' Association of Canada (Toronto branch), Institute of Professional Editors, Professional Editors' Group (now Guild), Society for Editors and Proofreaders), a number of reasons for this are put forward. One of the points to emerge from this comparison is reiterated in the concluding section: that some form of formal or semi-formal post-mentoring assessment of mentees is missing from the different offerings, and this is contributing in part to the lack of a consistently high standard of service delivery by professional text editors.

2. Background

Unlike most other professions such as doctors, lawyers and architects, text editors are not currently obliged by law to register with a professional regulating body before they may offer their services to clients (cf. Kotzé 2012). Professional associations for text editors and proofreaders also do not set minimum standards of performance that their members must provide proof of attaining if they wish to practise their craft professionally. On the contrary, registration is voluntary, and membership of a professional association also does not guarantee its members work (CSE 2015, IPEd 2015a, PEG 2015, SfEP 2015a). Membership per se (other than advanced or accredited membership) also does not guarantee that members' output as text editors or

proofreaders will be of a standard acceptable to clients. The voluntariness of membership of a professional association and the absence of a requirement of minimum standards of performance have led to a situation in which clients cannot be guaranteed editorial services of the highest standards. The professional associations for text editors in the English-speaking world are helping to fill this gap by providing voluntary mentoring programs (voluntary in the sense that text editors are not obliged to put themselves through them and the volunteer mentors are merely paid an honorarium for their participation).

The associations of editors' professional development offering to their members in Australia, Canada, South Africa, the UK and the US includes providing or recommending suitable training and networking opportunities, conferences, publications on relevant topics, chat groups, accreditation tests, graded levels of membership, and mentoring (ACES 2012; SfEP 2012a, 2012b; CSE 2014; EAC 2014; PEG 2014; IPEd 2015b). These activities – described in more detail in Linnegar (forthcoming) – are aimed at raising professional standards and promoting their members' services. Mentorships constitute a small but significant and much-needed aspect of this package of offerings. For the mentees who participate in them, they offer opportunities for upskilling, filling gaps in knowledge, obtaining advice on a range of matters, and personal growth, the summation of which is usually greater self-confidence and a higher level of performance (Levinson, Darrow, Klein, Levinson and McKee 1978; Tauer 1998; Murray 2001; Beagrie and Murray 2006; Manning Murphy 2012: 8, 35-36; Chen 2013: 199-200; Bloomberg 2014: 88-89; EAC 2014; Lepi 2014; Goldsmith and Marshall 2015).

It is particularly by providing mentorships that the professional associations have assumed the role of "learning organisations", previously the preserve of corporations and other institutions. In this role, they provide their members with opportunities for a form of lifelong learning (IPEd 2015b) that is aligned with both adult learning theory of the kind espoused by Knowles' (1970, 1984) "andragogy" and Bandura's (1977) self-efficacy mechanisms.

Knowles used andragogy as a concept to explain the conditions and principles for adult learning which include that adult learners: (i) have independent self-concepts and are thus led by self-directedness; (ii) draw on their accumulated reservoir of experience in their learning; (iii) are problem-centred and want to apply new knowledge immediately; (iv) need to know why they have to learn something before participating in learning, and (v) are motivated to learn by internal rather than external factors (Spies, Seale and Botma (in press), citing Knowles, Holton and Swanson 2005: 64-68). Andragogy emphasises the value of the process of learning (as mentoring is), which it regards as internal and self-directed (Knowles 1970, 1975, 1984). It is based on a belief that adults like to be given the opportunity to use their existing foundation of knowledge and experience gained from life and apply it to new learning experiences (Knowles 1978), as well as the belief that adults are goal- and relevancy-oriented. Accordingly, andragogy uses approaches to learning that are problem-based and collaborative rather than didactic, and also emphasises greater equality and collaboration between teacher and learner.

Mentorships for adult editors take these principles into account in confirming and extending editors' knowledge and skills, bringing their experience into play in their work and providing them with tasks that are challenging. They serve to help editors meet their expressed goals and are relevant to the field in which they wish to work. They also aptly describe the needs of text editors requiring mentoring.

In essence, Bandura (1982) and others have found that an individual's self-efficacy plays a major role in how goals, tasks and challenges are approached. People with a strong sense of self-efficacy, therefore, tend to view challenging problems as tasks to be mastered, develop a deeper interest in the activities in which they participate, form a stronger sense of commitment to their interests and activities, and recover quickly from setbacks and disappointments (Bandura 1977). In contrast, people with a weak sense of self-efficacy tend to avoid challenging tasks, believe that difficult tasks and situations are beyond their capabilities, focus on personal failings and negative outcomes, and quickly lose confidence in their personal abilities (Bandura 1977). They need to be exposed to what Bandura terms "social modelling", "social persuasion" and "mastery experiences" of the kind that a mentor-role model can offer a mentee (Bandura 1989).

In the 21st century, self-efficacy has become additionally important for text editors for two reasons. First, many have had to take charge of their careers, because in the new corporate business environment of publishing, where time is money and lifelong learning is increasingly becoming a process external to publishing houses, mentoring as a means of professional development has shifted to become the text editor's responsibility. Secondly, text editors are expected to work semi-independently and take editorial decisions or persuade writers of the correctness of their decisions (Mackenzie 2011: 1-2, 49, 51, 201; Manning Murphy 2012: 4-9). They are also required to deal assuredly with difficult texts and challenging writers backed by a strong commitment to improving texts for publication, a firm grasp of normative linguistics (Van de Poel, Carstens and Linnegar 2012) and recourse to authoritative resources. They should therefore possess a strong sense of self-efficacy. This is one aspect of a mentee's makeup that a mentor should attend to, basing their support on Bandura's self-efficacy mechanisms (Bandura 1977, 1989; Manning Murphy 2012).

Mentoring based on the learning principles and concepts of Knowles (1970, 1984) and Bandura (1977) is suited to the needs of Editors1-4 described below – especially when they have few, if any, experienced colleagues to turn to for personal support, guidance, feedback on their skills, confidence-building and career development opportunities.

To contextualise the particular form of mentoring being examined in this article, I begin by briefly sketching four fairly typical scenarios (based on real practitioners whom I have mentored):

- Editor1 is an aspirant text editor in her twenties who has recently completed an industry-recognised training course in text editing and proofreading. She aspires to pursue a career in the field as a freelancer without first gaining any inhouse experience. Without any inhouse contacts and apart from attending further training courses, she has few opportunities to develop her knowledge, skills and confidence (or self-efficacy) other than joining a professional association and considering a mentorship.
- Editor2 has been working as a copy editor in a publishing house for several years, but corporate downscaling has forced him into a new professional life as a freelancer. This will mean relinquishing the peers and informal mentoring contacts he has built up inhouse. The organisation will now become one of his clients with certain expectations of his service levels. His challenge is to seek out ways of continuing to develop and find someone who will serve as his role model or mentor now that he no longer has more experienced senior colleagues to turn to.

- Editor3 is the chief editor of a small editorial division within a major organisation. As head of her team and with no-one with any linguistic or editorial inclinations outside the unit, she finds herself bereft of a mentor figure to consult. Her problem is one of obtaining the professional support she needs, external to her unit and organisation.
- Editor4 wishes to switch genres but is fearful of change. She is uncertain of her capabilities as a novice academic editor and is also concerned about being able to make a living from such editing after the security of working on school textbooks.

Mentoring seems to be an appropriate option for such editors, but why not coaching, counselling or training, for instance? To answer this question, I proceed now to define "mentoring" and distinguish it from other models of learning intervention and personal development. In the process, I consider what the mentoring of text editors comprises and how it differs from other mentoring interventions, before offering some concluding thoughts on the mentoring of text editors in particular.

A reason for making these distinctions is that in some professional associations mentoring is considered to be training or labelled as "coaching", which I and others believe is incorrect (SfEP 2012a, 2012b; EAC 2014; PEG 2014; IPEd 2015b). The methodology of the online mentoring model that will be the product of this research programme will bear the attributes of mentoring first and foremost.

In my view, the inventory presented below in response to these questions should form the foundation of any further programme development aimed at adequately answering the profession's needs for mentorships. I begin by asking how mentoring is uniquely different from other forms of learning, and where and when it can include elements of them.

3. Mentoring: How it differs from coaching, counselling, training and teaching

Although elements of coaching, counselling, training and teaching can be included in a mentorship (Murray 2001; Single and Muller 2001; Sparrow 2008; Manning Murphy 2012: 7-8; SfEP 2012a, 2012b), mentoring is essentially different from them in a number of fundamental respects (IPEd 2015b). The overview of the differences between the different teacher and learner relationships, drivers, processes and outcomes set out in Tables 1a-c is intended to clarify the distinctions between mentoring and the other developmental interventions.

This comparative-table format is adapted from Goodman (2009), whose objective was also to distinguish mentoring from other interventions, but in a secondary school teaching environment. He made a strong case for mentoring being different from coaching, counselling and training. All of Goodman's criteria for comparison, except "where the intervention takes place", are considered relevant to the one-on-one mentoring of text editors; examples of the relevant criteria include "the role-players", "who asks the questions", "who has the answers", and "who holds the power". For the purposes of my comparison, however, I added teaching as an intervention to contrast with mentoring (Manning Murphy 2012: 8) and also the following criteria: "function of the facilitator", "function of the learner", "learning mode", "unit of facilitation and who determines it", "means of assessment", and "consideration of greater self-efficacy as outcome". All of these criteria, I believe, help to deepen our understanding of the distinctions between the interventions and provide for a clearer differentiation between mentoring and the other professional development strategies. The criteria are arranged in three broad groups:

- Table 1a: the role players in each relationship; who poses and answers questions; who holds the power or status in the relationship; the functions of the facilitator and the learner;
- Table 1b: the mode of learning; the unit of facilitation and who determines it;
- Table 1c: the means of assessment; and the outcomes, in particular the extent to which self-efficacy is one.

The items in the tables below are examined more closely, criterion by criterion. Table 1a is considered first.

Table 1a: Overview of the drivers, processes and outcomes in mentoring, coaching, training, teaching and counselling: the role players and their functions

	MENTORING	COACHING	COUNSELLING	TRAINING	TEACHING
Role players	Mentor and mentee	Coach and coachee	Counsellor and client	Trainer and trainees	Teacher and students
Questions posed by …	Mentee and mentor	Coachee	Client and counsellor	Trainees	Students
Answers provided by …	Mentee and mentor	Coach	Client and counsellor	Trainer	Teacher
Power/status held by …	Mentee-driven; equal status	Coachee	Counsellor	Trainer	Teacher
Function of facilitator	More holistic: Transfer skills and knowledge Develop career Counsel psychosocially Act as role model	Rectify specific problems or weaknesses in coachee	Deal with and help resolve specific problems of client	Transfer knowledge and skills to trainees	Transfer knowledge and skills to students
Function of learner	Hone skills and acquire knowledge Develop career Achieve specific goals Gain self-efficacy	Seek to rectify specific problems or weaknesses	Seek or follow counsel in dealing with and resolving own specific problems	Acquire and master knowledge and skills	Acquire and master knowledge and skills

3.1 The role players

Mentoring is a particular kind of relationship that an inexperienced person (a protégé or mentee such as Editor1 described above) enters into in order to gain knowledge, skills, attitudes and values under the guidance and advice of a more experienced colleague (the mentor) who has significant and valuable experience in a similar type of work (Levinson et al. 1978, Tauer 1998, Ragins and Cotton 1999, Murray 2001, Beagrie and Murray 2006, Chen 2013: 199-200, Bloomberg 2014: 88-89).

The ideal mentor–mentee relationship should be one-on-one, bi-directional, egalitarian and learner-driven (IPEd 2015b). For instance, the mentee should set the goals and the pace (ATA 2012, St-Jean 2012: 204, PEG 2013, CSE 2014), though the process should be closely monitored by the mentor, if only to maintain the momentum. This is in contrast to the other interventions, where coach, trainer, teacher and counsellor are more likely to apply set goals and control the pace. Here, the relationship is often not a collaborative one between equals; in the case of training and teaching, moreover, the relationship is one to many and typically uni-directional.

3.2 Who poses the questions and who provides the answers

Goodman (2009) suggested that it is the mentee who asks and the mentor who answers questions. However, mentoring relationships based on adult learning principles in which transformative learning is expected to take place either synchronously or asynchronously (Bach, Haynes and Lewis-Smith 2007: 167) are not as rigid or as clear-cut as this: in a process of give and take (Ryan 2006), the parties are expected to both ask and answer questions, with the mentor encouraging the mentee preferably to reflect on matters and to answer their own questions, since learning is seen to be an internal process (Knowles 1970) that should lead to greater self-efficacy (Bandura 1977, 1982). Knowles' andragogy uses approaches to learning that are problem-based and collaborative rather than didactic, and also emphasises greater equality and collaboration between the teacher and the learner.

Relevant here are two of Knowles' (1978, 1984) six principles of adult learning, namely that adults are internally motivated and self-directed, and that they bring life experiences and knowledge to learning experiences – factors that are important to successful mentoring. Any questions the mentor asks should therefore prompt the mentee to arrive at their own solutions under the empathetic, respectful guidance of the mentor (Bach, Haynes and Lewis-Smith 2007: 167). This approach has been expressed by the professional associations in Canada, Australia and South Africa (PEG 2013, CSE 2014, EAC 2014). In the other, more uni-directional relationships, the learner normally has the questions to pose whereas the facilitator is usually in the position of providing answers, whether prompted or not.

3.3 Power or status

In a mentoring relationship, a mentor has no power over a mentee (Ryan 2006); indeed, whatever "power" there may be should be shared equally by the parties, the mentoring being essentially mentee-driven (PEG 2013, CSE 2014, EAC 2014) or "self-directed" (Knowles 1970, 1978). Status should be equal between mentor and mentee, the latter willingly entering into a mentorship with a particular mentor, and the mentor providing benign guidance to ensure that learning and growth take place most purposefully (Ryan 2006, EAC 2014) by covering the required knowledge and skills, social modelling and guiding the mentee as to appropriate psychosocial responses to situations (Bandura 1977, 1982, 1989; Ragins and Cotton 1999). The Institute of Professional Editors (IPEd 2015b) terms a mentorship "a two-way learning experience" from which both participants gain. The mentee and the mentor must also agree on the content to be covered formatively during a programme; on the proposed pace and timing they must also negotiate (Tauer 1998, Ryan 2006), and either party can decide on the point when their mentoring relationship should be terminated and what form the winding-up should take (Ryan 2006; SfEP 2012a, 2012b; PEG 2013; CSE 2014). This is in contradistinction to the other relationships represented in Table 1a, where the power is mostly in the hands of the facilitator and relationships are clearly delineated, the status of the participants being unequal.

Single and Muller (2001: 113-114) stress the importance of making suitable matches between mentors and mentees, especially in online relationships which many in the field of text editing are nowadays (SfEP 2012a, EAC 2014, PEG 2014, IPEd 2015b). In a corporate environment, Single and Muller (2001) point out, the participants usually have the corporate setting and culture in common, which is conducive to successful mentoring (though not devoid of questions of status or power); however, the partners in an online relationship lack this common ground – indeed,

they may be situated in diverse cultures and environments (Single and Muller 2001: 113). Mentees should therefore be carefully matched with mentors by a mentoring administrator or committee (Single and Muller 2001: 113-114, Goodman 2009: 43). This can entail reviewing the mentoring profiles and making matches based on areas for development, mentor strengths, overall experience, skill set, location and the objectives of the mentorship. Assessing the mentor's skills and attributes is as important as assessing those of the mentee if a suitable match is to be made (Single and Muller 2001: 113-114, Ryan 2006, DoE 2008, PEG 2013, CSE 2014). For St-Jean (2012), working among independent entrepreneurs, the openness of a mentoring relationship is critical to its success if the mentee is to experience positive change. The mentee's self-disclosure is necessary, as such opening up leads to a deeper, evolving relationship based on trust and open communication, and also to a mentee's greater self-realisation by improving their self-understanding (Ellis 2000, St-Jean 2012: 204).

Nowhere is the irrelevance of power or status more starkly evidenced than in reverse mentoring, a relatively new phenomenon in which junior employees from Generations X and Y, who possess advanced skills in information technology (IT), guide their seniors in the use of high-tech equipment, software and systems (Linnegar and Norenius 2012: 6, Chen 2013). With IT playing an increasing role in the production of publications – especially as digital publishing grows – reverse mentoring is becoming increasingly necessary as less IT-native text editors are confronted with and are having to become immigrants to challenging new technologies (Attwell 2014).

Mentors and mentees need to set expectations, goals and responsibilities for their relationships consensually, and to agree on couching them in confidentiality (Allen and Eby 2011: 357, ACES 2012). In this regard, seeking a mentor outside one's organisation is also considered advantageous (Beagrie and Murray 2006, Bloomberg 2014: 88), which should also pre-empt any power or status questions. Both of these conditions would be appropriate for Editor3, for instance.

Not being constrained by time and geography, and enabling status differences to become attenuated are also key characteristics and advantages of current online mentoring relationships between text editors (Single and Muller 2001: 107, Emelo 2011: 47-48, PEG 2013, CSE 2014, IPEd 2015b).

3.4 Function of facilitator of learning

Whereas the function of trainers and teachers is primarily to transfer knowledge and skills, coaches and counsellors help to identify, deal with and rectify specific problems or weaknesses that coachees and clients present with. In contradistinction, the mentor's role is more holistic, concerned with the development of the whole person, and so the techniques employed are broad and require wisdom in order to be used appropriately (Daloz 1990). Mentoring is essentially about facilitating change in individuals by providing a stable source of support through the process. Through interaction with mentors, mentees should be able to rehearse their actions, clarify their thoughts and gain feedback (St-Jean 2012).

A "package" of skills and knowledge transfer, career development, psychosocial counselling, emotional support (both work-related and personal) and the presentation of themselves as an experienced role model for the mentee should be included in the mentor's offering (Wright and Wright 1987: 205; Beagrie and Murray 2006; ACES 2012; Harriss and Harriss 2012; St-Jean 2012: 202, 203, 205-206; Chen 2013: 201-202; Bloomberg 2014: 90). They should focus on

the individual and help them to use their strengths to achieve success (Ellis 2000). In this respect, the mentor is a substitute for the inhouse, on-the-job experience that text editors such as Editor2, in particular, would have had in the past. The mentor can also counsel or coach a mentee as and when the need arises: the stronger the support from the mentor, the firmer the relationship (Beagrie and Murray 2006, PEG 2013).

Kouzes and Posner (1993: 112) advise mentors to look for "teachable moments" in order to "expand or realise the potentialities of the people in the organizations they lead". These moments include monitoring their mentees gently to ensure that they also learn to deliver work on time (Ellis 2000, Single and Muller 2001, SfEP 2012a, PEG 2013, CSE 2014). Mossop (2010) takes this one step further when he says that an important distinction to make when teaching translation students is between things they need to know about and things they should actually be able to do in the workplace. For example, these students may know that a big problem in editing is passages whose meaning is obscure, but actually dealing with such passages when working on them is another matter. They also need to know that there is often not one best way to tackle a difficult text because, in reality, different professional editors work differently. So what teachers/mentors should be inculcating in learners/mentees is the internalisation of the procedures and principles for editing that can be applied long term rather than a mindset focused on achieving quick-fix results (Knowles 1970, Mossop 2010).

It has also been pointed out that the mentor is often the party who has to keep up the momentum of a mentor–mentee relationship (Single and Muller 2001, St-Jean 2012, PEG 2013, CSE 2014). Ellis (2000) emphasises that mentoring online requires constant vigilance of people whose lives are complex and busy and who risk either falling behind in the mentoring programme or discontinuing it, which is unsatisfactory if meeting deadlines is an important facet of mentoring. This view is supported by my experience of mentoring a number of mentees: it is so easy for either party to allow deadlines to slip, and so render the mentoring less effective. Sinclair (2003: 90), moreover, cautions mentors to be particularly sensitive when communicating with mentees online (via email or Skype) because she found it easier to encourage and support mentees, or gently challenge them, face to face than in writing.

3.5 Function of learner

Whereas the function of trainees and students is eventually to acquire and master knowledge and skills, that of the coachee and client is to seek to rectify specific problems or weaknesses or to seek professional counsel in dealing with them. The mentee, in contrast, will be looking to develop their career by broadening or refining their skills (e.g. specialising in editing law texts (Editor4), breaking into fiction editing or proofreading e-book texts) and gaining greater self-efficacy in the process (Bandura 1977, 1982). It is essentially a "one-to-one developmental relationship" (Beagrie and Murray 2006, DoE 2008: 7, Sparrow 2008) that gives the mentee the mentor's maximum attention. This is also in line with Knowles' (1970, 1978) principles of adult learning, where adults are goal- and relevancy-oriented, practical, and like to be respected.

Most text editors – such as Editors1-4 – are adults by the time they require mentoring, all of them post-school, many of them with a first or second tertiary degree and some work experience. Furthermore, they have at least some exposure to their craft, are strongly motivated to improve authors' texts (a single-minded goal), bring a wealth of life experiences and knowledge to their work, are inclined to set store by the practical application of their knowledge and skills to

enhancing texts, and regard earning respect as a key contributor to establishing a reputation for quality output and to achieving success in business. Knowles' (1970, 1978) principles are therefore aptly applicable to the mentoring of this group. In addition, much of the text editor's intervention to improve texts requires problem-solving and collaboration (Cubric, Clark and Lilley 2011: 136; Mackenzie 2011: 1-2, 49, 51, 201; Manning Murphy 2012: 4-9; Van de Poel, Carstens and Linnegar 2012: 19-21, 180, 194, 259-262).

The mentee should also be undergoing a type of action learning, a continuous process of learning and reflection that happens with the support of one or more colleagues working on real issues with the intention of getting things done (St-Jean 2012: 203). This would give the mentee increased responsibility for and control over their learning, and different pathways to knowledge (Brown and Thompson 1997, PEG 2013, CSE 2014, EAC 2014).

Text editors who require mentoring are typically either freelance service providers (Editor2) or full-time employees who no longer have direct access to a more experienced or expert colleague (Editor3) (ACES 2012, SfEP 2012a, PEG 2013, CSE 2014, EAC 2014). They therefore depend upon the professional associations of which they are members to be the catalyst in bringing suitable mentoring relationships into being. Such mentees can be either new to their craft (Editor1) or more experienced but wanting to hone their skills (Editors2-4), wanting to gain knowledge or develop their self-efficacy in order to sell their services to clients (Editor3). They have usually undergone at least basic training in text editing and/or proofreading (SfEP 2012a, PEG 2013, EAC 2014). They could have any number of mentoring goals, as Ryan (2006) says of translators: "[for example,] help with getting contacts, business advice, software training, marketing, practising their language skills, [wanting] the mentor to proofread their work, [and] to help the mentor with their workload [e.g. Editor3]. A lot of the time, the mentee just wants to be reassured that they're doing the right thing by going freelance and that their work is good enough".

There is consensus, at least among the Australian, Canadian and South African associations for text editors, that a mentorship should be mentee-driven: the mentee sets goals that become the basis of the pair's work together and in some associations is expected to set the pace too (PEG 2013, EAC 2014, IPEd 2015b). Those mentees with workloads also have to accommodate mentorships within full schedules and personal lives, and so mentors – themselves usually also busy individuals (Linnegar forthcoming) – have to take their competing commitments into account when setting assignments and negotiating deadlines and milestones (ATA 2012; SfEP 2012a, 2012b; PEG 2013; CSE 2014; EAC 2014; IPEd 2015b).

Freelance text editors, not fitting into an organisational structure other than their membership of a professional association, are more likely to experience the advantages (and some disadvantages) of a more semi-formal mentoring relationship that lies somewhere between strictly formal and informal (Lynn 1998), having some of the attributes of both. For one thing, the decision to be mentored is voluntary (Hutto, Holden and Haynes 1991; Harriss and Harriss 2012; St-Jean 2012: 202; PEG 2013; CSE 2014), as is the commitment of mentors who are experienced members of professional associations. Secondly, in contrast to corporate environments where HR departments tend to match-make (Harriss and Harriss 2012), the arrangement in which one user is matched with and assists another is also voluntary (Ehrich and Hansford 1999, Beagrie and Murray 2006) and is encouraged and facilitated by professional associations in the interests of both promoting individual development and enhancing

professional skills and personal capabilities (SfEP 2012b; IPEd 2015a, 2015b). Ultimately, the profession as a whole benefits from individuals upgrading themselves: some mentors express the altruistic belief that they are contributing to professionalism in their sector as a whole by putting something back into their profession (cf. Beagrie and Murray 2006, Bloomberg 2014: 89, CSE 2014). This altruistic volunteerism also starkly sets the mentoring of text editors apart from the other developmental interventions.

Finally, by mutual agreement with their mentor and the programme's mentoring co-ordinator, the mentee may also terminate a partnership because they feel they have either achieved all they can from it or the partnership has achieved its goals, or because the mentorship is seen not to be working (Single and Muller 2001; SfEP 2012a, 2012b; PEG 2013; CSE 2014; EAC 2014). The mentee also negotiates the form that any winding-up should take (Ryan 2006; SfEP 2012a, 2012b; PEG 2013; CSE 2014).

The criteria in Table 1b, which compares the learning mode and the unit of facilitation across the different development strategies, are considered next.

Table 1b: Overview of the drivers, processes and outcomes in mentoring, coaching, training, teaching and counselling: the learning mode and unit of facilitation

	MENTORING	COACHING	COUNSELLING	TRAINING	TEACHING
Learning mode	Lifelong, on the job, from a mentor, mentors or peers	Sessions with coach	Sessions with counsellor	Short, fit-for-purpose courses	Year-long in-class and homework
Unit of facilitation …	No formal syllabus. Specific text-based editorial tasks as determined by a mentee's needs and preferences	Coach working on 'problem' or 'weakness' that needs remediation	Counsellor working on client's specific problem or needs	Syllabus, short course Group and individual work Exercises	Syllabus, module, degree programme Group and individual work Exercises
… and who determines it	Mentee and mentor	Coach	Counsellor and client	Trainer	Teacher

3.6 Learning mode

3.6.1 What sets mentoring apart

This category is not included in Goodman's (2009) original table, and yet it strikes me as being another strong distinguisher of mentoring from the other developmental interventions.

Manning Murphy (2012: 8) is at pains to distinguish teaching from mentoring. Teaching means passing on knowledge and actively helping the learner to acquire a set of skills through concerted practice, testing their understanding and making sure that they are competent in applying those skills. Teaching, moreover, involves a more formal, uneven, even distant, relationship and process in which the teacher imparts knowledge and skills, the learner puts them into practice, and then the teacher assesses the practical–theoretical output. In such a relationship, the learner is often quite dependent upon the input of and assessment by the teacher, and eventually has to be weaned off that dependence. Achieving results (grades) tends

to be an important focus of teaching, and the psychosocial development of learners as well as career guidance tend to be peripheral. Except for summative assessment, much of what applies to teaching applies also to training.

Mentoring text editors, on the other hand, entails guiding and encouraging a novice while they find their feet, helping them to gain experience, building their editing skills and thinking processes, and also allowing them to develop along their own lines (through a variety of techniques) towards greater self-efficacy and competence. It is a negotiation-led process that takes place less formally and uni-directionally than teaching, one in which the mentee acts, learns and develops more autonomously (Manning Murphy 2012: 8, 35-36). There is also more emphasis on formative assessment, the information gained from editing assignments to some extent guiding the next steps and possible additional learning opportunities needed to ensure success. In addition, mentoring allows for responsiveness to a perceived or real mentee need (e.g. Editors3, 4) (Lepi 2014) and entails giving feedback on which to build rather than on grades.

Although both involve one-on-one interventions, mentoring differs from coaching because the latter is more about performance and is therefore based on training specific skills or overcoming discrete problems whereas mentoring is more holistic and concerns the development of people (Sparrow 2008). The International Mentoring Association (2014), a US-based professional association serving mentors, defines coaching as "the support given for technical, skills-related learning and growth provided by another person who uses observation, data collection and descriptive non-judgemental reporting on specific requested behaviours and techniques". Coaching is therefore a much more narrowly focused activity than mentoring, being more concerned with performance (e.g. athletes, managers) and skills (e.g. mathematics or public speaking) (Goodman 2009).

In contrast, mentoring is the all-inclusive description of everything done to support mentee orientation and professional development. However, the International Mentoring Association (and others, e.g. DoE (2008)) views coaching as one of the sets of strategies that mentors should learn and use effectively to increase their mentees' skills and success, possibly to focus on a skill that needs developing or an attitude that has to be instilled or changed (IPEd 2015b). Editors 3 and 4, for instance, would benefit from coaching as they have never had experience in editing very long documents and need practice in doing so in order to master the strategy required to impose stylistic and structural consistency across tens of thousands of words.

Although both involve one-on-one interfaces, mentoring also differs from counselling, which focuses on specific psychological help, personal growth and career guidance. Counselling is also set apart in that it involves a trained professional counsellor (Goodman 2009), but an outcome it could have in common with mentoring is self-efficacy. For instance, Editor2, who is new to freelancing, could need to consult a professional on client relations, especially on dealing assertively with uncompromising authors.

Whereas training and teaching involve fairly limited time-based interventions that take place outside the workplace (e.g. short courses, degree programmes, etc.), mentoring is most typically based in the workplace and can be classified as lifelong, on-the-job learning. Even with online mentoring, mentor and mentee tend to be office-based, though in separate offices remote from each other. This is also the case with text editors, although they typically interact

asynchronously and only virtually face to face, their communication taking place online, typically via either email or Skype.

Pursuing lifelong learning principles and objectives (IPEd 2015a), mentoring can be arranged as either long-term or short-term programmes according to mentees' specific needs (Ryan 2006; ACES 2012; SfEP 2012a, 2012b; PEG 2013; CSE 2014; EAC 2014). As conducted by professional associations for text editors such as SfEP, PEG and IPEd, these programmes are typically of about three to six months' duration, and during this period a total of between eight and 20 hours of "contact time" is allowed for by the different associations (cf. SfEP 2012a, PEG 2013, IPEd 2015b). Contact time is time during which mentor and mentee communicate about the mentee's assignments (suitable authentic texts that either the mentor has edited previously or that the mentee has acquired from a client), either orally or in writing or both, using electronic media (SfEP 2012a, PEG 2013, IPEd 2015b). Further mentoring time may be negotiated privately between mentor and mentee (SfEP 2012a, CSE 2014, PEG 2014, IPEd 2015b). Only in one instance (Op-Ed Project 2012) is a "mentorship" of very short duration and limited to one specific project: an "expert" journalist checking a fledgling writer's draft opinion-editorial (op-ed). Otherwise, in general, the duration of a mentorship should be "only as long as it takes for the mentee to achieve his/her goals" (Phillips-Jones 2001: 2, Beagrie and Murray 2006, Bloomberg 2014: 90). This cannot be said for coaching, teaching or training, which all take place within time and/or curriculum constraints.

The mentee's progress should be managed, usually through regular contact with their mentor (Sinclair 2003, Beagrie and Murray 2006, Goodman 2009: 43, Bloomberg 2014: 90). The role of the mentoring programme director or co-ordinator should simply be to monitor and record the progress of a mentorship and to be an arbiter should problems arise (SfEP 2012a, PEG 2013, CSE 2014, EAC 2014, IPEd 2015b).

3.6.2 Mentoring as online learning

As stated previously, much of the mentoring of text editors nowadays takes the form of online learning, distance learning or e-learning. Generally, online learning refers to the "delivery of a course via the web" (Emelo 2011: 48) via a number of media such as email, a website, Skype video conversations, tele- or videoconferencing, or social media such as Facebook, "with no significant difference in the quality of learning or overall satisfaction when people engage virtually versus in person" (Emelo 2011: 48). The benefits to the mentee of such online instructional design include: increased access to learning, asynchronous interactions, and flexibility of place, pace and interaction (Sherry 1996, Passerini and Granger 2000, PEG 2013, CSE 2014). Sinclair concludes (2003: 92) that, whereas technology cannot replace the affective nature of learning, it can nevertheless enhance the mentoring experience per se. The enhancement is likely when the tasks encourage higher-order thinking and substantive conversations among adult learners, and authentic assessment methods and tasks encourage mentees to put into practice what they have learned. This approach supports autonomous learning. This view is supported by Knowles' (1970) adult learning theory and is typical of much text editor mentoring (cf. SfEP 2012a, 2012b; PEG 2013; CSE 2014; IPEd 2015b).

Certainly, the Australian and South African programmes are evidence of multimedia making successful mentorships possible, using Skype, Skype Video, telephone, email and MS Word's Track Changes and Comments functions for written assignments (PEG 2014, Goldsmith and

Marshall 2015, IPEd 2015b); SfEP (2012a) claims that "mentoring is typically done by email, so it is available anywhere in the world". Already, successful mentorships using multimedia are in place between continents: at the time of writing, two non-Australians are mentoring Australian practitioners, Australians are mentoring other Australians across different states as well as non-Australians abroad, and within South Africa several mentors around the country are mentoring mentees who are geographically distant (PEG 2013, CSE 2014, IPEd 2015b), while one South African is being mentored by a mentor in Europe (PEG 2014) – all asynchronously.

Owing to their particular circumstances, for text editors mentoring has taken a form different from that encountered by other mentees in more structured organisations such as businesses, schools and universities. Until about the 1990s, the mentoring of many text editors took the form of informal inhouse superior–novice relationships within publishing houses, public relations practices or communications consultancies. There, less experienced practitioners could turn, as required, to more experienced colleagues for ad hoc information, opinions, advice and support (Beagrie and Murray 2006; DoE 2008: 20; Mackenzie 2011: 17, 19; Bloomberg 2014: 88, 90). Since the 1990s, however, businesses and educational institutions have been downsizing in order to reduce their overheads (DoE 2008: 16). In step with this, publishers worldwide have been shedding non-core staff (including text editors and proofreaders) and this has resulted in many editorial staff becoming freelance service providers, some of them servicing the very publishing houses that retrenched them (Editor2) (Mackenzie 2011: 199-200; Van der Poel, Carstens and Linnegar 2012: 149).

An important consequence of this recent trend has been to deny text editors the opportunity to enter into traditional informal mentoring relationships (Downie 2012, Van Loggerenberg 2012). These editors have effectively become the manager-entrepreneurs in their own businesses (not unlike Editors1, 2 and 4), a situation in which it is difficult to obtain psychological, career-related or role-model support from peers. They therefore have to obtain such support from an external mentor (St-Jean 2012: 203, IPEd 2015b) as it is not possible to enter into a mentoring relationship with a client. This is where professional associations of text editors have stepped into the breach: they have taken on the role of "learning organisations" (DoE 2008: 21, Bloomberg 2014: 89) formerly played by publishing houses in particular, and have set up mentoring programmes at either branch or national level (SfEP 2012a, PEG 2013, CSE 2014, EAC 2014, IPEd 2015b, SENSE 2015). Technological developments together with an increase in freelance service provision among text editors during the past two decades have combined to make online mentoring an attractive proposition for both the associations and text editors.

3.7 The unit of facilitation and who determines it

Once again, this factor was not used as a differentiating criterion in Goodman's (2009) summary, and yet in my view it makes for another critical distinction between mentoring and the other developmental interventions. In the case of training, the unit of facilitation can be a module of a course or a syllabus, and in teaching it can also be a module of an entire degree programme (Cubric, Clark and Lilley 2011: 134), including the assignments and projects that form part of the module. The content is usually prescribed by a standard-setting or examining body and implemented by the trainer or teacher, normally in line with a curriculum or syllabus.

In contrast, in mentoring for text editors the content is "packaged" in limited units or specific assignments based on the mentee's expressed needs/goals – for example, texts to be corrected and otherwise improved in order to enable the mentee to practise specific editing skills and either apply or gain relevant knowledge (Editors1, 4). Mentee needs could include: being new to (and/or newly trained in) professional proofreading or copy-editing and needing exposure to or practice with real texts (SfEP 2012a, EAC 2014); more experienced text editors feeling that their skills and knowledge are rusty or patchy; wanting to move into editing a different genre of text (Editor4) (SfEP 2012a, PEG 2013, EAC 2014); wanting feedback from an experienced editor or proofreader regarding their ability (SfEP 2012a, IPEd 2015b); needing informal ad hoc advice, support, and/or encouragement without it being based on a specific document (Editor3), or on any document (e.g. advice on the business aspects of freelance editing (Editor2) (IPEd 2015b)). They may even need "reverse mentoring" (see section 3.3), where a less experienced person mentors a more experienced one in the mentor's area of expertise, for example using MS Word Styles or indexing or using macros to enhance the editing process (Linnegar and Norenius 2012: 5, Chen 2013, IPEd 2015b).

A basic assumption is that learning through either teaching or training interventions has been completed prior to the start of a mentorship (SfEP 2012a, PEG 2014, IPEd 2015b). The tasks are selected by negotiation between mentor and mentee, and are based on the mentee's particular needs and preferences (Ryan 2006, Linnegar and Norenius 2012, PEG 2013, CSE 2014) and their stated objectives for entering into a mentorship (Ryan 2006). Editor1, for instance, wants to focus on subediting and proofreading magazine articles, and so not only will her mentor have to have had experience or expertise in that genre or those particular skills, he or she will also have to help Editor1 select suitable texts that expose her to them in the most realistic and practical of ways. In addition, sensitising Editor1 to the problems of plagiarism and defamation and the short turnaround times specific to this genre will form an important element of this mentorship. Plagiarism detection will also be an aspect of Editor4's mentorship, and she will require a mentor with considerable exposure to the intricacies of academic editing if their mentorship is to be productive

In the next two sections, the means of assessment and the consideration of greater self-efficacy as outcome are compared across the different interventions.

Table 1c: Overview of the drivers, processes and outcomes in mentoring, coaching, training, teaching and counselling: the means of assessment and consideration of greater self-efficacy as outcome

	MENTORING	COACHING	COUNSELLING	TRAINING	TEACHING
Means of assessment	Systematic exposure to and evaluation of assignments (texts), based on standard criteria. No formal evaluation	Effectiveness of remediation. Extent to which problem resolved	Effectiveness of remediation. Extent to which problem resolved	In-course exercises. Post-training assignments (formal or informal)	In-class and homework assignments. Tests, exam (formal or informal)
Consideration of greater self-efficacy as outcome	High: one-on-one interface, with strong input from mentee	Low: one-on-one interface	Medium: one-on-one interface	Low: large groups	Low: large groups

	Emphasis on: Role-model nurturing Challenging tasks, problem-solving Personal weaknesses Opportunities for positive outcomes Confidence-building	Greater focus on remedying specific problem or weakness than on building self-efficacy	Focus on specific needs or problems could lead to growth towards self-efficacy	Greater emphasis on knowledge, skills than on building self-efficacy	Greater emphasis on knowledge, skills. Less chance to develop individuals' self-efficacy

3.8 The means of assessment

Formative and summative assessment have already been alluded to. Both are critical to effective teaching and learning as, firstly, the student's progress must be monitored and decisions have to be made about the additional learning opportunities needed to ensure success. Secondly, both the teacher and students need information about the attainment of knowledge (usually measured by grades) and also an assessment of student learning by comparing their performance against some sort of standard or benchmark.

Formative assessment alone is more characteristic of short training courses and mentoring, where the same value is not generally attached to summative assessment. However, I would argue that for mentoring to be both effective and efficient, as a minimum, pre- and post-assessments (or "measurement moments") should be put in place in order to assess/measure whether a mentee, after systematic exposure to and evaluation of a series of assignments, is able to display evidence of an improvement in their editorial proficiency. A tool should also be put in place to monitor a mentee's growth as they proceed through the assignments and the mentor–mentee exchanges during a mentorship (Linnegar forthcoming). What is more, a benchmark is required against which editorial proficiency can be evaluated, if the claim that a mentee has "successfully completed" a mentorship is to have any value.

On the available evidence, formal assessment is absent from the mentoring programmes of the professional associations for text editors. This makes objective measurement of the success of mentorships impossible and the competence levels of mentees in different countries, even between different mentors, highly varied (IHEP 2000).

Only SfEP currently has an evaluation system of sorts in place, but it has a different stated purpose: mentors grade candidates on a scale of 0 to 2 in each of five broad categories, and on the basis of their overall score (a maximum of 10) they may or may not qualify for an upgrade to a higher membership category. However, the criteria for and the form of assessment cannot be a thorough test of editorial competence; in addition, both appear to be highly subjective (cf. SfEP 2012a, 2012b).

The CSE/IPEd programme requires both the mentor and the mentee to evaluate their partner in a mentorship and the mentor to draft a detailed evaluation of the mentee at the end of a mentorship, using a standard form (CSE 2014, IPEd 2015b). The purpose of this evaluation is to assess the development of the mentee, the areas in which they will need to develop further, and the strengths and weaknesses of the particular relationship and the mentoring experience as a whole. Mentoring is also regarded as good preparation for the biennial accreditation examination that member-editors are encouraged to sit every two years (IPEd 2015b).

3.9 The extent to which self-efficacy as an outcome of mentoring is considered

Outcomes are not included in Goodman's (2009) differentiating criteria and yet, once again, in my view they should be a set of critical distinguishers since the outcomes will surely vary between interventions and professional associations.

The Editors' Association of Canada (EAC 2014), for instance, declares the purpose of its programme to be to help "new or transitioning editors" to obtain advice, support and guidance from experienced editors with wisdom to share. The Institute of Professional Editors (IPEd 2015b) and the Professional Editors' Guild (PEG 2013) share this objective. In this sense, mentoring is a developmental relationship based on regular interactions through which the mentee gains skills, perspective and experience (Beagrie and Murray 2006, ATA 2012, PEG 2013, Bloomberg 2014, CSE 2014). At the same time, for the mentee, two important adjunct outcomes or benefits of entering into a mentoring relationship, broadly stated, are career advancement (Beagrie and Murray 2006, St-Jean 2012, Chen 2013: 199) and psychosocial support (identified as "encouragement, friendship, advice and feedback") (Kram 1985; Chen 2013: 199-201; Bloomberg 2014: 88). On the other hand, mentoring should not be viewed as a pathway to work, job shadowing, apprenticeship or an internship programme (Ryan 2006; SfEP 2012a, 2012b; PEG 2013; CSE 2014; EAC 2014; IPEd 2015a, 2015b).

In essence, self-efficacy is attained through a combination of mastery experiences, social modelling and social persuasion, and as such it is a good fit with the objectives of mentoring. If one considers self-efficacy as an outcome of a developmental intervention, then it will be attained to different extents with each type – from low at one extreme to high at the other (Table 1c). In the case of training and teaching, because they usually involve group interfaces during the transfer of knowledge and skills, with few opportunities for one-on-one interactions, the likelihood of striving towards and attaining higher levels of self-efficacy will more likely be low. The focus of coaching relationships is narrow (resolving specific problems or challenges) and they, too, are likely to lack the influences of at least social modelling and social persuasion, though there may be opportunities for mastery experiences. The likelihood of achieving self-efficacy during coaching has to be rated low. In the case of counselling, the likelihood will range between high and low because of the possibility (or not) of personal growth being an outcome of satisfying specific needs or resolving specific problems.

With mentoring (a one-on-one interface), working towards self-efficacy should be high on the continuum, because exposing the mentee to mastery experiences (e.g. Editor1, 3 or 4 mastering a technique or a genre), social modelling and social persuasion (e.g. having benefitted from the feedback provided and the example set by their role-model mentor) should be standard in such a relationship if the mentee is to emerge with more than simply additional knowledge and skills.

Because text editors such as Editors1-4 are expected to work semi-independently in close collaboration with publishers and/or authors, firmly taking informed editorial decisions and often persuading authors and other role-players of the correctness of their decisions, it is necessary that they possess a strong sense of self-efficacy (Mossop 2010; Mackenzie 2011: 1-2, 49, 51, 201; Manning Murphy 2012: 4-9). The contributions mentors should make in this regard include: attempting to improve the self-efficacy of mentees by gently and supportively confronting mentees with challenging editorial tasks (SfEP 2012a, IPEd 2015b); focusing on mentees' interests and strengths and building on them; identifying weaknesses and helping to remedy them;

creating opportunities for reflection and positive outcomes that help to build mentees' confidence in their ability to complete editorial tasks competently; and encouraging openness and question-raising without fear of loss of face (EAC 2014, PEG 2014, IPEd 2015b).

According to St-Jean (2012: 202-203), mentoring is more focused on a holistic quest for meaning than on pure skill building (the focus of other interventions), being firmly anchored in action. For this reason, it has been argued that training, coaching and counselling should not form the core offering or focus of mentorships, and that none of these interventions can be used interchangeably with mentoring (cf. IPEd 2015b).

4. Concluding observations

This article is an attempt to add to the literature on mentoring by providing some insights into the nature and content of the mentorships offered by five professional associations of text editors around the world. The mentoring of text editors is much neglected in the current literature. The mentorships described in this article are taking place in a landscape of fairly sweeping change: changes in the relationships between text editors and clients; change in the form of text editors being forced to become entrepreneurs while still needing support from industry peers; and sweeping changes in technology that are making communications between text editors, their clients and their peers more attenuated and asynchronous, both physically and temporally. Such changes also present opportunities, though, for those determined to ride the wave – including the opportunity for some form of distance learning or online mentoring across and between continents (Manning Murphy 2012, SfEP 2012a, PEG 2013, IPEd 2015b).

As far as mentoring is concerned, opportunities are currently limited to relatively few practitioners. During 2014, for example, PEG, whose members numbered 560, had fewer than 10 active mentorships in place (1.77% of members; Downie 2014). In the case of SfEP, with its national membership averaging 2 000, only 29 mentorships were registered in 2013 (1.45% of members), and only 55 in 2014 (2.75% of members; SfEP 2015b). However, the introduction and implementation of an online blended model for autonomous adult learning (the larger project to which this article contributes) has the potential to increase access to online mentorships because of their convenience to practitioners and their asynchronous nature.

Given their circumstances, text editors have access to fit-for-purpose mentoring by fellow editors only through membership of professional associations; this serves to make them members of a professional community and in turn validates the profession (Kotzé 2012). Such voluntary mentorships are at best semi-formal, being mentee-driven though mentor-monitored. But whether or not they are members of an association, a not insubstantial group of adult text editors, with their personal and career developmental needs in their own hands, is in need of lifelong professional development or the equivalent of on-the-job learning opportunities that include role-modelling, networking, guidance on running a business and marketing (Sparrow 2008), and building their self-efficacy, inter alia by being challenged and supported by a mentor who provides developmental opportunities. This is where implementing the principles of Knowles' (1970, 1984) adult learning theory, as described and applied in this article, can make an invaluable contribution to text editors' success in delivering quality products to their clients (even while being mentored).

It is generally acknowledged that distance or online learning presents challenges for participants (Sherry 1996; Ellis 2000; Passerini and Granger 2000; Single and Muller 2001; Sinclair 2003; Cubric, Clark and Lilley 2011). Mentees experience challenges related to technology (especially for IT non-natives), the distance between facilitator and learner (encounters being asynchronous and no longer face-to-face), and personal motivation (needing external stimuli such as peers, teachers, deadlines) (Sinclair 2003). However, applying Bandura's (1977) self-efficacy mechanisms – including a combination of mastery experiences, social modelling and social persuasion – in an online mentoring model should empower participants in mentorships to overcome such obstacles to lifelong learning more easily. This should be particularly true of individuals whose learning styles and needs are more suited to autonomous learning and focused on achieving success and whose strengths are used to achieve it (Ellis 2000).

Unlike learning interventions such as training and teaching, the semi-formal mentoring currently available to text editors is bound by neither syllabus nor curriculum, nor does it have any formal assessment component attached to it (or even informal assessment at best). As a result, it is not possible to benchmark mentees upon completion of a mentorship (IHEP 2000). This should be viewed as a flaw in a system that tends to militate against the professionalisation of text editors because of the lack of standardisation it leads to. It is a clear area for further research: into a standard assessment model that can be applied to editor-mentees in order to evaluate both their progress during mentoring and their level of editorial proficiency at the end of a mentorship. International best practice, clients and text editors themselves surely require this.

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Reading to Learn: A literature review within a South African context

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Abstract
Academic literacy development within the secondary schooling system in South Africa has reached crisis proportions, with a large number of students exiting the system unable to function adequately within the tertiary sector or labour market. Attempts to remedy this crisis by introducing curriculum reform over the past few years have yielded little success, with universities having to take on the literacy problem by offering a variety of remedial programmes to ensure that students are equipped to access learning and succeed at their studies. Research shows that most literacy intervention programs at universities appear to favour a more traditional approach to English academic language development by focusing on grammatical rules, sentence structure, spelling and punctuation. This bottom-up approach does not necessarily equip students with the skills needed to write coherent and cohesive extended pieces of writing as required by university assessment processes. For this reason, the Reading to Learn (RtL) methodology was chosen to be implemented within a writing module at the University of KwaZulu-Natal and within selected Grade 11 classes in the Winelands District in an attempt to find an alternative approach to academic literacy development. The purpose of this article is to offer a comprehensive synthesis of some of the theoretical assumptions of RtL as well as its practical implementation before embarking on an evaluative study of this methodology in future papers. In doing so, this article offers a brief discussion on academic literacy pedagogies and situates RtL within these frameworks. This is followed by a synthesis of the practical implementation of RtL and a discussion of the works of Halliday (1989, 1996), Vygotsky (1978) and Bernstein (1990, 1996) which have had an influence on the development of RtL.

Keywords: academic literacy, Reading to Learn, academic reading and writing pedagogies, genre pedagogy, scaffolded learning

1. Introduction

The national language-in-education policy of South Africa mandates the use of English as the medium of instruction (MoI) for all students from Grade 4 onwards. Despite an ongoing debate about the benefits of mother tongue education on student success, and the unintended outcome of excessive mother tongue code-switching in classes where English is deemed a barrier to learning,

this article takes the following as a point of departure: the reality that, for the majority of secondary school students, English is the default MoI even in classes where, for an overwhelming majority of students and educators, English is a second, third or even foreign language. To some extent, this offers an explanation for the poor English literacy development of a large majority of secondary school students in South Africa. A consequence of this reality is that unequal opportunities for learning are presented to these students which also results in unequal learning outcomes. In such cases, an inability to develop more advanced English academic literacy skills becomes an indicator for academic marginalisation, exclusion and alienation at secondary school level and later at tertiary level. Because Reading to Learn (RtL) was developed to bring marginalised students into the mainstream in the Australian education system (Rose and Martin 2012), and thus provide equal opportunities for learning for all students, there is good reason to test the efficacy of RtL in a South African secondary school and university context. I acknowledge that RtL is one of many available literacy interventions that could be utilised in South African classrooms or lecture halls to assist in academic literacy development. However, given that I was introduced to this intervention during my teacher training, I have became more interested in the intervention because it has a number of distinct features which may render it suitable for South African school-based interventions in a similar way to its appropriateness for Australian classrooms. These include a pedagogy designed to be appropriate for adolescent students, an inclusive pedagogy with regard to diversification of cultural and linguistic factors found within multilingual and multicultural classes, a close link to conventional national curriculum standards and practices, flexible modes of delivery, and a strong supportive base for advanced literacy development which applies to reading, writing and grammar skills. The aim of this article is to offer an overview of RtL and its practical implementation in classrooms by providing a summary of the literature as far as the conceptual framework of RtL is concerned. The article begins with a discussion of academic reading and writing pedagogies, and where RtL is situated with respect to various pedagogical paradigms. Secondly, an overview of the practical application of RtL is presented. Thirdly, the developing conceptual framework of RtL is discussed, which synthesises the seminal works of Halliday (1989, 1996), Vygotsky (1978) and Bernstein (1990, 1996), all of whom have had a strong influence on the origination of RtL. Lastly, a concluding section is given.

2. Literacy, academic reading and writing pedagogies, and Reading to Learn

Literacy skills development of students in South African schools post-Apartheid might lead one to conclude that education is a high-cost, high-enrolment, yet low-quality system (Taylor 2009: 12). The future looks bleak, if the following statistics from the Department of Basic Education (2013) are anything to go by: 61% of Grade 6 and 9 English first-language students scored less than 50% for the 2012 English Annual National Assessment (ANA) exam, while 75 % of Grade 6 and 79% of Grade 9 English second-language students failed to score above 50%. Furthermore, given the arguably high levels of social and distributional inequality in South African education today (UNESCO 2011: 87), students from lower socio-economic communities fail to break the cycle of poverty. Policy recommendations for increased student performance in South Africa are impressive but fail to focus on the practical component of teaching and learning. For example, improved school infrastructure, better school management, enhanced feeding schemes, increasing the number of qualified teachers, and improving teacher and school accountability are a few valuable proposals which may foster more equitable learning outcomes in South African schools. However, none of these offer a practical solution to the improvement of actual teaching and learning of literacy skills in the classroom. To ensure the most disadvantaged educational facilities (at primary, secondary and tertiary levels) have the capacity to provide quality literacy

programmes, low-cost strategies need to be developed to assure that even "no-fee" schools can access them. Such an intervention has been developed, albeit for the Australian educational context, in the form of RtL.

Before unpacking the conceptual framework of RtL, the concept of 'literacy' needs to be defined, as it can be rather ambiguous given the evolution of concepts such as 'new literacies' and 'multimodal literacies', to name a few. For the purposes of this article, "literacy" refers to a student's ability to read English texts fluently and with comprehension, write English texts coherently, synthesise different information sources and offer a critical awareness of the information at a grade-appropriate level to ensure access to knowledge and success in education (UNESCO 2011). RtL is not confined to the English language only, but can be applied in any language, and encompasses the improvement of literacy skills ranging from pre-foundation phase to tertiary level. Some criticism may arise regarding my use of such a limited definition of literacy but, given the particular concern espoused by various stakeholders regarding the poor standard of reading and writing skills of South African students, it stands to reason that literacy is discussed from a reading and writing perspective only for the purposes of this article.

Literacy pedagogies often include one perspective of reading and writing. For example, *traditional* pedagogies foreground linguistic features of written texts and ensure that students are presented with the regularities and "rules" related to particular forms of written texts only (Luke and Freebody 1997). *Socio-literate* approaches emphasise that writing is a social practice and is shaped by social forces as much as it is shaped by linguistic and cognitive processes (John 1997, Jackson 2005). Furthermore, socio-literate pedagogies expose the multifaceted and often countless meanings and uses that reading and writing can have for different communities (Swales 1990, Gee 1996). *Behaviourist* pedagogies, which use basal readers and phonics programmes, focus on the development of literacy skills of individual students by communicating systematised information of language structures and curriculum content. *Progressivist* pedagogies, such as "whole language" literacy models, focus on the personal development of individuals through the acquisition of cultural and personal abilities (Martin, Christie and Rothery 1987). *Critical* pedagogies aim to change political relations between groups of individuals through the teaching of critical literacy skills (Freire 1970, Bourdieu 1991). *Social-psychological* models, which use genre-based methods, are also concerned with changing power associations. This is achieved largely through the transmission of literacy skills via institutionally privileged discourses (Rose and Martin 2005).

None of the abovementioned approaches are without fault, though. For example, social-psychological approaches, which make use of genre-based methods[1], erroneously assume that all students have access to formal educational discourse[2]. Personal experience has also highlighted that genre-based pedagogies may result in the development of "mechanical" writers who are less confident to deviate from genre model guidelines given in class, thereby failing to produce autonomous students who can apply and adapt the genre guidelines to different writing tasks (Millin

[1] Genre teaching comprises the explicit teaching of organisational patterns and structures found within differing types of "genres" developed to meet differing social purposes.

[2] Here, "discourse" refers to the use of language in a specific way to meet formal educational expectations. For example, this may refer to more formal academic language. Generally, the term (written with a lower-case 'd') refers to language in use. However, when the use of language is combined with other social practices – such as ways of doing, behaving, believing, dressing, and customs and practices – then the term "Discourse" (with a capital 'D') is used.

2011, 2015). Equally, critical (literacy) pedagogies are often inconsistent with regard to distinguishing between critical literacy and critical reading. For example, critical reading asks for an objective analysis of authorial intention, rendering the practice positivistic in nature. In contrast, critical literacy maintains that what constitutes knowledge is not neutral. Instead, it is based on the discursive rules of individual communities, and is therefore both ideological and interpretivist in nature (Cervetti, Pardales and Damico 2001). In South Africa, unless students are given the necessary skills to increase their level of criticality, they are merely likely to perform mechanical critical reading and may fail to achieve critical literacy objectives as set out by the new Curriculum Assessment Policy Statement (CAPS). It needs to be made clear that often the confusion between critical literacy as pedagogy and critical reading as a way of engaging with content is not a shortcoming, but is most likely a problem that scholars have in making a clear distinction between similarly termed but differently aligned educational matters. From the explanation above, it becomes increasingly clear that literacy development in the classroom should not be perceived simply as the adoption of one pedagogic approach or the "mastery of a fairly discrete set of decoding and encoding skills" (Jackson 2005). Rather, literacy development programmes need to integrate aspects of numerous approaches. RtL's approach to literacy development attempts to synthesise the various pedagogies mentioned above, as illustrated in Figure 1 below. Instead of adopting one particular viewpoint of academic literacy pedagogies, RtL has managed to incorporate multiple aspects of the progressivist, behaviourist, social-psychological, critical and constructivist pedagogies, resulting in an intervention that is supposedly able to fast-track development of literacy skills within any phase of the curriculum and across all subject specialisations (Rose 2006, Acevedo 2010).

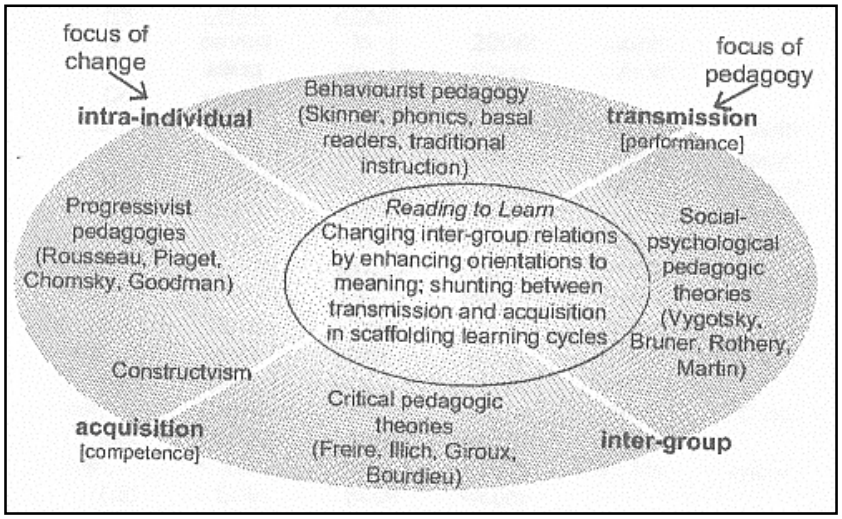

Figure 1: Types of pedagogy that collectively comprise Reading to Learn[3]

3. Reading to Learn

RtL is a teaching and learning methodology for literacy development. It includes a professional teacher development programme that was developed in Australia over a number of years to meet the needs of a community of students who typically find it difficult to gain access to learning content due to serious lags in their literacy development (Rose 2004, Rose and Martin 2012). The

[3] Taken from Rose (2007).

programme is based on three core principles. The first principle derives from the assumption that reading provides the primary mode of learning. Thus, the explicit teaching of reading concurrently with the teaching of curriculum content is advised. Teachers then need to integrate the teaching of reading and writing skills across all subject disciplines (Rose and Acevedo 2006). This means that all teachers, regardless of subject discipline, are considered literacy teachers. Secondly, unlike current trends in education in South Africa which see class activities pre-determined by student ability, all students in the same classroom are taught at the same level of reading and writing skills to ensure that the abilities gap commonly found in classrooms and maintained by differentiated learning is not maintained or exacerbated. Thirdly, learning supposedly takes place when teachers are able to offer students support beyond their current abilities, thereby ensuring that students reach higher levels of learning through purposeful scaffolding[4] (Rose and Acevedo 2006). Thus, RtL is able to facilitate learning across the curriculum, and improve the chances of academic success of traditionally marginalised students whilst simultaneously adding value to the learning and progress of those students already deemed to be strong students. RtL is founded on an understanding of grammar developed in Systemic Functional Linguistics. This means that a particular perspective on language is foregrounded where language is supposedly determined socially rather than mentally.

One of the main achievements of RtL is its ability to minimise educational inequality. This is accomplished by using a pedagogy that is focused on supporting students in their acquisition of crucial orientations to reading and writing, achieved by careful scaffolding in a purposefully designed teaching cycle (Rose 2006). For example, if one examines university academic requirements, the primary skill that students require for access and success is the ability to learn autonomously from reading (Rose, Rose, Farrington and Page 2008), as university courses generally require large portions of academic texts to be read before lectures. Thus, the function of the lecture is to synthesise and build upon information offered in the course readings (Rose et al. 2008). Students are then required to demonstrate their understanding by way of written assignments. However, according to Rose et al. (2008), the traditional academic cycle (see Figure 2) assumes that students come to university already equipped with the skills necessary for autonomous learning from reading, a skill that should have been developed in the secondary school phase. Consequently, students already disadvantaged by a poorer quality of secondary school education (and who are incapable of autonomous learning from reading), are further disadvantaged at a tertiary education level[5]. From Figure 2, the assumption that the secondary school system has adequately prepared students to cope with the traditional academic cycle cannot be taken for granted. It is no surprise then that university academics in South Africa are faced with, for example, relatively high rates of attrition as far as lecture attendance is concerned. Failure to read and understand what has been read before lectures, coupled with student attrition, means that tutorial sessions fail to remedy an already systemic problem in relation to weaker performing students. This implies a failure of such students to demonstrate adequately in writing what has been learnt, which in turn translates into a breakdown in the traditional academic cycle.

[4] "Scaffolding" refers to the input teachers give to students to assist them in producing tasks that they ordinarily would not be able to complete on their own.

[5] There are numerous reasons why students fail to comprehend what they read, especially as far as English second-language or additional-language speakers are concerned. Some reasons might be: students have not adequately developed their home language vocabulary, which then limits the extent of mental representations required to comprehend what has been read in the English text; students do not read at a fast enough pace to achieve a minimum reading fluency required to comprehend what has been read; or students lack the motivation to read, especially academic texts, which undermines the traditional academic cycle.

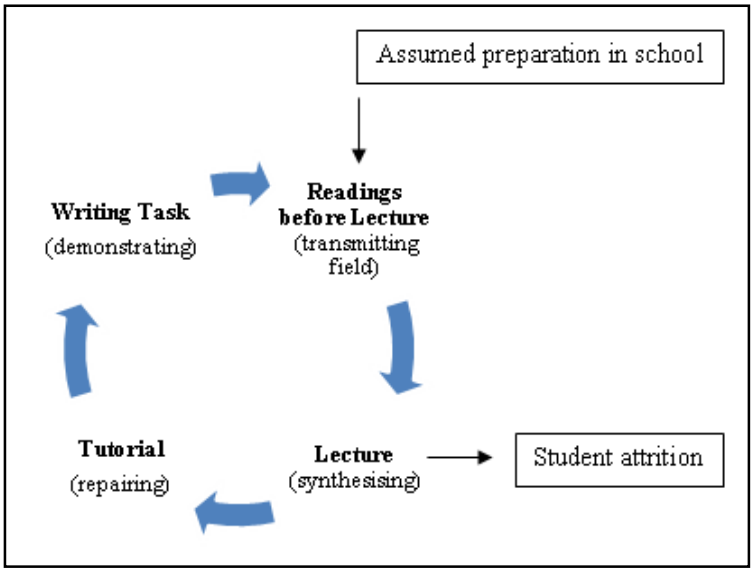

Figure 2: The traditional academic cycle[6]

In an effort to overcome barriers to learning imposed by the traditional academic cycle, the first phase of the RtL cycle, "Preparing for Readings" (see Figure 3), is used to address the inequitable suppositions of the traditional academic cycle. Instead of insisting that students spend their time outside of lectures or classes independently reading abstract course texts, which can be demotivating for second or additional language students, some class time is used to assist students in reading difficult texts with critical comprehension (Rose et al. 2008). Similarly, some class time is also used to guide students through the writing process (see Figure 3). Aspects concerning the processes of reading and writing may not necessarily be taught by the subject lecturer or class teacher, but rather a language specialist in conjunction with the lecturers or teachers concerned. For example, the University of KwaZulu-Natal's (UKZN) Department of Economics has a dedicated language specialist who offers reading and writing lectures to extended degree students. The texts to be used in the literacy development classroom are "authentic" (of subject-specific relevance) and are best chosen in conjunction with subject lecturers to ensure that the benefit to students is maximised. Similarly, the academic literacy support offered to selected Grade 11 students during a pilot study[7] of RtL within a secondary school context made use of curriculum-based work, thereby ensuring that the teaching of academic reading and writing was carried out alongside the teaching of curriculum content. (See the Appendices for an example of materials developed for an academic argument essay with one set of Grade 11 students.)

[6] Taken from Rose et al. (2008).
[7] This formed part of my PhD study on the efficacy of RtL with selected Grade 11 students in the Winelands District (Millin 2015).

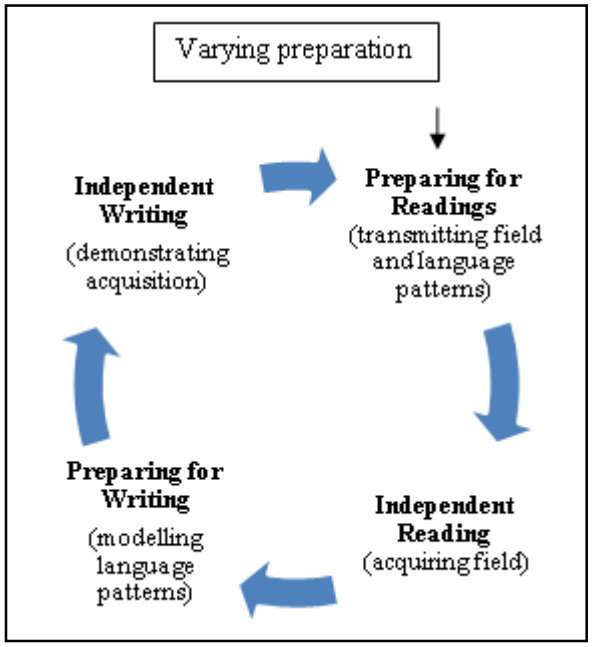

Figure 3: The scaffolded academic cycle[8]

The four-stage scaffolded academic cycle (Figure 3) can be expanded upon, resulting in a six-stage RtL cycle (not included for discussion here due to word limitations) which can be implemented in both secondary school classrooms and tertiary-based academic writing modules (as well as primary schooling) to raise students' academic literacy skills. Upon first glance, any person familiar with school-based teaching practices and tertiary teaching in South Africa might argue that the RtL cycle is likely to be too onerous and time-consuming to implement effectively given the stringent CAPS requirements and university curriculum constraints. However, one must bear in mind that the RtL cycle is meant to be used for dedicated reading and writing lessons, which usually comprise only one or two lessons, at the most, out of a scheduled five or six lessons per week or per cycle at school. A more detailed explanation of the RtL cycle within the secondary schooling context can be found in Millin (2015), which seeks to elucidate how such a process can be practically implemented in South African classrooms to ensure better preparation for tertiary studies.

4. The conceptual framework of Reading to Learn

4.1 Halliday – Language as a text within a social context

Reading texts in English is an immensely challenging task for non-native speakers of English, and even more so for students who have not yet developed Cognitive Academic Language Proficiency (CALP) in either their home language or mother tongue (L1), or first additional language (L2), regardless of whether a student's L1 or L2 is used as the MoI at school (Millin 2015). This is because the ability to grapple with the complexities of reading and writing involves the ability to recognise and replicate patterns of language on three different levels, namely the levels of "discourse semantics", "lexicogrammar" and "graphology" (Halliday 1996), as illustrated in Figure 4. The most noteworthy difference between Halliday's approach to reading

[8] Taken from Rose et al. (2008).

and writing, and the approach adopted in schools in South Africa currently is that the former adopts a top-down approach whereas the latter, for the most part, adopts a bottom-up approach. If having acquired CALP is a necessary condition to access the complexities of academic texts encountered at a tertiary level, one should not be surprised to find that scores of students navigate their way into tertiary education in South Africa only to find that they are ill-prepared to cope, let alone succeed, with the rigors of academic discourse[9].

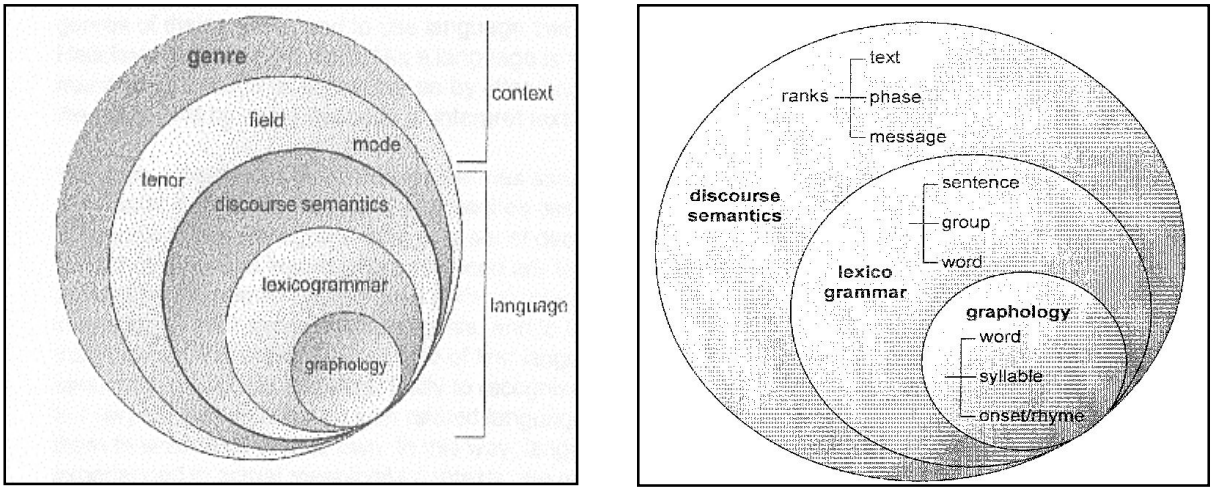

Figure 4: Halliday's (1996) stratified model of language[10]

The following explanations of Halliday's (1996) "discourse semantics", "lexicogrammar" and "graphology" are synthesised from Rose and Acevedo (2006) and Rose and Martin (2012).

"Discourse semantics" relates to aspects of language beyond the clausal level. Readers need to be able to recognise what the text is about and how it is organised. For example, students need to be able to recognise the sequence of events in narratives or chunks of information in factual texts. This entails a recognition and interpretation of the genre of the text which would then allow students to ascribe the text to a specific purpose and organisation. See Appendix A for an example of a schematic map of an academic argument used with selected Grade 11 students in a South African pilot run of RtL (Millin 2015).

"Lexicogrammar" relates to aspects of language at the phrasal and clausal level. Readers need to be able to recognise the arrangement of words within phrases while simultaneously recognising the function of each phrasal component. For instance, students need to be able to recognise the subcomponents of clauses that provide information about processes (what is being done – *verb phrases*), participants (who or what the sentence is about – *noun phrases*) and circumstances (where, when, why and how).

"Graphology" relates to aspects of language at the word level. Readers need to be able to recognise what each word means within the text and how individual letters are arranged to form particular words. Put differently, students need to be able to understand how individual symbols come together to form individual words.

[9] Other studies which have also reported on the under-preparedness of undergraduate students are Troskie-De Bruin (1999), Penrose (2002), Van Schalkwyk (2008) and Allardice (2013).
[10] Both figures appear in Rose and Acevedo (2006), and Rose and Martin (2012).

Because of the complexities of accessing texts, as illustrated above, it is argued that the teaching of literacy needs to be "simplified" (complex patterns need to be broken down) to assist students in accessing all three levels of a language (Rose 2005), whilst simultaneously ensuring students' affective filters are not raised due to the stressful nature of reading tasks (Krashen 1981). Very briefly, the affective filter is an impediment to language acquisition – or learning of any kind, for that matter – caused by undesirable emotional responses to learning environments. Therefore, anxiety and stress can inhibit language learning as these emotional factors function as filters between the input being provided and the amount of input the student is able to take in (Krashen 1981). By breaking down a text, for example, the task becomes less stressful, and students are able to make sense of the text in question. An understanding of the text at a global (or genre) level offers the foundation for students' understanding of the overall text. The genre of a text offers insight into the field, tenor and mode[11] (Millin 2015). Similarly, individual sentences can only make sense in relation to other sentences that come before and/or after it, and these links need to be made clear to students (Rose 2006, Hart 2009). Equally, words within a text only make sense in relation to the other words used in close proximity. Therefore, the conceptual framework which informs RtL, from Halliday's (1996) point of view, assumes that if students understand what the text is about (discourse semantics) and how clauses within the text are arranged (lexicogrammar) to provide crucial information, students will be better equipped to recognise the meaning of individual words (graphology).

According to Rose (2006), the ability to understand these complexities provides students with access to written codes of knowledge, and the ability to unlock the usefulness of "devices" used to convey meaning. Given that students in secondary schooling and tertiary education in South Africa are required to read "specialised" academic texts to access curriculum content, and subsequently write about the material, an ability to access the three levels of texts becomes crucial. Arguably, most teachers are of the opinion that the availability of subject-specific technical terms, together with their definitions, is sufficient for English Second Language (ESL) students to access meaning within abstract, technical texts (Cohen, Glasman, Rosenbaum-Cohen, Ferrara and Fine 1979). However, other research has shown that a mastery of technical terms and vocabulary is not the solution to accessing academic content (Selinker, Todd Trimble and Trimble 1976). Furthermore, access to non-technical aspects of texts, such as specialised referencing devices (for example, lexical and grammatical cohesive devices as well as theme and rheme patterning), created greater barriers in accessing meaning. Therefore, according to Rose (2006), problems related to the accessibility of meaning are often closely related to a lack of information and attentiveness to the function of rhetorical devices used within texts. Given the complexity of academic texts, students especially at tertiary level need intensive scaffolding in how meaning is conveyed in these texts, and not only assistance in accessing technical terms found within academic texts[12]. However, if this scaffolding can be provided earlier, at secondary school level, students might find the transition to university easier with regard to accessing abstract academic texts. This leads to a discussion of the second theoretical perspective, advanced by Vygotsky (1978), which underpins the conceptual framework of RtL.

[11] "Field" refers to what is going on in the text or what the text is about. "Tenor" refers to the participants involved in the text as well as the relationship between participants, their roles and status or rank, and the permanency of the relationships. "Mode" refers to the type of channel used for communication.

[12] An inability to understand simple conjunctives was evident in my teaching experience at UKZN. Students did not understand how certain conjunctives indicated that opposing viewpoints of a thesis were being presented. Consequently, when asked to paraphrase all the positive attributes of living in rural contexts, students gave both the positive and negative attributes. This is because conjunctives such as "however", "on the contrary" and "in contrast" were simply misunderstood.

4.2 Vygotsky – Learning as a social process

Current pedagogic practices in South African schools are closely aligned with the incremental learning model, formalised through Piaget's (cited in Wadsworth 1984) theory of innate developmental stages. In other words, teachers provide a diagnostic form of assessment, and then present activities or tasks to students based on their assessed abilities (Rose 2005). According to Rose (2005), progressivists view this practice as "student-centred". However, the problem in South Africa remains that the "ability" gap between weaker and stronger students is rarely closed, as teaching and learning tasks are controlled by the competence of students. RtL aims to close this gap by incorporating aspects of Vygotsky's (1978) theory of social learning into its pedagogic practice. RtL incorporates three fundamental aspects of Vygotsky's theory of learning as a social process, namely social interaction, mediated learning, and the zone of proximal development (ZPD). Very briefly, the ZPD is the gap between an individual student's actual academic literacy capability and his or her potential capability, which results from collaboration with a significant (more capable) other, such as a peer, mentor or teacher.

At school and university, students are usually required to demonstrate what they have learnt through written assignments. Complex patterns of language are needed to assist students in the successful completion of these tasks. However, if a student is left to develop this sophisticated grasp of language on his or her own, most students from working class, oral-cultured families would most likely fail at doing so (a more detailed discussion of this is beyond the scope of this article and incorporates a discussion of assimilation into formal educational Discourse). Therefore, RtL makes use of social interaction in supportive environments to assist students in developing more advanced levels of understanding of academic texts, more advanced than they would otherwise have been if these levels of understanding were to develop individually (Vygotsky 1978). Vygotsky (1978) refers to this metaphorical "place" as the ZPD. It is within this zone that marginalised students are given the "skills" to complete tasks (for example, understand academic texts and other related material) independently. Because students develop the ability to imitate patterns of thought or spoken language through intensive scaffolding from a significant other, they increasingly develop the ability to comprehend academic texts and produce their own without the assistance of others (Mitchell and Myles 2004). They therefore develop academic autonomy. The amount of assistance is gradually reduced until students are able to integrate the new skills into their own consciousness. The support offered by educators gradually shifts to become internal and self-governing, and is indicative of a successful process of scaffolding.

According to Vygotsky (1978, cited in Schaffer 2004), students ordinarily develop advanced forms of reasoning and awareness through collaboration with others more accomplished than themselves. It is through these social interactions that students acquire the critical cultural skills needed to participate in society. These skills include communicative skills that students need in order to be able to access pedagogic strategies, such as RtL, which are used for the development of literacy skills. Furthermore, these skills are considered the same as Bernstein's (1990, 1996) "restricted and elaborated codes of consciousness". As far as the application of RtL in the Australian context is concerned, because most Aboriginal students come from oral-cultured families, skills related to elaborated codes of consciousness are not necessarily passed on to these students before they start school. It could be argued that the reality of most South African students, in terms of a childhood orientation to an oral culture, is not too dissimilar to the experience of non-native English speakers in Australia. Therefore, it becomes critical to employ

literacy intervention strategies that address this obstacle. As such, RtL was designed with this barrier in mind.

Learning as a social process, and the resultant acquisition of cultural skills (for example, orientations to reading) needed to access academic texts, should take place through social interaction (Schaffer 2004). The type of language used in classrooms – for example, a higher-order versus lower-order language vocabulary – should be seen not only as a vital source of input for communication, but also as a crucial part of cognitive development. In other words, language becomes the "vehicle for thought" or channel of mediation in the development of CALP (Mitchell and Myles 2004). Consequently, it is language that guides students' thoughts and directs their attention to important rhetorical devices within academic texts, highlighting the link between understanding of academic texts and communication. Thinking is facilitated by communication and the type of language used (amongst others), which means that the learning of literacy skills becomes a "mediated process" (Schaffer 2004). However, development is necessary of the associations between students' own frames of reference and abstract concepts presented within academic texts. For students who have already had access to some rhetorical devices, a process of *assimilation* takes place. However, for students who have limited academic proficiency in their native or home language – a plausible assumption for many South African students – a process of *accommodation* needs to take place, which can often be problematic and time-consuming when one considers that students in any particular classroom context have different language abilities. Nevertheless, Mitchell and Myles (2004) argue that it is during this mediated process of language usage that students are supported in the development and control of their unique "mental tools". It is both through the supported development and subsequent use of these "mental tools" that students are able to access the three layers of text in Halliday's (1996) stratified model of language – see Figure 4 (Mitchell and Myles 2004).

The success of the mediated process is dependent upon shared processes and face-to-face interaction. Through interpersonal communicative strategies, students "pool" their understanding of the intricacies of academic texts, and cooperatively negotiate meaning and understanding of these texts. This collaborative understanding would not necessarily be possible if students attempted to do so independently. Conversations with highly-trained participants (educators) are vital for this process, as the thoughts and insights of these participants are internalised by students, resulting in greater control of mental processes. Similarly, communicative interactions with peers of better language ability, as well as educators, are important as both the level of interaction together with the interactants with better linguistic ability are considered the origin of new language, and consequently, new thought (Vygotsky 1978). Within the RtL cycle (Lemke 1990, Rose 2006), students are provided with the language and feedback necessary to comprehend academic texts. Within this cycle, the progression from interpersonal (or shared) speech to intrapersonal (or inner) speech allows for CALP to develop. However, one must bear in mind that this is not a random process, but takes place through explicit scaffolding within the student's ZPD. It must be noted that mediated learning through educator scaffolding may be a problematic process in the South African context. This is because few teachers in some rural schools possess the necessary qualifications or native English-speaking proficiencies needed to generate "new", higher-order language and thinking patterns necessary to advance academic literacy. It would seem tautologous to say that improving educator skills in English language proficiency is an important part of strengthening the process of mediated learning; nonetheless, efforts by the Department of Basic Education in building language capacity would be a catalyst to ensuring the

success of literacy interventions, such as RtL, which rely strongly on significant others to build language capacity.

4.3 Bernstein – Education as a pedagogic device

Section 2 of this article highlighted the dismal literacy performance of students at secondary school level, with students studying English as a first additional language (L2) more likely to face the full brunt of the growing literacy problem (UNESCO 2011). Research has shown that there tends to be a difference in literacy performance of students from well-resourced, former model C[13] schools as opposed to students coming from township and rural schools (UNESCO 2011, Millin 2015). Given this scenario, it becomes too easy to assign the literacy outcome of students solely to socio-economic circumstances. However, one should possibly be attributing lower levels of performance to issues such as poorer levels of early childhood linguistic stimulation and possibly a lack of early socialisation into the dominant Discourse of formal education (Duncan and Seymour 2000, Ghosh 2013). Both Bernstein (1996) and Rose and Martin (2012) articulate that, all too often, the academic performance of students is attributed to innate biological abilities and cultural associations. This is not to be disputed, however, this does not necessarily account for the poor academic performance of some students, where an association between academic performance and innate biological abilities becomes the scapegoat for legitimising individual failure instead of looking at unequal opportunities for quality learning at some schools (Bernstein 1996).

Rose and Martin (2012) attempt to make a case for the fact that literacy development curricula at schools fail to provide explicit instruction in reading and writing after the first two years of schooling. This is often linked to competence models of education (Rose 2005). In competence models of schooling, the literacy development curriculum presupposes an already established, innate educational competency due to the fact that, apparently, all students arrive at school with the necessary pre-orientations to the dominant discourse of formal education (Rose 2005). Consequently, literacy instruction after the first two years of schooling becomes implicit, with the teacher's role being that of the "guide on the side". Bernstein (1996), Rose (2005), and Rose and Martin (2012) further argue that knowledge systems necessary for successful assimilation into the school Discourse (see fn. 2 for an explanation of this term) are construed to be invisible to the student struggling to assimilate into the Discourse of the school. Given this scenario, teachers within a competence model of schooling assume that all learners entering the formal educational domain are already successfully assimilated into the Discourse of schooling, and thus fail to explicitly help students make the transition (Rose 2005). In practical terms, this could relate to reading and writing skills. Less assistance with regard to reading and writing is given beyond the second year of primary school, so if a student still has not mastered (either of) these skills by then, he or she may struggle to become an independent reader and/or may have difficulty writing later on. According to Bernstein (1996), this is not because of an innate biological fault on the student's part; rather, it is more likely due to unequal opportunities to access formal learning.

In direct contrast to the competence model of literacy development, RtL supposedly adopts more of a performance model. With this model of literacy development, classroom attention is given to the learning of specialised literacy skills needed to complete specific academic tasks

[13] Former White schools during Apartheid.

at school (Rose 1999). The skills needed to become successful learners in a discourse possibly foreign to some students are made explicit during classroom interaction. In this scenario, the teacher moves from being the "guide on the side" to being the "sage on the stage" (Bernstein 1996). With interventions like RtL and the attempt to make knowledge specific to formal educational Discourse more visible to students, the age-old metaphor of the "hidden curriculum", applicable to many educational systems, might possibly be rectified (Rose 2005). To understand the concept of the 'hidden curriculum' in education, one needs to look simultaneously at the role of instructional and regulative classroom discourse (Rose 2005). According to Rose (2004), reading often forms the basis of most school-based activities. As a result, educators need to place a strong emphasis on helping students develop systematic approaches to reading skills development. Reading is crucial in that students cannot write about knowledge that they have not acquired through reading-based activities (Hart 2009). It is thus plausible to state that reading becomes a crucial pedagogic medium for accessing vital information, which means that well-developed reading skills become crucial for academic success (Bernstein 1990, Rose 2004). Given the importance of solid reading skills, this is a skill that needs to be developed well as early as possible within the literacy development curriculum. However, this becomes problematic within the South African school curriculum because unequal opportunities exist in which these crucial skills may fully develop. For example, according to UNESCO (2011), 75% of primary school learners fail to meet minimum literacy benchmarks, with 45% of Grade 5 learners struggling to develop basic reading skills. Consequently, the negative impact that the role of instructional and regulative classroom discourse has on students' literacy development is reason to believe that this very discourse might be a strong component of student literacy insufficiencies (Rose 2004).

Instructional discourse refers to the multiple opportunities created in a classroom for the development of specialised reading and writing skills. Regulative discourse is the creation of an identity, and order and management of performance (Bernstein 1996, Rose 2005). In educational contexts, instructional discourse is embedded within a regulative discourse. In other words, instructional discourse involves skills development whereas regulative discourse involves the maintenance of social order (Rose 2005). According to Bernstein (1996), a lack of explicit instruction (regulative discourse) in academic literacy skills development (instructional discourse) is more likely to blame for unequal literacy development in students and not necessarily as a result of a student's innate biological ability. In discussing the above concepts, one also needs to bring into the discussion Bernstein's (1990) concept of 'codes of consciousness' or knowledge.

Middle-class discourse has the propensity of being categorised as elaborate, whereas working-class discourse tends to be categorised as restricted (Rose 1999). According to Bernstein (1996), this is a possible reason for why children from working-class homes are more prone to underperformance in comparison to students from middle-class homes. A possible reason for this is the restrictions to various speech codes that working-class children encounter prior to starting school. Therefore, teachers should be offering suitable classroom practices that could help working-class students produce and respond better to meaning through apt codes of speech. In a schooling context, this may take the form of elaborated codes of consciousness. Having access to either restricted or elaborated codes of consciousness or knowledge affords students different ways of understanding meaning through experience (Bernstein 1996).

Halliday (1989) offers a different term for Bernstein's (1996) codes of language, namely "written or spoken forms of language". Just like elaborated and restricted codes of consciousness or

knowledge, written (elaborate) and spoken (restricted) codes of consciousness necessitate different degrees of skill. Written codes are considered more cognitively demanding than spoken codes, partly due to the fact that speaking consists of face-to-face relations. With written codes, meaning is supported by non-verbal cues. Furthermore, written codes of knowledge are abstract because meaning is rooted in specific language patterns (for example, rhetorical devices such as lexical and grammatical cohesive devices). It is written codes of language patterns that RtL attempts to make more explicit to students who have not been given ample opportunities to immerse themselves into these discourses. The level of inequality regarding access to written codes of language is demonstrated by pre-school access to written or spoken forms of language (i.e. early childhood linguistic stimulation). Rose (2004) found that children from high-literate, middle-class families spent approximately 1000 hours engaging with reading material through or with their parents before starting their school careers. Consequently, these students are more likely to develop the necessary skills to engage efficiently with written texts. As a result, these students will more likely be able to learn to read within the early years of schooling. On the contrary, students coming from low-literate homes tend to have less access to written stories. As a result, these students are more likely to find it difficult to engage with written texts. Consequently, developing the skills necessary to become fluent readers early on at school might be an issue. These difficulties are compounded during each year of schooling as the curriculum increasingly demands more from these students, with the result that students like these tend to fall behind. This highlights probable faults embedded within the sequencing and pacing of the South African literacy development curriculum (Rose 2004), as illustrated in Figures 5a and 5b.

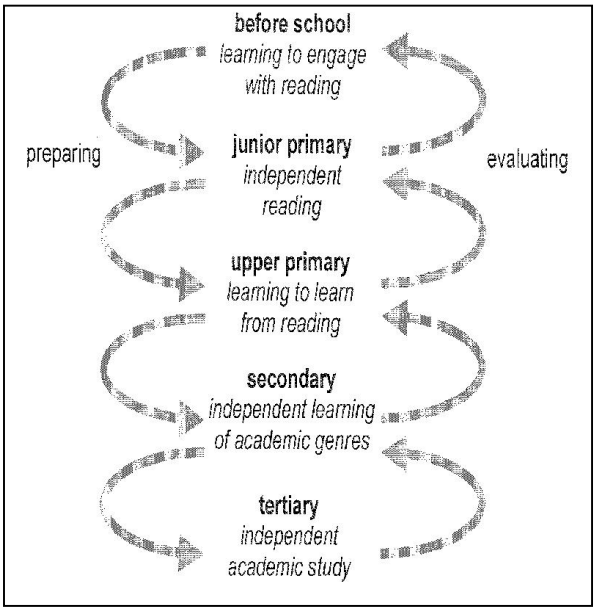

Figure 5a: The literacy development curriculum's impact on marginalised students – South African curriculum goals (Rose 2004)

Before school
Limited pre-school reading experience

Junior primary
Limited explicit instruction of reading skills for students from low-literate homes; focus on decoding not comprehension: "barking at print"

Upper primary
No teaching of reading skills; fluency assumed; limited access to textbooks or reading materials (14 year-olds reading at age 7-8 levels)

Secondary
Inability to learn from reading independently; reading below grade-specific levels

Tertiary
Inability to understand complex academic texts; lose interest; reading levels low.

Figure 5b: The literacy development curriculum's impact on marginalised students – South African curriculum outcomes (Hart 2009)

According to Rose and Martin (2012), the disparity in academic achievement between working-class and middle-class students is because the preparation of "successful" students in obtaining essential reading and writing skills is realised covertly during the secondary phase of schooling.

At this stage of schooling, it is assumed that students are already capable of autonomous learning from reading. As a result of this assumption, a large proportion of curriculum-based content is set out as homework. This offers important learning opportunities necessary for the development of independent reading skills. Students able to read and write independently will probably be able to acquire content knowledge (Rose 1999). However, students unable to make (adequate) use of these learning opportunities may be excluded from the literacy development cycle. This is because the cycle is hierarchical in nature, as knowledge builds upon previously acquired knowledge and skill sets. Consequently, an inability to perform according to predetermined literacy curriculum goals and objectives (Figure 5a) at specific phases of schooling worsens students' chances of reaching appropriate reading and writing goals at a later stage. For this reason, it is possible to maintain that the end result of the pacing of the literacy development curriculum is twofold: students from high-literate homes are given more opportunities to succeed, whilst students from low-literate homes might be excluded from acquiring the skills necessary to succeed at school (Figure 5b). RtL was supposedly designed to remedy this scenario by providing explicit instruction in the teaching of academic reading and writing skills, and thus democratise the classroom by giving all students an equal chance of succeeding.

5. Conclusion

Given that academic literacy skills of secondary school students and university students have called into question the quality of teaching and learning of late, it becomes even more important to find alternative approaches to the teaching of reading and writing at both school and university levels. It must be noted that one particular approach to the teaching of academic literacy may not necessarily be appropriate in bridging the skills deficiency of students exiting the secondary school system. For this reason, given that RtL attempts to amalgamate a number of different academic reading and writing pedagogies, this methodology was chosen for evaluation purposes (the evaluative aspect will be reported on in a forthcoming article) in an attempt to bridge the skills divide of students entering the university system. This article focused on the practical implementation of RtL by offering an overview of how this methodology moves away from the traditional academic cycle towards a scaffolded academic cycle, the latter which is rooted in the theoretical assumptions of Halliday (1989, 1996; language as a text in a social context), Vygotsky (1978; learning as a social process) and Bernstein (1990, 1996; education as a pedagogic device). A detailed discussion was presented of the seminal works of Halliday (1989, 1996), Vygotsky (1978) and Bernstein (1990, 1996), as an understanding of the conceptual framework of RtL is important if one is to engage in a critical evaluative study of the efficacy of RtL within a South African context. From the discussions presented above, it is clear that RtL could be considered theoretically sound. Given that a pilot study of RtL was conducted at the University of KwaZulu-Natal in 2010, and has already been reported on (see Millin and Millin 2014), a strong recommendation is to pilot a similar study within select secondary school contexts to test the efficacy of RtL within a South African secondary school context. Although the context of schooling in South Africa is different to that of Australia, a recommendation for a RtL study within a South African context would be to utilise some sort of comparative method that tests whether RtL is truly an academic literacy intervention for a global audience. Furthermore, given the unique context of schooling in South Africa (teacher qualifications, overcrowded classrooms, low-literate students and dysfunctional schools in some geographic areas), it would be important

to run a pilot study of RtL to test whether the intervention can assist students in the way that it was designed to, regardless of school contextual constraints.

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Appendices

Appendix A: Basic Academic Essay / Exposition Genre (based on Rose (2007))

		Controversial Statement
	Phase 1.1: Background Information	Contextual Information
Stage 1		Definition/s
Introduction	**Phase 1.2**: Thesis Statement	
	Phase 1.3: Controlling Ideas (firstly, secondly, thirdly etc.)	
……		
Stage 2	**Phase 2.1:** Topic Sentence	
Body	**Phase 2.2**: Evidence	
(Paragraph 1)	**Phase 2.3**: Elaboration / Explanation	
	Phase 2.4: Sign-post Forward	
……		
	Phase 2.1: Topic Sentence	
Body	**Phase 2.2:** Evidence	
(Paragraph 2)	**Phase 2.3:** Elaboration / Explanation	
	Phase 2.4: Sign-post Forward	
……..		
Stage 3	**Phase 3.1**: Restatement of Thesis Statement	
Conclusion	**Phase 3.2:** Short / Brief Summary of Each Paragraph	
	Phase 3.3: Recommendations	

Appendix B: Essay Question

In no more than one page (500 words), argue whether the novel "Buckingham Palace" by Richard Rive is relevant to the Grade 11 curriculum according to its historical context.

Buckingham Palace is deemed a literary masterpiece of its time as it keeps alive the history of one of the most notorious yet dynamic communities of South Africa during the Apartheid era. The setting of the novel is District Six, an inner-city dwelling in Cape Town, home to largely the Coloured population of Cape Town. The novel is divided into three clear time segments, namely morning, afternoon and evening, with the mood of the novel taking on a darker tone as the time periods progress. As you jump through time, as the sunset gradually falls on this district, its characters and their homes are erased from the physical realm of Cape Town due to the infamous Group Areas Act of 1966. Despite tragedy and adversity, the community maintains its kinship. The Group Areas Act of 1966 was a move by the Apartheid government to declare District Six a Whites-only area, forcing nearly 60 000 people from their homes to the desolate Cape Flats. It is for this historical perspective alone that "Buckingham Palace" is considered an important and relevant novel for the Grade 11 curriculum. Therefore, this essay will argue that "Buckingham Palace" is relevant and should remain as part of the Grade 11 curriculum. In doing so, this essay will draw links between historical events of the Group Areas Act of 1966 and events in the novel.

The Group Areas Act of 1966 left hundreds of District Six families homeless due to forced removals by the Apartheid government. The reason for these removals, according to the government of the time, was that District Six was a slum and provided the perfect grounds for crimes such as gambling, drinking and prostitution. For example, Zoot is the leader of the gang known as The Boys (pg 19) who is responsible for various petty theft crimes, and Mary, with "the girls", runs the Casbah brothel (pg 25). Despite the people of District Six feeling happy within their community, the government still declared it a "no-go" area and started with forced removals. This event is highlighted in Richard Rive's novel with the bulldozing of many houses in District Six (pg 36) and the forced removal of thousands of people to the desolate Cape Flats (pg 45). In writing about the events of District Six and the emotional turmoil that the characters experience, Richard Rive wants to keep alive the memory, whether good or bad, of the real historical events leading up to the forced removals which are not too dissimilar to countless forced removals which still happen in South Africa today, regardless of the racial group affected. This is a stark reminder that history does repeat itself and hence the importance of being reminded of past events. Therefore, by reading a novel such as "Buckingham Palace", one not only learns about the past, but may be taught how to avoid a similar act of cruelty in the future.

In conclusion, this essay argued that the novel "Buckingham Palace" is considered relevant and should remain part of the Grade 11 curriculum. This is largely due to the historical relevance of the novel as it portrays the events of the infamous Group Areas Act of 1966 which saw scores of District Six residents forced from their homes and moved to the Cape Flats. Richard Rive wanted to ensure, through the reading of this novel that the bad aspects of Apartheid were kept alive, thereby ensuring that past mistakes are not repeated.

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Measuring receptive collocational competence across proficiency levels

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Abstract
The present study investigates (i) English as Foreign Language (EFL) learners' receptive collocational knowledge growth in relation to their linguistic proficiency level; (ii) how much receptive collocational knowledge is acquired as linguistic proficiency develops; and (iii) the extent to which receptive knowledge of collocations of EFL learners varies across word frequency bands. A proficiency measure and a collocation test were administered to English majors at the University of Burundi. The results of the study suggest that receptive collocational competence develops alongside EFL learners' linguistic proficiency, which lends empirical support to Gyllstad (2007, 2009) and Nizonkiza (2011), among others, who reported similar findings. Furthermore, EFL learners' collocational knowledge growth seems to be quantifiable, where both linguistic proficiency level and word frequency occupy crucial roles. While more collocational gains that EFL learners could potentially add as a result of change in proficiency are found at lower levels of proficiency, collocations of words from more frequent word bands seem to be mastered first, and more gains are found at more frequent word bands. These results confirm earlier findings on the non-linear nature of vocabulary growth (cf. Meara 1996) and the fundamental role played by frequency in word knowledge for vocabulary in general (Nation 1983, 1990; Nation and Beglar 2007), which are extended here to include collocational knowledge.

Keywords: receptive knowledge of collocations, English as Foreign Language, linguistic proficiency, word frequency

1. Introduction

Collocations are lexical combinations preferred by native speakers of a language – in this case English – e.g. *say a prayer*, *draw a conclusion*, *make a mistake*, *do justice*, and *lose count* rather than **tell a prayer*, **pull a conclusion*, **do a mistake*, **make justice* and **drop count*[1], respectively. Collocations have increasingly attracted research attention over the past few years (Barfield and Gyllstad 2009). Scholars such as Pawley and Syder (1983) and Wray (2002), among

[1] These examples were taken from Gyllstad (2007: 1-2).

others, have convincingly demonstrated that collocations are important in second language (L2) and foreign language (FL) contexts as they help users to achieve fluency and thus sound nativelike. Pawley and Syder (1983: 192), for instance, state that "[t]he stock of lexicalized sentence stems known to the ordinary mature speaker of English amounts to hundreds of thousands". For them, these lexicalised and semi-lexicalised sentences, which are retrieved as wholes, facilitate fluency. This view is supported by empirical evidence from scholars who have attempted to examine the relationship between collocations and L2/FL proficiency, among other things. Boers, Eyckmans, Kappel, Stengers and Demecheleer (2006), for instance, have established a relationship between collocational competence and oral proficiency among EFL learners. Many other studies have also revealed that collocations can indeed characterise L2/FL proficiency (see, among others, Granger 1998; Granger and Meunier 2008; Gyllstad 2007, 2009; Howarth 1998; Keshavarz and Salimi 2007; Meunier and Granger 2008; Mochizuki 2002; Nesselhauf 2005; Nizonkiza 2011; Schmitt 1998).

The relationship between knowledge of collocations and linguistic proficiency has been established through (receptive or productive) testing, which has proven to be an excellent way of understanding collocations (Gyllstad 2007). Methods adopted include essay analysis, translation, cloze procedures, and recall and recognition tasks. The receptive tests – especially those which associate collocations with L2/FL proficiency – are relevant to this study as the aim here is to measure receptive knowledge of collocations. Barfield (2003), Gyllstad (2007, 2009), Keshavarz and Salimi (2007), Mochizuki (2002) and Nizonkiza (2011) – all reviewed in section 2.2 – are cases in point as all of these studies, with the exception of Barfield (2003), have pointed to the same general tendency that L2/FL proficiency can be predicted on the basis of collocational competence. This is an interesting finding in that even though the studies testing receptive knowledge of collocations did so with different approaches and involved students from completely different backgrounds, they are consistent in terms of the finding that a predictive relationship exists between knowledge of collocations and overall proficiency.

However, it is worth noting that these studies have several limitations which, once transcended, could allow for a full exploration of the relationship between receptive knowledge of collocations and L2/FL proficiency. These limitations range from testing collocational knowledge and another aspect of vocabulary knowledge in the same test battery (e.g. Mochizuki 2002 and Nizonkiza 2011) to testing different types of collocations measured in the same test battery (Keshavarz and Salimi 2007) through not embedding collocations in a context (e.g. Gyllstad 2007, 2009; Keshavarz and Salimi 2007; Nizonkiza 2011). It is my opinion that testing collocations together with another aspect of vocabulary knowledge or testing two types of collocations in the same test battery may negatively impact the test-takers' performance. It may indeed make the task harder or confusing, which may consequently also affect test-takers' performance. This may result in the omission of important information, thereby limiting the generalisability of the results. The same holds true for not providing context which is vital for word knowledge/meaning but often overlooked in vocabulary testing (Read 1997, 2000). Furthermore, none of these studies attempted to estimate the gains made in terms of collocational growth from one level of proficiency to another. Until now, we cannot tell from empirical evidence the amount of collocational knowledge learners are expected to have at different learning stages. This is a gap which I believe should be bridged and which the present study sets out to do. It falls in this endeavour to shed more light on our understanding of the association between receptive knowledge of collocations and overall linguistic proficiency, and thus complements the studies referred to above.

This study endorses Gyllstad's (2007, 2009) view of testing collocations within a single construct, and complements it through the provision of authentic material by embedding collocations within a sentential context. Word frequency bands and their role in collocational knowledge are also considered. The study thus attempts to explore the relationship between receptive collocational competence and EFL proficiency while attempting to quantify knowledge of collocational growth as proficiency increases and across word frequency bands. The following questions are addressed:

(i) Does receptive knowledge of collocations grow with EFL linguistic proficiency?
(ii) Can receptive collocational competence be quantified across proficiency levels?
(iii) Does word frequency play a role in receptive collocational competence growth?

The study was undertaken with the following assumptions in mind:

(i) Receptive collocational competence grows parallel with linguistic proficiency (cf. Gyllstad 2007, 2009; Keshavarz and Salimi 2007; Nizonkiza 2011).
(ii) Receptive collocational competence is quantifiable, but the amount of collocational gains from one level of proficiency to another is not exactly the same. The non-linear nature of vocabulary learning in general (Meara 1996, Laufer 1998, Laufer and Paribakht 1998, Read 2004) inspired this assumption.
(iii) Word frequency plays an important role in receptive collocational competence. Nation (1983, 1990) and Nation and Beglar (2007), for example, have found that lexical competence in general varies according to word frequency bands. It is logical then to assume that the same holds for receptive knowledge of collocations.

2. Related literature

2.1 Definition of collocations

Defining collocations did not seem to be an easy task for researchers, as the available literature indicates. Wray (2002), for instance, reports a terminological problem and complains about the various terms used to refer to this phenomenon of co-occurring words and fixed expressions. She adopts the term "formulaic language" (Wray 2002: 9) which she defines as follows:

> [A] sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar.

The main idea in Wray's definition is that formulaic language consists of units of language or expressions which are stored and retrieved as wholes rather than generated by the rules of grammar. While she places importance on the wholeness of the co-occurring words in terms of storage and retrieval, Sinclair's (1991: 170) definition of collocation, which is "the occurrence of two or more words, within a short space of each other in a text", introduces the notion of 'space' between co-occurring words or, as he calls it, "span" (Sinclair 1991: 170). A span can go up to approximately four words. In the example *All three methods yielded identical results*,

the word *yielded* collocates with *results* in a span of one word as they do not follow each other[2]. Sinclair has also introduced the notion of a main word and a co-occurring word in a collocation, respectively referred to as a "node" and a "collocate". In the above example, the node is *results* while the collocate is *yielded*, and the two collocate in the verb-noun (V+N) combination. Nattinger and DeCarrico (1992: 20) have retained the notions of 'node', 'span' and 'collocate' to which they have added the notion of 'direction' of the collocation, 'frequency', and 'fixedness':

> […] a collocational unit consists of a 'node' that co-occurs with a 'span' of words on either side. The span consists of particular word classes filled by specific lexical items. […] If it is the case that the node word occurs with a span of particular words at a frequency greater than chance would predict, then the result is a collocation. The more certain the words in the span are to co-occur with the node, the more fixed and idiomatic the collocation.

Once again utilising the same example presented above, we can say that *yielded* collocates with *results* to the left, i.e. *yielded* appears to the left of *results*. But in the example *Preliminary results suggest that there is no cause for concern*, the word *suggest* collocates with *results* to the right, i.e. *suggest* appears to the right of *results*. The collocate appearing to the left or right of the node is what Nattinger and DeCarrico (1992) refer to as the "'span' of words on either side". Moreover, what they mean by "frequency" is that in order for co-occurring words to be considered a collocation, they must co-occur together up to a certain threshold.

For a comprehensive overview of the challenges related to defining collocations and the way they have been approached in the literature, readers are referred to Gyllstad (2007). Suffice it to say that co-occurrence of words is the main idea put forward by different scholars in their definitions of collocations. The operational definition adopted in this study is the one provided in the *Oxford Collocations Dictionary for Students of English*, which defines collocations as "the way words combine in a language to produce natural-sounding speech and writing" (Lea, Crowther and Dignen 2002: vii). This definition adheres to the view put forward by Nattinger and DeCarrico (1992) above but excludes idioms from the category of collocations.

2.2 Measurability of collocations

Since collocations gained increased research attention, they have been measured through receptive or productive tasks. The present study being receptive in nature, this section briefly discusses several previous studies which tested collocations receptively. Associating receptive collocational knowledge with L2/FL proficiency has established a predictive relationship between the two, i.e. learners who have a good command of collocations are likely to be more proficient (Gyllstad 2007, 2009; Keshavarz and Salimi 2007; Mochizuki 2002; Nizonkiza 2011).

Gyllstad (2007) developed two tests, namely COLLEX and COLLMATCH, in order to measure the receptive collocational knowledge of Swedish learners of English at different learning levels. COLLEX contains multiple-choice questions while COLLMATCH contains yes/no questions, and both tests measure V+N collocations. The target words (nouns) were selected from the first to the fourth word families appearing in Kilgarriff's (1996, cited in Gyllstad

[2] The examples used here were retrieved from the *Oxford Collocations Dictionary for Students of English* (Lea et al. 2002).

(2007)) online word-frequency list based on the British National Corpus. The *Oxford Collocations Dictionary for Students of English* (Lea et al. 2002) was used for collocates (verbs) selection. The collocates were cross-checked for frequency in Kilgarriff's list (1996, cited in Gyllstad (2007)). As argued by Gyllstad (2007), for testing purposes, they had to be of the same or higher frequency bands as the nodes. The tests, which Gyllstad (2009) validated, satisfactorily measured the test-takers' receptive knowledge of collocations, proved that receptive knowledge of collocations increased with learning stages, and significantly correlated with overall proficiency, depth, and vocabulary size tests. However, the tests had certain limitations, chiefly that no contextual information was provided, which might have affected the test-takers' performance.

The second study reviewed is that of Keshavarz and Salimi (2007). It tested receptive collocational competence of English majors at Tehran University, using a cloze procedure and a "fill-in-the-gaps" format. The test battery consisted of both lexical and grammatical collocations. The tests contained 50 items in a "fill-in-the-gaps" format, where three options from which to choose were provided. Lexical collocations consisted of V+N combinations, where the verbs were omitted and had to be supplied by the test-taker. Grammatical collocations consisted of adjective-noun, noun-preposition, and verb-preposition combinations in which the adjectives and prepositions were omitted. The tests are reported to have measured what they were designed to. The tests' scores correlated well with those of the Test Of English as Foreign Language (TOEFL), a linguistic proficiency measure, which allowed the authors to conclude that receptive knowledge of collocations could be used as an indicator of L2 proficiency. However, the tests have several limitations: (i) it is not clear how and from which source the collocations were selected; (ii) the grammatical collocations are of three types and the question which can be raised is whether or not this could have impacted on the scores; and (iii), as it was reported, it is unclear whether or not the "fill-in-the-gaps" format was embedded in a context (Gyllstad 2007).

Nizonkiza (2011), of which the present study is a follow-up, investigated the relationship between lexical competence, collocational competence, and L2 proficiency. It was conducted on English majors at the University of Burundi, and utilised a test modelled on Read's (1993) Word Associates Test. The target words were selected from the *Collins COBUILD Collocations Dictionary* (1995) following the frequencies of individual words. The collocates of the target words were selected from the same dictionary on the basis of the frequency of co-occurrence with each node. The analytic relations, another type of associate, were selected from the *Concise Oxford Dictionary* (Allen 1990). The number of items totalled 50 and the test-takers were instructed to identify the associates. The study concluded that lexical competence and collocational competence could be good indicators of L2 proficiency, with the vocabulary test scores correlating well with those of the TOEFL.

One of the main limitations of the study is that collocations were not tested in a single construct. Knowledge of analytic relations was also tested in the same test battery. Furthermore, the choice of collocates was only guided by frequency, meaning that their syntactic categories were not specified. The direction of the collocations was not specified either, making the task demanding for test-takers. Like Gyllstad (2007) and Keshavarz and Salimi (2007), Nizonkiza (2011) did not provide any context, which is vital but often disregarded in vocabulary testing (Read 1997). The test thus gave a broad picture of the collocational-lexical competence and can be complemented by improving the test battery.

Mochizuki (2002) tested receptive collocational knowledge together with paradigmatic knowledge and overall vocabulary size. Japanese first-year students participated in Mochizuki's study which aimed to explore how collocational competence and paradigmatic knowledge develop after one year of academic instruction. It is worth noting, however, that the participants were not English majors; they were majoring in other disciplines and were exposed to the language through in-class reading and conversation tasks which totalled 75 hours. The collocation test consisted of 72 words presented in multiple-choice format, where four possible options were offered to participants who were instructed to decide which option was linked to the target word in a syntagmatic (collocational) or paradigmatic (synonym or semantically-related) relationship. The merit of this study is that it is longitudinal in nature as the test was presented at the beginning and at the end of the academic year. Significant differences between pre-test and post-test scores were noted, allowing Mochizuki to conclude that collocational competence increases over time, a conclusion in line with the studies which established a relationship between collocational competence and L2 proficiency.

Barfield (2003) also conducted a study on Japanese students which involved 93 undergraduate and postgraduate students. Collocations of the V+N combination type were tested which were then compared to knowledge of the individual words constituting the collocations. The target words (40 lexical verbs) were selected from the Academic Word List (AWL; Coxhead 2000) and the General Service List (West 1953). Their collocates (three nouns for each verb) were selected from the Bank of English[3]. Barfield created 20 pseudo-collocates which were presented with the real collocates to the participants. Participants were required to rate their familiarity with both the real and pseudo-collocations on the following scale (cf. Gyllstad 2007: 57):

I. I don't know this combination at all.
II. I think this is not a frequent combination.
III. I think this is a frequent combination.
IV. This is definitely a frequent combination.

Barfield (2003) found that individual nouns and verbs were known almost to the same extent. However, scores on collocations were much lower, and the author concluded that knowledge of individual words does not necessarily entail recognising them in the combinations in which they are used. He also found that scores on individual words (both verbs and nouns) correlated with overall proficiency but the collocation recognition did not, thus contradicting the findings from the studies described earlier. On this basis, Gyllstad (2007) rightly observed that the relationship between receptive collocational knowledge and L2 proficiency is inconclusive. Even so, the general observation is that the relationship between collocational competence and L2 proficiency is strong.

As shown in the description above, knowledge of collocations seems to predict overall linguistic proficiency. Even though these studies were conducted in different contexts using different tasks, the general tendency they point to is an interesting finding to build on in order to advance research in this area. The general observation that there is a predictive relationship between receptive knowledge of collocations and overall proficiency has pedagogical consequences. I have in mind the response to the calls made since the 1990s for teaching L2s/FLs with the focus

[3] This is a huge collection of modern English that was initiated by the University of Birmingham. It is regularly updated and, to date, consists of 450 million words. It is available online at http://www.titania.bham.ac.uk/docs/svenguide.html.

on collocations (Lewis 1993, 1997, 2000; Martyńska 2004; Nation 2001; Nattinger and DeCarrico 1992; Singleton 1999; Willis 1990). L2/FL practitioners and researchers (e.g. Boers and Lindstromberg (2009) and Boers et al. (2006), amongst others) have empirically demonstrated the relevance of teaching a foreign language with explicit focus on collocations. Some of these studies have suggested approaches to adopt, of which the recent pedagogical experiments[4] (Barfield 2009, Jiang 2009, Ying and O'Neill 2009), the studies exploring and testing Lewis' (1993) Lexical Approach (Boers et al. 2006; Boers, Lindstromberg, Littlemore, Stengers and Eyckmans 2008), as well as the works reported in Wray (2002), are a few examples. The major finding is that raising learners' awareness constitutes the best way forward for teaching collocations. One general limitation of these studies, however, is that the different approaches do not relate to the frequency of words, i.e. the studies have raised learners' awareness of collocations without taking into consideration the frequency of collocation constituents. Therefore, a possible future study would have great potential if it measures collocations in relation to L2/FL proficiency and takes word frequency into account in an attempt to quantify how much knowledge is added from one level of proficiency to another.

3. The present study

3.1 Sample population

The target population of this study consists of English majors at the University of Burundi from which a sample was selected. By the time the study was conducted, the Bachelor of Arts (BA) was still a four-year degree[5]. The data were collected from first-, third- and fourth-year students (the second-year students were not available) towards the end of the 2009-2010 academic year. The participants were all Burundian nationals between the ages of 20 and 26. While French is their language of wider communication, they all spoke Kirundi as their mother tongue and some of them also spoke Swahili, a lingua franca of the region. Dagnelie's (1992) random sampling technique was used and the selection resulted in 115 participants.

3.2 The test battery

3.2.1 Proficiency measure: TOEFL

The TOEFL was used in this study to determine the level of EFL proficiency of the participants. The idea was to allocate test-takers to different language proficiency levels and then see whether the same levels would be reflected in the collocation test, which would therefore allow for testing of the first two assumptions of this study. The TOEFL is an internationally acknowledged English proficiency test consisting of three parts: listening comprehension, structure and written expression, and vocabulary and reading comprehension. For accessibility and practical reasons, an old paper-based version was used and the Educational Testing Service's instructions were strictly adhered to.

[4] Readers are referred to Wray (2002) and Barfield and Gyllstad (2009) for more details on how to teach collocations.
[5] The higher education schooling system has since been reformed, and BA degrees are now three years in duration.

3.2.2 Collocation test

For the purpose of this study, a receptive collocation test was developed. The target words were selected from Nation's (2006) word list, a database of word families[6] organised in frequency bands based on the British National Corpus. Considered for selection were the 2,000-word, 3,000-word, and 5,000-word bands (cf. Nation 1983, 1990; Schmitt, Schmitt and Clapham 2001) as well as Coxhead's (2000) AWL, the latter consisting of the most frequent words in an academic context and which do not appear in the first two 1,000-word bands. The 10,000-word band, another band considered by Nation (1983, 1990) and Schmitt et al. (2001), was excluded from the sample because it consists of infrequent words which were deemed to be too difficult for the participants to let us learn much from the scores at this frequency band.

Ten words (cf. Nation and Beglar 2007) were selected from each word band, with Dagnelie's (1992) random sampling technique used to select the target words (nodes). Their collocates (verbs in the V+N combination) were selected from the *Oxford Collocations Dictionary for Students of English* (Lea et al. 2002). Two factors guided the selection of these collocates, namely their frequency which was cross-checked in Nation (2006), and their degree of co-occurrence which was calculated using an online sampler. Ideally, the collocate had to be of a frequency level equal to or higher than the node (cf. Gyllstad 2007), with the most significant collocate selected. It is essential to note here that the collocation sampler gives different collocates of the node, indicating how often they appear in the Bank of English, how many times they co-occur with the node, and how significantly they do so.

The collocations investigated in this study were restricted to V+N combinations for the same three reasons explained in Gyllstad (2007): (i) these combinations constitute frequent occurrences; (ii) they are more difficult for L2 learners; and (iii) they contain the most important information for communication. I have added a fourth reason, which is that when we express ourselves, we start with an object to or upon which we want to perform an action; this object is expressed through the noun. Then we think of how to perform the action, which is expressed through the verb. The result is collocation in the form of a verb paired with a noun (Lea et al. 2002). The collocations were embedded in a sentential context with the collocates omitted (see Appendix A). The test was in multiple-choice format and the test-takers' task was to supply the missing collocates, chosen from three possible options in each case: the correct collocate and two pseudo-collocates. The pseudo-collocates had a distracting "red herring" role and were all synonyms, selected from an online dictionary (Dictionary.com), of the respective collocates. The test was sent to a native English speaker, working for an examining board at Trinity College London, who confirmed the combinations as collocations. However, the distractors of the following items, which she judged as possible collocates, were changed in the final version:

(i) Item 11: *honor*, distractor of *anniversary*, was changed to *label*;
(ii) Item 17: *construc*t, distractor of *nest*, was changed to *create*;
(iii) Item 18: *gain*, distractor of *rank*, was changed to *strike*;
(iv) Item 23: *support*, distractor of *diversity*, was changed to *practise*;
(v) Item 37: *set up*, distractor of *foundations*, was changed to *put*;
(vi) Item 39: *supply*, distractor of *accommodation*, was changed to *host*.

[6] The concept of 'word family' refers to a word and its family members, such as derivations or inflections.

Test-takers were given one point per correct answer and 0 points per wrong or no answer. The whole test was graded out of 40.

4. Results

4.1 Item analysis

Language testing practitioners suggest that a test has to be as reliable as possible (Green 2013). This entails that the test consistently measures exactly what it is was designed to. Cronbach's Alpha, which is commonly used to measure the reliability of a test, was computed for the test designed for this study. The result was an Alpha of .84 which indicates that the test is internally consistent (cf. Pallant 2007). Test items should also discriminate between test-takers who perform differently. This is measured by means of the Corrected Item-Total Correlation (CITC) which measures items on a scale from -1 to +1, where the higher, the better. Ebel's (1979) scale, which suggests classifying items according to the following four categories, was used and the results are presented in Table 1.

- .40 and higher: definitely good items;
- .30 to .39: reasonably good items;
- .20 to .29: marginal items in need of improvement;
- Below .19: poor items to be revised or eliminated.

Table 1. Corrected Item-Total Correlation (CITC) on Ebel's (1979) scale

CITC	.40 and higher	.30 to .39	.20 to .29	Below .19
Item number	5, 6, 9, 12, 13, 15, 16, 18, 20, 21, 22, 23, 26, 28, 31, 33, 34, 35	3, 4, 14, 17, 24, 27, 36, 39	1, 2, 19, 25, 32, 40	7, 8, 10, 11, 29, 30, 37, 38
Total items	18	8	6	8
Percentage	45%	20%	15%	20%

The results in Table 1 show that 80% of the items function well, with only 20% (8 items) falling below the cut-off point of .19 therefore requiring revision. Overall, with 80% of items performing well, the test can be considered as measuring what it was intended to measure despite the few items which need revising.

4.2 Relationship between collocation knowledge and EFL proficiency

The present study investigated the relationship between collocational knowledge and EFL proficiency, assuming that it exists (first assumption in section 1). In order to test this assumption, the TOEFL scores were compared with the scores from the collocation test. The test-takers were divided into proficiency levels according to their TOEFL scores, which resulted in three groups: level 1 (N = 31), level 2 (N = 33), and level 3 (N = 33), with an average score of 332.55, 383.55, and 447.91, respectively. Note that some test-takers (18 in total) who did not finish either of the tests were excluded from the analysis on a case-by-case basis. The collocation test scores were calculated and were found to reflect the same three proficiency levels, with an average of 22.48

for level 1, 26.58 for level 2, and 28.85 for level 3. A one-way ANOVA[7] was performed and confirmed the differences between the groups as statistically significant (Sig. is 0.000, 2-tailed). This means that receptive knowledge of collocations gradually develops as EFL proficiency increases; this is represented graphically in Figure 1.

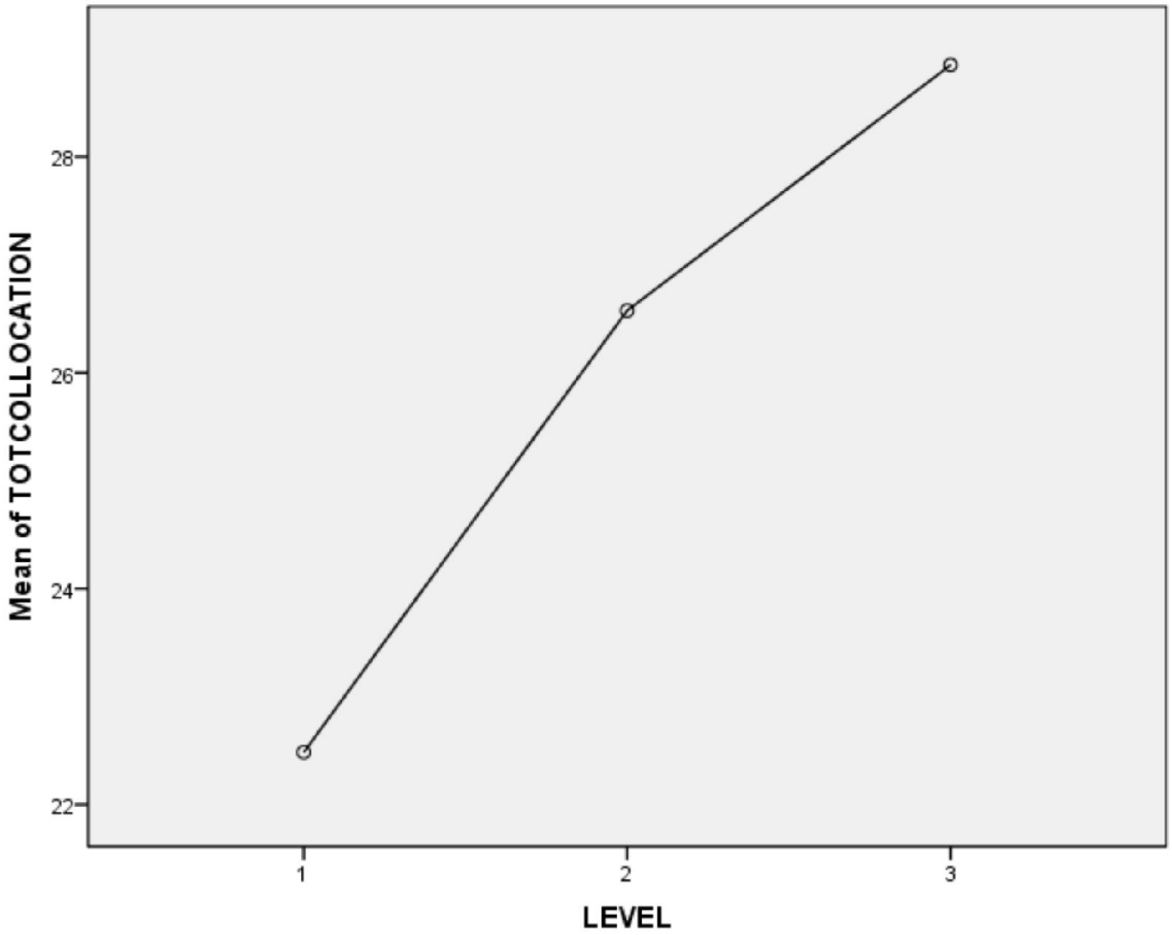

Figure 1. Collocation distinguishes between EFL proficiency levels

The collocation test and TOEFL scores were further compared by running their correlative links (Pearson correlation). The positive linear relationship between the two (Figure 2), with a significantly large correlation coefficient of .621 (cf. Appendix B), supports the above observation about a possible parallel growth between collocational knowledge and overall EFL proficiency. This is yet another argument in favour of a strong relationship between collocational competence and overall EFL proficiency.

[7] The one-way ANOVA is a test that assesses the statistical significance of mean differences between three or more groups (cf. Pallant 2007, among others).

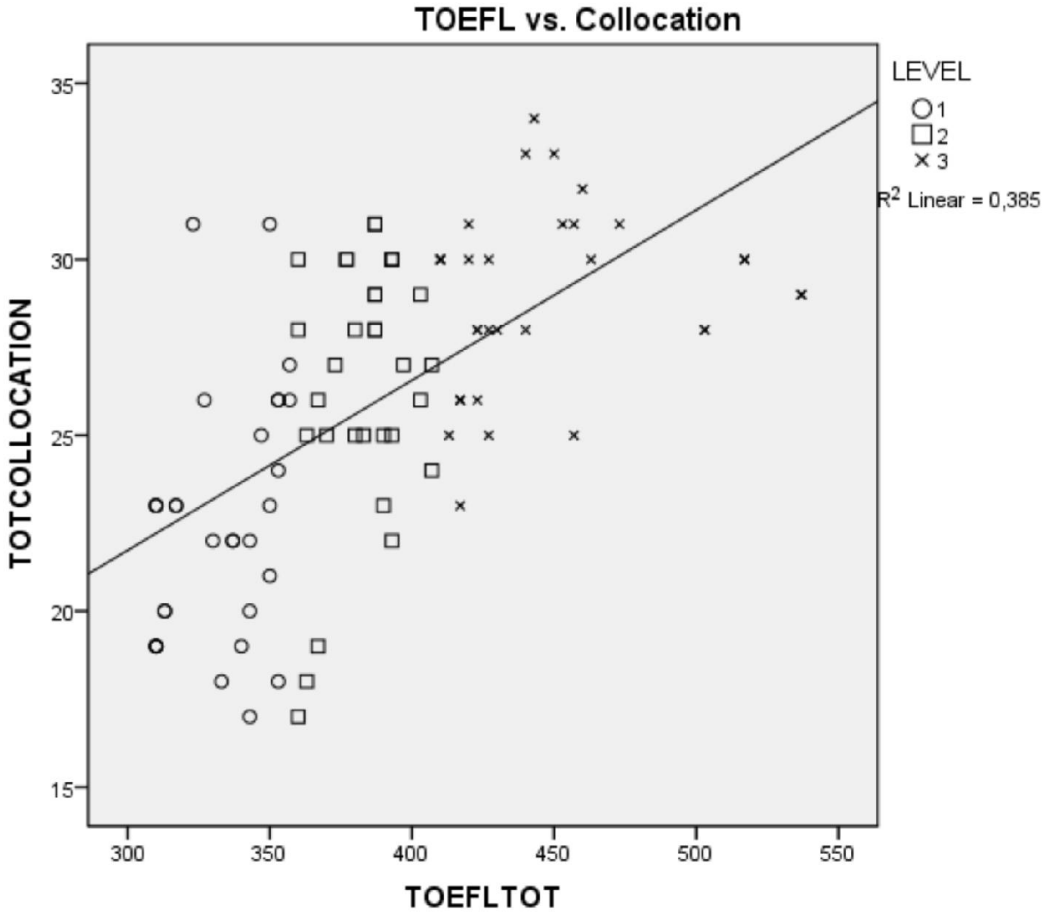

Figure 2. Correlation between TOEFL scores and the collocation test scores

The results were analysed further by performing a Scheffe analysis. This analysis complements the one-way ANOVA, of which the latter shows significant differences but does not specify which groups significantly differ. As demonstrated in Table 2, the results of the Scheffe analysis confirm that the three levels of EFL proficiency belong to three clearly different groups. This constitutes a substantial argument that the three levels of proficiency performed differently in the collocation test, meaning that one level of proficiency is different from another in terms of collocational knowledge. These findings confirm the first hypothesis of this study, namely that receptive collocational knowledge grows parallel with EFL proficiency.

Table 2. Groups distinguished by Scheffe analysis

Proficiency levels	N	Mean	Groups assigned by Scheffe
Level 1	31	22.48	1
Level 2	33	26.58	2
Level 3	33	28.85	3

4.3 Collocational growth across proficiency levels

Collocational gains across proficiency levels constituted the second question posed in the present study. In order to quantify the collocational knowledge acquired as a result of proficiency increase,

mean scores for collocation tests were converted into estimates of collocational size using Zhong and Hirsh's (2009) formula. Based on Schmitt and Meara's (1997) principle that "a score out of a total score at each level indicates the proportion of words the test-taker knows" (Zhong and Hirsh 2009: 97), the formula calculates the estimated size by multiplying "the target word level with the ratio between the raw score and maximum score at that level" (Zhong and Hirsh 2009: 96-97). For instance, a score of 8 out of 10 at the 2,000-word band could result in an estimate of 2,000×8÷10 = 1,600 words. The results presented in Table 3 clearly show that, overall, gains are observed from one level of proficiency to another. For instance, from level 1 to level 2 at the 2,000-word band, we observe a gain of 180 collocations, while that from level 2 to level 3 is 44. It is obvious that gains from level 1 to level 2 are much higher than those from level 2 to level 3, which is consistent at the other word bands as well.

Table 3. Collocational gains across proficiency levels

Word bands	Level 1		Level 2		Level 3		Level 1-Level 2		Level 2-Level 3	
	Mean	Size	Mean	Size	Mean	Size	Gains	Gain size	Gains	Gain size
2,000	6.58	1316	7.48	1496	7.70	1540	0.90	180	0.22	44
3,000	6.26	1878	6.91	2073	7.15	2145	.65	195	0.24	72
AWL	5.03	287	6.27	357	7.45	425	1.24	70	1.18	68
4,000[8]	5.43	2172	6.41	2564	6.85	2740	0.98	392	0.44	176
5,000	4.61	2305	5.91	2955	6.55	3275	1.30	650	0.64	320

This finding confirms the second hypothesis of the study, namely that the increase of receptive collocational competence from one level of proficiency to another can be quantified, but the amount of collocational gains is not exactly the same.

4.4 Collocational growth across word frequency bands

The third assumption of the study is that receptive collocational competence varies across word frequency bands, where the higher the frequency band, the higher the collocational competence. This was tested by comparing scores from the collocation test on an inter-frequency band basis. The results reveal that the scores do indeed vary according to frequency, with high scores at the 2,000-word band, which has an average of 7.27. The scores gradually decrease with frequency (at infrequent bands) reaching 5.71 at the 5,000-word band (cf. Table 4).

Table 4. Mean scores at word frequency bands

Word band	Level 1	Level 2	Level 3	Average	SD
2,000-word	6.58	7.48	7.70	7.27	1.49
3,000-word	6.26	6.91	7.15	6.78	1.45
AWL	5.03	6.27	7.45	6.25	1.71
5,000-word	4.61	5.91	6.55	5.71	1.43

[8] Scores at the 4,000-word band are averaged from scores at the 3,000-word and 5,000-word bands, as suggested by Laufer and Ravenhorst-Kalovski (2010).

A one-way repeated ANOVA was performed which confirmed the differences as statistically significant (with a Wilks' Lambda of 0.000, 2-tailed, $p < .05$). In order to give estimates of the words added from one word frequency band to the next, the size estimates presented in Table 4 were used and the differences between each two successive bands are presented in Table 5. These differences represent possible collocational gains between two word frequency bands. It should be noted that the AWL is not considered when it comes to gains estimates from one word band to another for the reason given by Laufer (1998) that words at this word band may belong to either the 4,000-word band or the 5,000-word band. On average, the gains are about 581 collocations from the 2,000-word band to the 3,000-word band, 460 collocations from the 3,000-word band to the 4,000-word band, and 353 collocations from the 4,000-word band to the 5,000-word band. These findings indicate that more collocations are likely to be added at more frequent word bands. What we learn from these findings is that growth of receptive knowledge of collocations depends on word frequency, with massive gains at more frequent bands. This confirms the third hypothesis of the study regarding the important role played by word frequency in collocational growth.

Table 5. Collocational gains across word frequency bands

Proficiency levels	Collocational gains		
	From 2,000 to 3,000	From 3,000 to 4,000	From 4,000 to 5,000
Level 1	1878-1316 = 562	2172-1878 = 294	2305-2172 = 133
Level 2	2073-1496 = 577	2564-2073 = 491	2955-2564 = 391
Level 3	2145-1540 = 605	2740-2145 = 595	3275-2740 = 535
Average	581	460	353

5. Discussion and conclusion

The present study has measured the receptive knowledge of collocations in an attempt to gauge the extent to which it grows and changes with EFL proficiency and word frequency bands. In order to test the three hypotheses put forward in the study, a proficiency test (TOEFL) and a receptive collocation test were administered to English majors at the University of Burundi.

The first hypothesis predicted that receptive collocational competence grows parallel with EFL proficiency. The results indicate that the same proficiency levels determined on the basis of the TOEFL scores were also reflected in the collocation test, with both tests correlating significantly thus confirming the hypothesis. This implies that receptive knowledge of collocations grows as a result of an increase in EFL proficiency, which supports earlier studies that pointed to similar conclusions (cf. Gyllstad 2007, 2009; Keshavarz and Salimi 2007; Nizonkiza 2011). However, as can be seen in Figure 1 and Table 3, levels 1 and 2 do not differ by the same amount of collocations as levels 2 and 3 do. The difference in terms of added collocations is much bigger between levels 1 and 2 than between levels 2 and 3. What can be inferred from this finding is that EFL learners' receptive knowledge of collocations develops with their EFL proficiency, but significantly more so at lower levels. This confirms the second hypothesis of the study, namely that an increase in receptive collocational competence from one level of proficiency to another is measurable, but the gains from one level to another are not exactly the same. This finding empirically supports the non-linear nature of vocabulary growth (Laufer 1998, Laufer and Paribahkt 1998, Meara 1996, Melka 1997, Read 2004), but is extended to include receptive collocational knowledge. The third hypothesis tested in this study suggests that receptive

collocational competence grows with word frequency bands. This is exactly the case, as the results indicate that the higher the word frequency band, the higher the scores. In addition, learners are likely to add more collocations at more frequent word bands. These results extend the research findings on vocabulary in general (cf. Nation 1983, 1990; Nation and Beglar 2007) to include receptive knowledge of collocations.

It should be noted that these results are not related to the teaching approaches in place at the University of Burundi. Consequently, it is difficult to account for the processes resulting in students' performances on collocation tests as shown in this study. However, knowing that collocations are not taught explicitly in any of the language programmes at the University of Burundi, a possible assumption is that growth in knowledge of collocations among these students is a result of exposure to English. Given that students do not even master collocations of words from the 2,000-word band, this approach does not contribute towards helping students develop their collocational knowledge. This study therefore joins in the calls in favour of teaching collocations explicitly. In terms of how to do so, I believe that with my conclusions regarding receptive knowledge of collocational growth in relation to linguistic proficiency levels, and the proof that collocational gains can be quantified following both proficiency levels and word frequency bands, this study lays the basic groundwork for developing a collocation-based syllabus. Considering both linguistic proficiency and word bands for productive knowledge of collocations, as suggested by Nizonkiza and Van de Poel (2014), seems to be warranted and could contribute enormously to the heated debate on which collocations to teach in L2/FL contexts.

In summary, the study satisfactorily answers the initial research questions and points to the conclusions that: (i) receptive knowledge of collocations grows as EFL proficiency develops; (ii) receptive knowledge of collocations added from one level of proficiency to another can be quantified; and (iii) receptive knowledge of collocations varies across word frequency bands.

The study has also raised other questions worth exploring in further research. Firstly, while it was proven that receptive knowledge of collocations grows more significantly at lower EFL proficiency levels, the study only included a few levels of proficiency (beginners, post-beginners, and low-intermediates) and concluded that collocational growth from one level to another is not exactly the same. Therefore, collocational growth deserves to be explored further in a follow-up study ideally including all levels of proficiency, from very beginners up to the most advanced. Following the non-linear nature of vocabulary acquisition in general (Laufer 1998, Laufer and Paribahkt 1998, Meara 1996, Melka 1997, Read 2004), involving more participants would allow for monitoring of collocational growth and would shed more light on what exactly happens as receptive knowledge of collocations develops, ultimately allowing for predictions of how much knowledge is added at which level of proficiency.

Secondly, this study is semi-longitudinal, and it is my view that studying one group longitudinally would give more detailed observations on receptive growth of collocational knowledge. Finally, the major limitation of this study is that it did not test receptive knowledge of participants' general vocabulary. As research evidence indicates that collocational knowledge develops slowly (Laufer and Waldman 2011, Nesselhauf 2005), testing receptive knowledge of collocations in comparison with receptive knowledge of vocabulary in general in another study could shed even more light on collocational growth.

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Appendices

Appendix A: Collocation test

Universiteit Antwerpen

Receptive Collocation Test

Name:	Date:
Level of study (year):	Start hour:
University:	End hour:

Instruction: One word has been deleted in each of the sentences below. Among the three words given, only one is appropriate, underline it.

Example: She is conducting campaigns to …… new clients.

a) attract b) seduce c) tempt

She is conducting campaigns to …… new clients.

a) attract b) seduce c) tempt

1. I …… no intention of changing jobs because I am happy where I am.
   a) have b) possess c) hold
2. Enemy planes were seen to …… bombs along the railway line.
   a) descend b) drop c) fall
3. They always …… a 10% commission on every sold encyclopaedia.
   a) reimburse b) reward c) pay
4. I wonder, this unusual building seems to barely …… the definition of a house.
   a) meet b) fit c) conform
5. Better …… your energy and not waste time trying to persuade people who are not interested.
   a) save b) economise c) rescue
6. She asked him if he could …… a secret before telling him the horrible story.
   a) retain b) reserve c) keep
7. Great care is being taken to …… the accuracy of research data with good planning, several revisions and rewrites as part of the procedure.
   a) protect b) ensure c) secure
8. She felt she would …… a terrible mess of her life if she were to throw everything overboard now.
   a) make b) form c) build

9. They did not …… the permit for a street demonstration against university fees which they had applied for a couple of months ago.
   a) win b) get c) acquire

10. Her appointment will …… the gap created when the marketing manager left.
   a) supply b) complete c) fill

11. They held celebrations to …… the anniversary of Mozart's death.
   a) glorify b) mark c) label

12. It is common practice that when a song ends, the performer has to …… a bow.
   a) take b) procure c) acquire

13. They plan to …… congratulations to Tony on his new job and bought a nice card.
   a) forward b) send c) transmit

14. We could …… a faint echo, before it slowly died away.
   a) perceive b) attend c) hear

15. Victory will …… glory, fame, and riches to the football team.
   a) guide b) transport c) bring

16. She inherited all the family precious stones, but she does not like to …… jewellery.
   a) bear b) wear c) carry

17. In May and June, females leave the males to …… a nest and incubate their eggs.
   a) create b) build c) establish

18. She joined the navy where she expects to …… the rank of captain before retiring.
   a) reach b) strike c) hit

19. He is a person who can …… his soul to the devil provided he gets money.
   a) sell b) exchange c) vend

20. Why didn't the referee …… the whistle just before he shot the goal; it would have prevented the clash between rival supporters.
   a) hit b) blow c) slap

21. When she got pregnant at the age of 16, she decided to …… an abortion.
   a) endure b) undergo c) have

22. The estate expects to …… an auction to raise money.
   a) hold b) possess c) contain

23. Our party should …… diversity, not division, in order to attract new members.
   a) practise b) urge c) encourage

24. How do you …… the discrepancies between the money and the receipts?
   a) elucidate b) explicate c) explain

25. Jumbo jets somehow …… the glamour of the transatlantic liner which has an impact on the number of passengers.
   a) require b) miss c) lack

26. She had a short time to dress and …… lipstick before rushing out to the party.
   a) spread on b) apply c) lay

27. The burglars had to …… a pane of the front window to enter the house.
    a) fracture b) break c) crack

28. He vowed to …… revenge on the man who had killed his brother.
    a) take b) seize c) catch

29. They have decided to …… the catwalk stereotype of the skinny model.
    a) doubt b) challenge c) question

30. They called on the government to help …… native wildlife as a response to the major environmental concerns of the century.
    a) protect b) shelter c) defend

31. She was hoping she would not have to …… evidence in court.
    a) donate b) give c) grant

32. I can't …… any conclusions from their vague observations.
    a) attain b) reach c) hit

33. She had to …… some compensation for the damages she had caused.
    a) pay b) reimburse c) reward

34. With the new computer, you can …… access to all the files.
    a) have b) possess c) own

35. The mechanic can …… the necessary adjustments to the broken engine.
    a) build b) create c) make

36. Many universities in the UK …… special fees to overseas students.
    a) demand b) ask c) charge

37. His sound argument will …… the foundations for future cooperation between the two countries.
    a) deposit b) lay c) put

38. We have to …… the safety guidelines laid down by the government.
    a) follow b) track c) pursue

39. It is the duty of the local community to …… accommodation for the homeless.
    a) provide b) host c) render

40. He was found to …… from clinical depression after several months of hospitalisation.
    a) experience b) endure c) suffer

Appendix B: Correlative links between TOEFL and collocation test

		TOEFLTOT	2000-word level	3000-word level	5000-word level	AW list	TOTCOLLOCATION
TOEFLTOT	Pearson Correlation	1	.317**	.204*	.527**	.626**	.621**
	Sig. (2-tailed)		.002	.045	.000	.000	.000
	N	97	97	97	97	97	97
2000-word level	Pearson Correlation	.317**	1	.209*	.265**	.260**	.626**
	Sig. (2-tailed)	.002		.040	.009	.010	.000
	N	97	97	97	97	97	97
3000-word level	Pearson Correlation	.204*	.209*	1	.194	.262**	.597**
	Sig. (2-tailed)	.045	.040		.057	.010	.000
	N	97	97	97	97	97	97
5000-word level	Pearson Correlation	.527**	.265**	.194	1	.546**	.728**
	Sig. (2-tailed)	.000	.009	.057		.000	.000
	N	97	97	97	97	97	97
AW list	Pearson Correlation	.626**	.260**	.262**	.546**	1	.780**
	Sig. (2-tailed)	.000	.010	.010	.000		.000
	N	97	97	97	97	97	97
TOTCOLLOCATION	Pearson Correlation	.621**	.626**	.597**	.728**	.780**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	97	97	97	97	97	97

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

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Academic literacy of South African higher education level students: Does vocabulary size matter?

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Abstract
This study explores the extent to which vocabulary size matters in academic literacy. Participants (first-year students at North-West University) were administered the Vocabulary Levels Test (Schmitt, Schmitt and Clapham 2001). Scores from the test were used to estimate students' vocabulary size and were subsequently mapped onto the levels distinguished by the Test of Academic Literacy Levels (TALL). Estimates show that, on average, the vocabulary size of first-year students at North-West University is approximately 4,500 word families, a size large enough to allow them to follow lectures in English. Furthermore, students with large vocabularies were found to have higher academic literacy proficiency, which establishes a strong relationship between vocabulary size and academic literacy. This relationship was also observed at the different word frequency bands the Vocabulary Levels Test consists of. These results support previous findings which established a relationship between vocabulary size and reading (cf. Nation 2006), and between vocabulary size and overall language proficiency (cf. Beglar 2010, Meara and Buxton 1987, Meara and Jones 1988, Nation and Beglar 2007), which could be extended to academic literacy. Furthermore, a stronger relationship between vocabulary size and academic literacy was found towards more infrequent word bands, indicating that infrequent word bands may best predict academic literacy. On the basis of these findings, we discuss possible strategies to adopt in order to assist some first-years with expanding their vocabularies.

Keywords: vocabulary size, academic literacy, academic vocabulary, vocabulary teaching, word frequency

1. Introduction

Over the past three decades, interest in vocabulary research has been characterised by testing its growth. Specifically, measuring vocabulary size, i.e. how many words a student knows (Henriksen 1999, Meara 1996), has resulted in considerable implications for both teaching and research. For instance, recent estimates suggest that 8,000 word families[1] is the number needed for reading authentic texts and newspapers (Nation 2006), while 4,000-5,000 word families are required to follow lectures at undergraduate level (Laufer and Ravenhorst-Kalovski 2010, Nation 2006, Schmitt 2008, 2010, Schmitt and Schmitt 2012). Lists of academic words that frequently appear in academic contexts have also been compiled, which include Coxhead's (2000) Academic Word List (AWL), Gardner and Davies' (2013) Academic Vocabulary List (AVL), and Simpson-Vlach and Ellis' (2010) Academic Formula List (AFL). The AWL especially constitutes an excellent general reference tool for both teaching and research (Coxhead 2011, Gardner and Davies 2013, Hyland and Tse 2007, Simpson-Vlach and Ellis 2010).

Internationally, vocabulary tests on the basis of which the above thresholds were determined are used today as placement indicators, i.e. used to determine linguistic proficiency. These include the Vocabulary Levels Test (Nation 1990, Schmitt et al. 2001) and the Vocabulary Size Test (Nation and Beglar 2007). The general tendency today is to test, among others, first-year students' knowledge of vocabulary, overall proficiency or academic literacy; the latter concept is discussed in section 2.3, but it should be noted already that vocabulary is considered to be one of the fundamentals comprising academic literacy. This is particularly intended for placement purposes and academic support some students may be in need of (Scholtz 2012, Weideman 2006).

Within this line of thought, first-year students at North-West University annually sit the Test of Academic Literacy Levels (TALL) and its Afrikaans counterpart "Toets van Akademiese Geletterdheidsvlakke" (TAG) – cf. Van Dyk and Weideman (2004a) for an explication of the construct of this test. The scores are used as placement indicators and assist in assigning students to different groups, with two modules (AGLA/E 111 and AGLA/E 121) suggested according to students' performance on the test(s). AGLA/E 111 is an awareness-raising module offered to students who are at risk of not completing their studies in the desired time. Matters such as study skills, listening and note-taking strategies, and an introduction to academic reading and writing are addressed in this module. AGLA/E 121 is a compulsory module taken by all first-year students. The focus of this module is on basic research skills, critical thinking, finding and using applicable sources for different purposes in an acceptable manner, the development of a lucid written (and to a lesser extent spoken) argument, as well as information and computer literacy development. It is credit bearing and is embedded in the curriculum. Note that there is close collaboration with discipline experts, and knowledge and skills acquired and developed in these modules are applicable to different fields of study.

The respective AGLA/E modules taught at North-West University introduce students to a number of interrelated skills and a set of knowledge to assist them in becoming academically literate and make overt what is usually covert, i.e. enhancing epistemological access. Developing academic

[1] The concept of 'word families' refers to head words and their family members, which include its inflections and derivations. For instance, the word family of "abstract" has the following family members: "abstraction, abstractions, abstractly, abstracts".

vocabulary in particular is one of the aims of these modules, which is achieved by presenting the AWL to students. However, the AWL covers only about 10% of a running text whereas higher education second language (L2) and foreign language (FL) students need at least a size of 4,000-5,000 word families (cf. Laufer and Ravenhorst-Kalovski 2010, and Nation 2006). While first-year students at North-West University, as in any other higher education institution, could be expected to master the AWL (Nation 1990), they need a vocabulary size large enough to allow them to follow lectures and to read, and respond to, academic textbooks. However, the exact vocabulary size of these students remains unknown. Furthermore, the available literature indicates that vocabulary size predicts reading comprehension, which is an important component of academic literacy (cf. Nation 2001, 2006 among others). It remains to be seen, however, whether this relationship holds for overall academic literacy, particularly since adequate levels of academic literacy are important to persist and prosper with studies in higher education (Carstens 2013, Van de Poel and Van Dyk 2014, Van Dyk and Van de Poel 2013). Students' academic performance is seemingly mediocre despite different efforts to address their inadequate levels of preparedness. In many cases, no tangible results of these efforts are evident. Although this is a global issue, South Africa is a case in point where a recent report by the Council on Higher Education (2011) has shown that approximately 49% of registered students for a three-year degree programme managed to graduate only after five years. It is our opinion that this gap (a possible relationship between academic literacy and vocabulary size) should be bridged, which the present study sets out to do. It focuses on students who study through the medium of English but who are L2 users of English (henceforth ESL students). It tests first-year ESL students' vocabulary size in relation to their academic literacy level in an attempt to answer the following questions:

(i) What is the vocabulary size of first-year ESL students at North-West University?
(ii) Is there any relationship between ESL students' vocabulary size and their academic literacy levels?
(iii) Is the relationship between vocabulary size and academic literacy levels (if there is one) maintained at the different word bands? And, which of the frequency band(s) could best predict academic literacy?

2. Related literature

2.1 Dimensional approach to vocabulary knowledge

The 1970s saw increasing research attention accorded to vocabulary (Read 1997), with a very influential classification of what knowing a word entails coming from Richards (1976). According to Richards (1976), researching vocabulary should consider all the aspects that knowing a word entails. These aspects include form, meaning, the syntactic behaviour of a word, and the word's associations. However, not only was this approach considered to be too theoretical (Nation 2001), but studying the many aspects involved was also perceived as a daunting task and even impracticable (Meara 1996). Consequently, Meara (1996) suggested studying vocabulary knowledge through a small number of manageable and thus measurable features that could reflect the lexicon at a more global level. He proposed two dimensions: *size* and *organisation*. While these two dimensions were (and still are) considered the foremost qualities of vocabulary knowledge, Henriksen (1999: 304) added a third, but adopted a different terminology. Meara's "size" was referred to as the "partial-precise knowledge" dimension, while "organisation" was referred to as the "depth of knowledge" dimension. Today, other terms which are used

interchangeably in the literature include "breadth", or "vocabulary size" when referring to the first dimension, and "depth", or "depth knowledge", "deep word knowledge" or "quality of vocabulary knowledge" to refer to the second dimension. The third dimension Henriksen proposed is known as the "receptive-productive" dimension.

The dimensional approach to vocabulary gained popularity and was adopted by L2/FL scholars as a construct of word knowledge. "Vocabulary size" refers to how many words one knows irrespective of how well they are known (cf. Anderson and Freebody 1981, Henriksen 1999, Meara 1996, Nation 1990, Read 1993, 2000), whereas "depth knowledge" refers to how well a word is known (cf. Greidanus and Nienhuis 2001, Henriksen 1999, Meara 1996, Qian and Schedl 2004, Read 1993, 2000, Vermeer 2001, Wesche and Paribakht 1996, Wolter 2001). "Depth" refers to those associates of a word at the paradigmatic (synonyms or close in meaning, e.g. *puppy* and *dog*), analytic (one word being a key word of the dictionary definition of the other, e.g. *canine* and *dog*), and syntagmatic (collocations, e.g. *own*/*hunting* and *dog*) levels (Read 1993). The "receptive-productive" distinction is based on the premise that word comprehension does not necessarily imply its correct use (Gairns and Redman 1986, Laufer and Paribakht 1998, Van de Poel and Swanepoel 2003, Zareva, Schwanenflugel and Nikolova 2005) and some scholars consider it as a bridge between lexical competence and performance (cf. Melka 1997).

2.2 Vocabulary size: Threshold and text coverage

Increased research attention given to vocabulary over the past few decades has brought the latter to the forefront of L2/FL teaching. Schmitt (2008: 329), among others, acknowledged that "one thing that students, teachers, materials writers, and researchers can all agree upon is that learning vocabulary is an essential part of mastering a second language". With empirical evidence pointing to a significant relationship between vocabulary size and overall language proficiency, today most L2 and FL practitioners agree that the number of words learners know – vocabulary size – characterises their language proficiency (also note here the link between language proficiency and academic literacy – cf. Van Dyk and Van de Poel 2013). Studies that explored this relationship include Beglar (2010), Meara (1996), Meara and Buxton (1987), Meara and Jones (1988), Nation (1983, 1990), Nation and Beglar (2007), and Schmitt et al. (2001). All of these studies point to the same conclusion: the larger the vocabulary size of L2/FL students, the more proficient the students. In Meara's (1996: 37) terms:

> all other things being equal, learners with big vocabularies are more proficient in a wide range of language skills than learners with smaller vocabularies, and there is some evidence to support the view that vocabulary skills make a significant contribution to almost all aspects of L2 proficiency.

Meara's statement emphasises the role a larger vocabulary size plays in the different aspects of overall L2/FL proficiency. Vocabulary size tests developed and used to demonstrate this relationship can serve as placement indicators and can also be used for diagnostic purposes. Determining words that L2/FL learners need in order to follow lectures, watch a movie, read newspapers, etc. without external support (Nation 2006), and considering this as a learning goal (Schmitt 2010), is a direct pedagogical consequence that arose from this development.

Nation (2006) and Schmitt (2008) suggested considering text coverage as a decisive factor in determining the learning goals. Even though scholars still do not have commonly agreed-upon thresholds for reading authentic texts comfortably and following lectures, recent estimates have suggested a minimal one which should be 4,000-5,000 word families (Laufer and Ravenhorst-Kalovski 2010, Nation 2006, Schmitt 2008, 2010, Schmitt and Schmitt 2012). This vocabulary size allows text coverage of about 95% of a running text. Some scholars suggest that students should also master the AWL, in addition to this threshold, in order to meet the demands that higher education may pose (cf. Nation 1990). If text coverage of 98% is the aim, Laufer and Ravenhorst-Kalovski (2010) propose an optimal threshold of 8,000 word families, echoing Nation's (2006) suggestion. Nation (2006: 59) argues that:

> [i]f 98% coverage of a text is needed for unassisted comprehension, then a 8,000 to 9,000 word-family vocabulary is needed for comprehension of written text and a vocabulary of 6,000 to 7,000 for spoken text.

This view was supported by Schmitt (2008), according to whom a large vocabulary is necessary in order to function in English, which should be 8,000-9,000 word families for reading and as many as 5,000-7,000 word families for oral comprehension. Both Schmitt (2008) and Nation (2006) made a distinction between written and oral texts and, as can be seen from their respective suggestions, oral text uses more frequent words.

On the basis of the most widely referred to text coverage classification (that of Nation (2006)), Schmitt and Schmitt (2012: 1) revisited the notion of 'frequency' and suggested three word boundaries: high-frequency vocabulary (3,000 words), low-frequency vocabulary (9,000 +), and the vocabulary between high-frequency and low-frequency, which they refer to as "mid-frequency vocabulary" for pedagogical purposes. They agreed with Nation's suggestion to teach explicitly the high-frequency words, which they raised to the 3,000-word level instead of the 2,000-word level in Nation's suggestion. They also agreed with Nation (2006) and Schmitt (2008) that the mid-frequency vocabulary is needed for proficient language use while acknowledging that words from this vocabulary pose a pedagogical challenge that should be addressed. Schmitt (2008) added that the goal of 8,000 words seems to be realistic. This is a view confirmed by Schmitt, Ng and Garras (2011).

Given the general observation that, even at an advanced level, L2 and FL speakers of English usually achieve a vocabulary size of less than 5,000 word families (Waring and Nation 1997), the present study tests the minimal vocabulary size of participants up to the 5,000-word band.

2.3 Academic literacy

The concept of 'academic literacy' has been approached from many different angles over the last couple of decades. Moreover, many scholars have given definitions and outlined what they view are the major components of academic literacy. These definitions were informed by rationales popular at that moment in time and usually addressed limitations in previous attempts to define the concept. Of importance today are those that shaped our understanding of the concept and are still applicable to, and useful in, our contexts. They include the New Literacy Studies movement (including the Study Skills movement), the Academic Literacies movement, and the more linguistically inclined movement (inclusive of studies in English for Academic Purposes with a particular focus on the target language use context, Systemic Functional Linguistics, and Corpus

Linguistics). As it is not the purpose of this article to provide an exhaustive definition of academic literacy; readers are referred to Van Dyk and Van de Poel (2013) for an extensive and recent account of what this concept entails. It should be noted though that being academically literate is considered nowadays to be more than just being able to read and write. It is about being multiliterate and combining a range of abilities that are conducive to making meaning as well as mediating and negotiating knowledge (Carstens 2012) – note again the way in which the AGLA/E modules are structured at North-West University. Becoming multiliterate, through a process of acculturation and integration, enables students to understand and transfer knowledge and skills from one context to another and to move between different discourse communities. We can then broadly define academic literacy as "the knowledge and skills required to communicate and function effectively and efficiently in different academic communities and achieve well-defined academic goals" (Van Dyk and Van de Poel 2013: 47). Implied in this attempt of a definition is the notion that academic literacy has three different dimensions: a social (exchange information), cognitive (understand, organise and reason about information) as well as a linguistic (language) dimension.

As previously indicated, due to limited levels of preparedness, assessing academic literacy of first-year students in particular has become imperative at universities. This practice seems to have become a norm worldwide and is meant for placement and diagnostic purposes, especially for at-risk students (Scholtz 2012, Weideman 2006). According to Scholtz (2012), the main tests used to this end in the South African context are:

- The Test of Academic Literacy Levels (TALL) or its Afrikaans counterpart "Toets van Akademiese Geletterdheidsvlakke" (TAG)[2];
- The National Benchmark Test (NBT);
- The Placement Test in English for Educational Purposes (PTEEP);
- The Standardised Test for Access and Placement (SATAP);
- The English Literacy Skills Assessment for Higher Education and Training (ELSA Plus);
- The Assessment Access Battery (AAB).

It is worth noting that some of these tests are used on a small scale only. The TALL/TAG and the NBT are the two most frequently used. Note that all of the tests mentioned above are based on roughly the same construct or definition of "academic literacy" (Scholtz 2012, Weideman 2006), which Van Dyk and Weideman (2004a: 10) summarised in the following ten competencies:

(i) Understand a range of academic vocabulary in context;
(ii) Interpret and use metaphor and idiom, and perceive connotation, word play and ambiguity;
(iii) Understand relations between different parts of a text, be aware of the logical development of (an academic) text, via introductions to conclusions, and know how to use language that serves to make the different parts of a text hang together;

[2] The TALL/TAG is the test used at North-West University from where participants in this study were sourced. For the purpose of this article, this test is the only one that will be briefly described.

(iv) Interpret different kinds of text type (genre), and show sensitivity for the meaning that they convey, and the audience that they are aimed at;
(v) Interpret, use and produce information presented in graphic or visual format;
(vi) Make distinctions between essential and non-essential information, fact and opinion, propositions and arguments; distinguish between cause and effect, classify, categorize and handle data that make comparisons;
(vii) See sequence and order, do simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument;
(viii) Know what counts as evidence for an argument, extrapolate from information by making inferences, and apply the information or its implications to other cases than the one at hand;
(ix) Understand the communicative function of various ways of expression in academic language (such as defining, providing examples, arguing); and
(x) Make meaning (e.g. of an academic text) beyond the level of the sentence.

These competencies are what Butler (2013) calls a "functional oriented definition" as they summarise the abilities students are expected to have in higher education, an observation that echoes Van de Poel and Van Dyk's (2014) overall characterisation of academic literacy as students' "linguistic ability". The above construct of academic literacy inspired the design of the TALL/TAG which "is to a large extent determined and required by the higher education context of South Africa, in which larger numbers of potentially underprepared students have found their way into tertiary studies" (Weideman 2006: 81). As Van der Slik and Weideman (2008) and Van Dyk (2010) put it, the test was proven to be efficient, valid, and highly reliable. For instance, while Van der Slik and Weideman (2008) report an average Cronbach's Alpha of .90 for the 2005 and 2006 data, ICELDA[3] (2014) reports an average Alpha of .93. The test is a placement indicator, which allows institutions using it to allocate students "into appropriate academic literacy support courses" (Weideman 2006: 82).

3. Methodology

3.1 Instruments

3.1.1 Test of Academic Literacy Levels

At North-West University, the Test of Academic Literacy Levels (TALL) and its Afrikaans counterpart "Toets van Akademiese Geletterdheidsvlakke" (TAG) are administered annually to assess the academic preparedness of first-year students. The tests consist of the following seven sections that are described in Van Dyk and Weideman (2004a, 2004b), which Weideman (2006: 85-86) put in the following terms:

- Section 1: *Scrambled text* (in which a scrambled paragraph is presented which students have to restore to its original order).
- Section 2: *Interpreting graphs and visual information* (which tests, among other things, the student's ability to interpret either a graph or a diagram, and

[3] Inter-institutional Centre for Language Development and Assessment.

to demonstrate a capacity for quantitative literacy [numeracy] related to academic tasks).

- Section 3: *Text type*. Here the students are presented with a number of sentences or phrases taken from a variety of text types or genres, which they have to match with a list of sentences or phrases from the same text types.
- Section 4: *Academic vocabulary*. Even though academic vocabulary is tested separately (and fairly traditionally) here, there are also vocabulary questions in some of the other sections.
- Section 5: *Understanding texts*. This section normally consists of one or more extended reading passage or passages, followed by questions focusing on critically important aspects of the construct, such as distinguishing between essential and non-essential information, or cause and effect, as well as inferencing, sequencing, defining, handling metaphor and idiom, and so forth.
- Section 6: *Text editing*. This part of the test, which relies on cloze procedure, normally has three sub-sections, though the text continues from the first to the last […]. In the first, a word is omitted, and students have to indicate the place where it is missing. In the second, the place where the missing word has been taken out is indicated, and students have to choose the appropriate word. In the third and final part, students have to indicate both place and missing word.
- Section 7: *Writing*. This section is used to test the ability of the student to make a short argument, which is normally connected to the theme of the text(s) that the student has read, as well as the topic of the scrambled paragraph and the text edit question. The test therefore contains (academic) information that is potentially useful in completing the writing section.

On the basis of the test scores achieved, students are grouped according to their level of risk, of which there are five, with level 1 being the most at-risk group while level 5 is the group the least, if at all, at risk:

1. Extremely high risk
2. High risk
3. Borderline case (after a second assessment, either identified as *At risk*, or *Low risk*)
4. Low risk
5. Low to no risk[4]

3.1.2 The Vocabulary Levels Test

The Vocabulary Levels Test (VLT; Nation 1983, 1990) is a receptive vocabulary test which involves word-definition or definition-word matching. It measures vocabulary size and was designed on the basis of four word-frequency levels – i.e. 2,000-word, 3,000-word, 5,000-word, and 10,000-word levels – and the University Word List (UWL) that evolved into today's Academic Word List (AWL; Coxhead 2000). At each level, 18 words are randomly selected (proper and compound nouns excluded) and presented with their corresponding definitions in clusters of six words and three definitions. Test-takers are instructed to match a word with its definition. In order to avoid giving clues to test-takers, care is taken so that all the words in the

[4] Quoted from Van der Slik and Weideman (2008: 365).

same group belong to the same class. The test has been revised specifically for validation purposes (see Beglar and Hunt 1999, Schmitt et al. 2001).

The VLT is a matching test, the major advantage of which is that it is easy to design (Nation 1983, 2001; Read 2000), take, mark and interpret (Nation 2001). The test indeed provides information about how many words learners know at each level (Schmitt 1994). Today, the VLT is the most widely used vocabulary size test (Ishii and Schmitt 2009, Read 2007, Schmitt et al. 2001). Schmitt et al.'s (2001) VLT, like other tests of this nature, is a receptive test and was used for this study. It is worth noting that it uses 30 items instead of 18 at each of the five frequency bands involved in the test design. Furthermore, two versions of the test exist, with version B being adopted in this study.

3.2 Participants

Participants in this study came from different faculties and institutes of North-West University's Potchefstroom Campus[5] (N = 345). In terms of their study subjects, they constituted a diverse population from different fields of study such as commerce, law, engineering, natural sciences, etc. in their first year. All of them enrolled for both the AGLE 111 and 121 academic literacy modules, both subjects being taught in English in this case. (Note that being enrolled for both the modules is an indication of high risk as measured by the TALL.) Their other subjects are taught either in English or Afrikaans. While English is the L2 for most of the participants, their native languages are mainly Afrikaans and Setswana. The participants sat the VLT test at the beginning of the second semester in 2012.

4. Results

4.1 Item description

The reliability of the instrument used (the VLT) in this study was assessed before examining the questions the present study purports to answer. It is worth noting, however, that the reliability was never under suspicion as validation studies ensured the quality and reliability of the test. On average, validation studies indicate that the test's Cronbach's Alpha is .90 and higher, showing its internal consistency. Cronbach's Alpha was, however, computed again for this specific sample, which was done in order to ensure the test's suitability for participants in this study. The Alpha was measured at .942, confirming the internal consistency of the test. The Corrected Item Total Correlation (CITC) was also carried out, which showed that the test discriminates well between participants performing differently (cf. Table 1). As can be seen from Table 1, where the CITC is mapped onto Ebel's (1979) scale, 94.16% (= 45%+39.16%+10%) of the items function well, i.e. can distinguish between participants with a different vocabulary size.

[5] We sincerely thank Dr Henk Louw for assisting in collecting the data by administering the tests to his students.

Table 1: VLT Corrected Item Total Correlation on Ebel's (1979) scale

CITC	.40 and higher	.30 to .39	.20 to .29	Below .19
Item number	15, 17, 18, 20, 21, 22, 23, 25,27, 30, 32, 33, 34, 36, 39, 42, 45, 46, 48, 49, 50, 52, 55, 56, 57, 58, 60, 67, 69, 70, 72, 73, 74, 76, 78, 80, 81, 91, 94, 95, 96, 104, 106, 107, 108, 109, 110, 112, 113, 116, 117, 118, 119, 120	6, 7, 8, 9, 14, 16, 19, 24, 28, 29, 35, 37, 38, 40, 41, 43, 44, 51, 53, 54, 59, 61, 62, 64, 65, 66, 68, 71, 75, 79, 83, 86, 88, 89, 90, 92, 97, 98, 99, 100, 101, 102, 103, 105, 111, 114, 115	1, 4, 12, 13, 26, 63, 77, 82, 84, 85, 87, 93	2, 3, 5, 10, 11, 31, 47
Total items	54 (45%)	47 (39.16%)	12 (10%)	7 (5.8%)

4.2 Vocabulary size of first-year students

The first research question addressed in this study estimates the vocabulary size of students in their first year of study, which was measured at the 5,000-word band. Laufer and Ravenhorst-Kalovski's (2010) formula was used to this end. Laufer and Ravenhorst-Kalovski (2010: 21) state that the score at the 1,000-word band is the same as that at the 2,000-word band, and that the score at the 4,000-word band is obtained by averaging scores at the 3,000- and 5,000-word bands. They agree with Laufer's (1998) suggestion that the AWL be excluded from the calculation because this list consists of words that belong either to the 4,000- or 5,000-word band. For the total score, they state that, "[s]ince each frequency level has 30 items, the maximum score, which represents knowledge of 5,000 words, would be 30×5 =150". For instance, in the data analysed for this study, a student who scored 30 at the 2,000-word band, 28 at the 3,000-word band, and 21 at the 5,000-word band, would have the following score: 30+30+28+24.5+21 = 133.5[6]. This student's vocabulary size would then be 4,450 word families (133.5×5,000÷150 = 4,450).

Results indicate that, on average, the vocabulary size of participants in this study is approximately 4,500 word families. This finding answers the first research question and shows that first-year students have achieved the required vocabulary size for following lectures in English.

4.3 The relationship between academic literacy and vocabulary size

The second research question explores the relationship between vocabulary size of first-year students and their level of academic literacy. In order to answer this question, scores from the TALL and the size estimates from the VLT were compared. The classification established by the TALL scores was used as a baseline onto which the size estimates were mapped. As indicated in section 3.2, the TALL distinguishes between five different "risk" levels. A one-way ANOVA of the size estimate was performed in order to see if the same groups were

[6] The figure 30 appears twice because it is the score at the 1,000-word band level which is the same as that at the 2,000-word band level. The 4,000-word band has a score of 24.5, which is an average of 28 and 21 (the respective scores at the 3,000- and 5,000-word band levels).

reflected in the vocabulary size. As Figure 1 shows, the levels identified by the TALL scores[7] (2-5) are also reflected in the VLT.

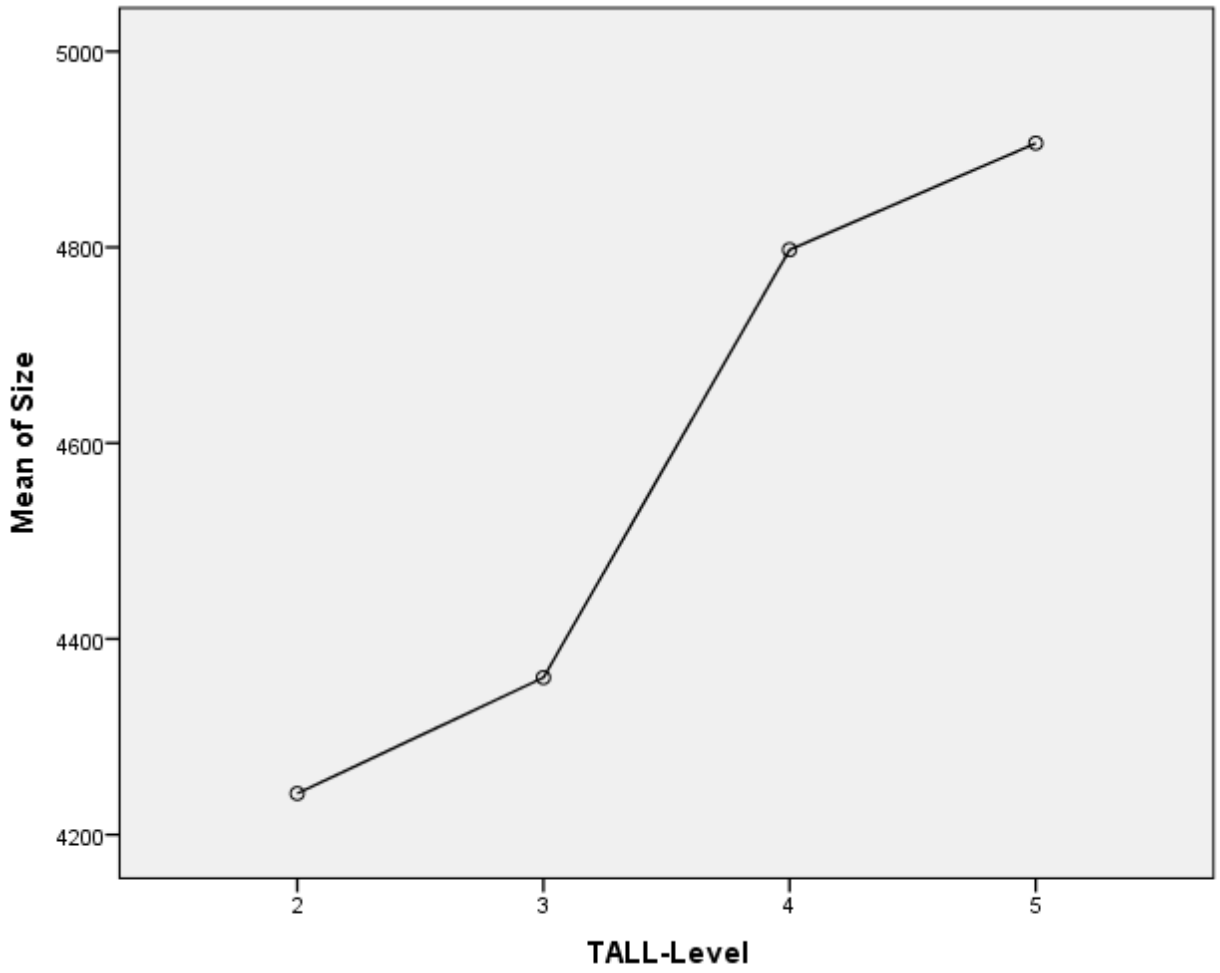

Figure 1. Vocabulary size mapped onto TALL levels

Means of size estimates and standard deviations of the different groups identified by the TALL are presented in Table 2. The means are 4,242.11 in level 2; 4,360.53 in level 3; 4,797.51 in level 4; and 4,906.25 in level 5. This clearly indicates that the size increases from one level of academic literacy to another. Therefore the implication is that the more the students tend to be categorised as *Extremely high risk*, the smaller their vocabulary size, while the more towards *Low to no risk* the students tend to be categorised, the larger their vocabulary size. This is yet another piece of evidence that could be added to the validation argument of the TALL.

[7] Note that, owing to Bouma's (1984) rule of thumb that each group should consist of at least 30 subjects for valid statistics tests, group 1 (which consisted of only eight students) was excluded from the analysis.

Table 2: Vocabulary size means estimate

TALL Levels	N[8]	Mean	Std. Deviation	Minimum	Maximum
5	32	4,906.25	105.13	4,550	5,000
4	127	4,797.51	163.31	4,233	5,000
3	76	4,360.53	348.51	3,617	5,000
2	38	4,242.11	447.59	3,117	5,000

The observed differences between groups were found to be statistically significant as determined by a one-way ANOVA [F(3,269) = 76.01, p = 0.000] which was run to this end. The data were analysed further by running multiple comparison tests with the Scheffe post-hoc test. These comparison tests aimed to complement the one-way ANOVA by showing where significant differences occurred, i.e. which two groups could be considered different in terms of their vocabulary size. The results are presented in Appendix A and summarised in Table 3 below. Students identified as *High risk* (risk level 2 according to the TALL, N = 83) and *Borderline* (risk level 3 according to the TALL, N = 76) were found to belong to the same group as far as their vocabulary size was concerned, while those identified as *Low risk* (risk level 4 according to the TALL, N = 127) and *Low to no risk* (risk level 5 according to the TALL, N = 32) were found to belong to another group. This implies that even though *Borderline* students have a larger vocabulary size than *High risk* students, the difference between the two groups is not statistically significant. The same holds for *Low to no risk* students who have a larger vocabulary size than *Low risk* students, yet with a difference that is not statistically significant. What this means is that the vocabulary size of risk levels 2-3 (TALL) does not differ significantly, with only significant differences starting to emerge at level 4.

Table 3: Size groups as identified by the Scheffe test

TALL-Levels	N	Means	
		Group 1	Group 2
2	38	4242.11	
3	76	4360.53	
4	127		4797.51
5	32		4906.25

A Pearson correlation between performance on the TALL and the VLT was also performed. As Figure 2 indicates, the correlation is positive and linear with a correlation coefficient of .513**, statistically significant with a p-value of 0.000, significant at the 0.01 level, 2-tailed (cf. Appendix B). According to Cohen (1988), the strength of correlation might be interpreted as either (i) small (.10 to 29), (ii) medium (.30 to .49) or (iii) large (.50 to 1), and the higher the better. In this case, the correlation is large, which is another argument in favour of a strong relationship between vocabulary size and academic literacy. These findings indicate that students with higher academic literacy levels also have a larger vocabulary size, therefore

[8] It should be noted that the number of students does not match the total number of participants, as noted in the methodology section of this paper, because we could not obtain TALL scores of some students; these were then excluded from the analyses.

answering the second research question from yet another angle. The findings also confirm the validity arguments of both the TALL and the VLT.

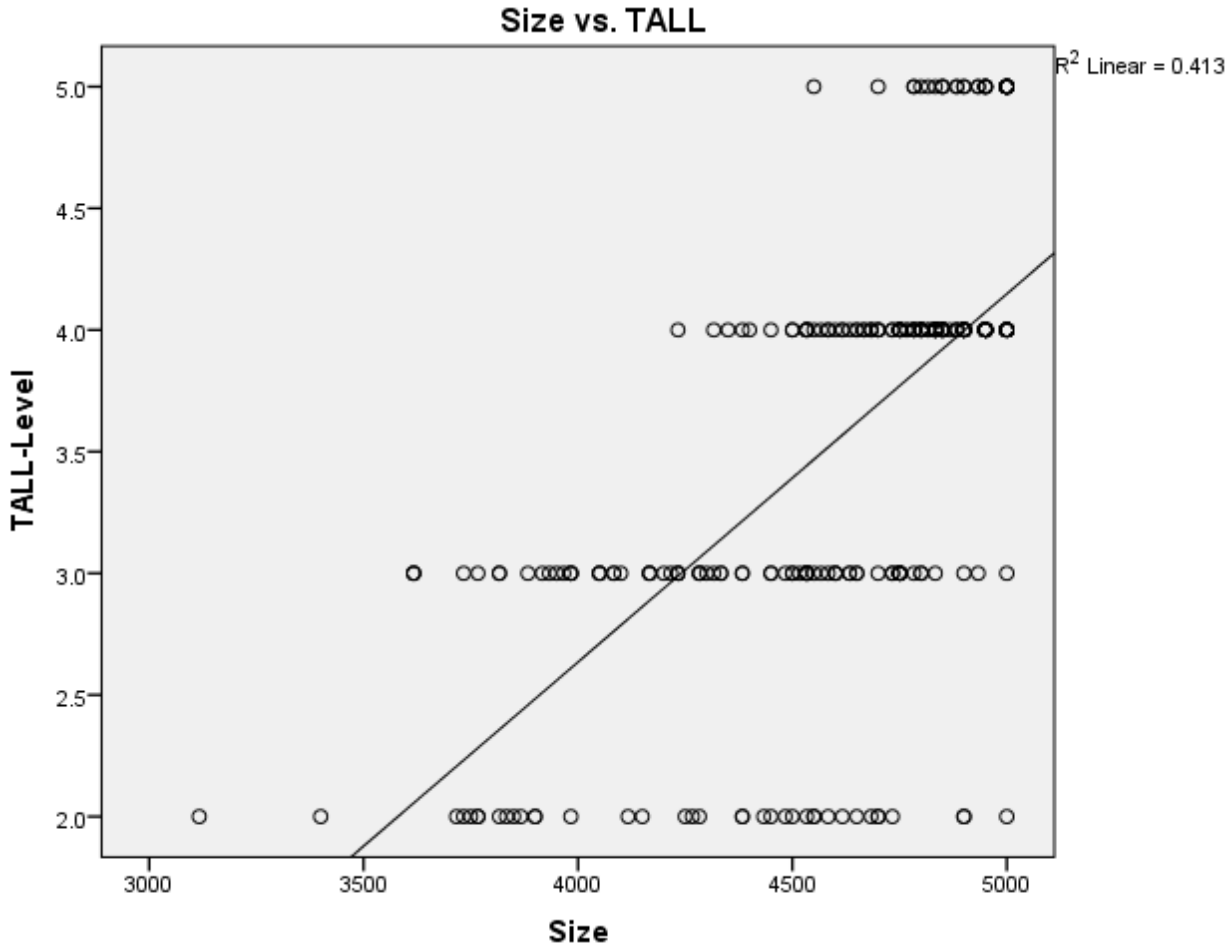

Figure 2. Correlation between academic literacy (measured by the TALL) and vocabulary size

4.4 The relationship between academic literacy and vocabulary size at word bands

In order to gain more insights into the link between vocabulary size and academic literacy (related to the second research question), the relationship between vocabulary size and academic literacy was explored further by mapping each frequency word-band score onto TALL levels. The aim was to examine the relationship between vocabulary size and academic literacy at the level of word bands, and to find out which frequency word bands were completely mastered by the students. This was achieved by running a one-way ANOVA at each of the frequency word bands. The mean scores and standard deviations are presented in Table 4, while Table 5 presents the ANOVA results.

Table 4: Mean scores at word bands

Word Band vs. TALL Level		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
AWL	2	38	25.71	3.21	.52	15	30
	3	76	27.18	2.24	.25	20	30
	4	129	28.84	2.49	.22	9	30
	5	32	29.72	1.02	.18	25	30
	Total	275	28.05	2.72	.16	9	30
2000-word	2	38	28.50	1.62	.26	24	30
	3	76	28.62	1.68	.19	22	30
	4	129	29.26	1.68	.14	14	30
	5	32	29.72	.52	.09	28	30
	Total	275	29.03	1.63	.09	14	30
3000-word	2	38	26.37	2.59	.42	21	30
	3	76	27.62	1.71	.19	23	30
	4	128	28.80	1.25	.11	24	30
	5	32	29.41	.79	.14	27	30
	Total	274	28.20	1.85	.11	21	30
5000-word	2	38	20.47	5.83	.94	8	30
	3	76	21.43	5.00	.57	9	30
	4	128	27.98	2.08	.18	20	30
	5	32	29.09	1.85	.32	21	30
	Total	274	25.26	5.13	.31	8	30

As can be seen from Table 4, scores at each word band vary from one level to another, which entails that the same levels identified by the TALL are also identified by the VLT scores. Furthermore, on average, the mean scores achieved out of 30 are satisfactory – we found a mean score of 28.05 at the AWL, 29.03 at the 2,000-word, 28.20 at the 3,000-word, and 25.26 at the 5,000-word bands. These scores were weighed against Schmitt et al.'s (2001) cut-off point. According to Schmitt et al. (2001), a vocabulary band is mastered if the score at that band is at least 24 out of 30. Considering the above scores, it appears that a huge majority of the participants has achieved the suggested threshold. Note, however, that as many as 11.30% of the students (i.e. 39 students out of 345 participants) did not reach the minimum required score.

The number of students below 5,000 word families dramatically increases when each word band is analysed separately. For instance, the score at the 5,000-word band analysed separately shows that as many as 29.85% of the participants (i.e. a total of 103 students out of 345) do not seem to master this frequency band. At the 2,000- and 3,000-word bands respectively, it was found that 1.44% (5 participants) and 3.46% (12 participants) of the students do not seem to have complete mastery of these bands. About 6% of the students (i.e. 21 participants out of 345) were found to be below the threshold at the AWL.

Table 5: ANOVA at word bands

		Sum of Squares	df	Mean Square	F	Sig.
AWL	Between Groups	434.00	3	144.66	24.60	.000
	Within Groups	1593.28	271	5.87		
	Total	2027.28	274			
2000-word	Between Groups	45.76	3	15.25	6.05	.001
	Within Groups	682.94	271	2.52		
	Total	728.70	274			
3000-word	Between Groups	245.34	3	81.78	32.03	.000
	Within Groups	689.21	270	2.55		
	Total	934.55	273			
5000-word	Between Groups	3403.28	3	1134.42	80.62	.000
	Within Groups	3798.83	270	14.07		
	Total	7202.11	273			

As Table 5 indicates, there is a statistically significant difference at each of the frequency bands [$F(3,271) = 24.60$, $p = 0.000$, for the AWL; $F(3,271) = 6.05$, $p = 0.001$, for the 2000-word; $F(3,270) = 32.03$, $p = 0.000$, for the 3000-word; $F(3,270) = 80.62$, $p = 0.000$, for the 5000-word)]. This entails that there is a significant effect of academic literacy on performance on vocabulary size at each frequency word band. However, these results do not specify which two academic literacy levels differ significantly. To this end, post-hoc comparisons were performed using the Scheffe test, and the results are presented in Appendix C and summarised in Appendix D for each of the frequency word bands in the order AWL, 2,000-word, 3,000-word, and 5,000-word band levels. As the Scheffe test results show, all risk levels (except levels 4 and 5) identified by the TALL performed significantly differently at the AWL and 3,000-word band level, at a p value of 0.05. The Scheffe test thus classifies the levels in three clearly different groups – group one: *High risk*, group two: *Borderline*, and group three: *Low risk* and *low to no risk*. At the 2,000-word band, however, the groups do not seem to perform differently. Overall, two groups are identified, namely group one: *High risk* and *Borderline* and group two: *Low risk* and *Low to no risk*. It is worth noting, however, that *Low risk* students can form part of both groups. At the 5,000-word band level, no significant differences occur between *High risk* and *Borderline* students or between *Low risk* and *Low to no risk* students, which are the two groups identified at this level.

The data were analysed further in order to determine the frequency band(s) which could best predict academic literacy proficiency[9]. Consequently, a multiple regression analysis was performed to predict academic literacy from the AWL, the 2,000-word, 3,000-word, and 5,000-word bands. Results (see Tables 1 and 2 in Appendix E) indicate that, statistically, these frequency word bands significantly predict academic literacy [$F(4,268) = 53.97$, $p = 0.000$; R^2

[9] We express our gratitude towards one of the reviewers who inspired this idea.

= 0.446]. The R^2 which is 0.446 should be interpreted as academic literacy being predicted at 44.6% by performance on vocabulary knowledge at the different frequency bands. Furthermore, all four variables (frequency bands) added significantly to the prediction except the 2000-word band (see Table 3 in Appendix E). The frequency bands could be ranked in the following descending order with regard to their predictive power over academic literacy: 5,000-word band, AWL, and 3,000-word band. These findings answer the third research question by indicating that the relationship established between vocabulary size and academic literacy level is preserved at the different word frequency bands, which predict academic literacy to varying degrees. The predictive relationship between vocabulary size and academic literacy also seems to be stronger towards infrequent word bands.

5. Discussion

The present study measures the vocabulary size of first-year students at North-West University in comparison with their academic literacy risk levels determined by the TALL, in order to (i) estimate the size of their vocabulary, (ii) test the relationship between their vocabulary size and their academic literacy, and (iii) test this relationship between vocabulary size and academic literacy at each of the word frequency bands and thereby determine which band(s) may best predict academic literacy. The vocabulary size of participants estimated using Laufer and Ravenhorst-Kalovski's (2010) formula shows that, on average, students master the 5,000 most frequent words. Even though they are ESL users, this vocabulary size is large enough to allow them to follow lectures in English (cf. Laufer and Ravenhorst-Kalovski 2010, Nation 2006, Schmitt 2008, 2010, Schmitt and Schmitt 2012).

The relationship between academic literacy and vocabulary size was explored by mapping the size achieved by participants onto the TALL. The levels set by the TALL were also identified in the vocabulary size. This relationship between vocabulary size and academic literacy was also found at each of the frequency word bands, establishing a strong link between vocabulary size and academic literacy. This relationship between vocabulary size and academic literacy and the strong correlation[10] between the TALL and vocabulary size imply that students with bigger vocabularies are those with a greater chance of being successful in their studies (if one considers academic literacy a reliable and valid predictor of academic success – cf. Van Rooy and Coetzee-Van Rooy 2015, and Van Dyk's forthcoming publication for reports on this). These results also confirm previous findings that pointed to the conclusion that vocabulary size predicts reading ability (cf. Nation 2006 among others) and potentially all the four language skills (Milton and Treffers-Daller 2013) if one desires to interpret language in terms of skills at all. The present study extends this relationship to academic literacy as a whole and confirms the predictive relationship between vocabulary size and overall language proficiency (Beglar 2010, Meara 1996, Meara and Buxton 1987, and Meara and Jones 1988). Furthermore, the closer toward infrequent word bands, the stronger the predictive relationship between vocabulary size and academic literacy. This finding lends empirical support to Laufer and Nation (1995) and Meara and Fitzpatrick (2000) in their observation that more proficient

[10] We acknowledge that correlation between vocabulary size and the TALL should ideally be performed after removing the vocabulary component from the TALL. However, we could not do so and the correlation coefficient as it stands now may be slightly higher than it should be because of possible co-variance. We acknowledge this is the main limitation of this study. However, we could not do otherwise given that the TALL measures vocabulary knowledge in many of its sections and not just in section 4, the latter which tests academic vocabulary (as described by Weideman (2006: 85-86); see section 3.1.1 of our article).

students use words from infrequent word bands, which they consider a good discriminator of linguistic proficiency levels.

The vocabulary size achieved by participants in this study is, furthermore, large enough for them to follow lectures in English. However, some students do not seem to have achieved the required vocabulary size, as demonstrated by an in-depth analysis performed to track individual students' vocabulary size. We strongly recommend identifying individual first-year students who could be below this suggested threshold and giving them the coaching and encouragement with the aim to expand their vocabulary size. For the word bands which are mastered receptively by the students (i.e. the 2,000-word and 3,000-word bands as well as the AWL), the help students might require should rather be on a productive level than a receptive one. We therefore call for productive-oriented teaching of the words, especially those from the AWL. With regard to bands which are more problematic for many students, such as the 5,000-word band, students should be encouraged to read more and expand their vocabulary size and possibly aim at optimal understanding (which is 8,000 word families). Given that students still struggle even though their vocabulary size seems to be large enough, we are tempted to believe that minimal understanding is not the ideal option. We suggest considering optimal understanding and using Nation's graded readers books[11] which could help in this regard.

It should also be noted that all risk groups as set by the TALL do not seem to differ significantly in terms of their vocabulary size. The 5,000-word band for instance sets the students in two clearly distinct groups, i.e. *High risk* and *Borderline* students belong to one group while *Low to no risk* and *Low risk* students belong to another group. The AWL and the 3,000-word band set the students in three groups, i.e. *High risk* students constitute group one, *Borderline* students constitute group two, and *Low risk* and *Low to no risk* students constitute group three. At the 2000-word band, only the most proficient group (*Low to no risk*) performs significantly better than all of the other groups barring the *Low risk* group. What we learn from this finding is that students from different academic literacy proficiency levels may need different support in terms of vocabulary. We suggest considering these levels when deciding on the vocabulary to provide to students in a similar fashion as the construct of the TALL is used to inform teaching-learning materials for the course followed by first-year students. This might, however, be unrealistic in the sense that one has classes constituted by students who have mixed abilities, which complicates differentiated learning. Nevertheless, additional differentiated teaching-learning materials might be designed in such a way as to promote autonomous learning in a blended teaching-learning approach followed nowadays at North-West University.

6. Conclusion

The present study reports on the results of an investigation conducted on first-year students at North-West University which estimated their vocabulary size and the extent to which it relates to their academic literacy. First-year students seem to have an overall vocabulary size large enough to allow comprehension of lectures in an L2. They also master the individual word bands, and the more infrequent word bands seem to "best" predict academic literacy. This implies that students with a high level of academic literacy have larger vocabularies, both general and academic. These results answer the research questions examined in this study, but they also raise other important ones, described below, which are worth considering in further studies.

[11] The books are accessible for free at http://www.victoria.ac.nz/lals/about/staff/paul-nation. They target mid-frequency words.

Firstly, even though the results reported here suggest that students have the required vocabulary size to follow lectures, empirical evidence seems to suggest that using vocabulary, especially collocations, is more problematic among L2/FL students (Laufer and Waldman 2011, Nesselhauf 2005). Given that students' productive use of collocations was found to fall short of expectations – the students were found to master collocations of words from the 2,000-word band only (cf. Nizonkiza, Van Dyk and Louw 2013) – we agree with the suggestion to explore the relationship between academic literacy as a whole and productive knowledge of collocations.

Secondly, the results of this study show that students have a large (enough) academic vocabulary. For the same reason as explained above, we suggest comparing the receptive knowledge of academic vocabulary with its productive use. As a follow-up study, we intend to explore the relationship between the academic vocabulary from the VLT and productive knowledge of collocations selected from the AWL. We are of the opinion that productive knowledge of collocations, based on words in the AWL, will also benefit students. We are, accordingly, investigating the possibility of including a collocation component in the AGLA/E modules. Participants will be tested in a pre- and post-experimental design, and we hope to gain more insights into the relationship between the productive knowledge of collocations and academic literacy.

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Appendices

Appendix A: Multiple comparisons of size estimates

(I) TALL-Level	(J) TALL-Level	Mean Difference (I-J)	Std. Error	Sig.
2	3	-118.421	54.479	.196
	4	-555.401*	50.702	.000
	5	-664.145*	65.790	.000
3	2	118.421	54.479	.196
	4	-436.980*	39.766	.000
	5	-545.724*	57.784	.000
4	2	555.401*	50.702	.000
	3	436.980*	39.766	.000
	5	-108.743	54.237	.262
5	2	664.145*	65.790	.000
	3	545.724*	57.784	.000
	4	108.743	54.237	.262
* The mean difference is significant at the 0.05 level.				

Appendix B: Correlations between TALL and VLT scores

		AWL	TALL-Level	2000-word	3000-word	5000-word
AWL	Pearson Correlation	1	.458**	.512**	.564**	.521**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	345	275	345	344	344
TALL-Level	Pearson Correlation	.458**	1	.241**	.505**	.635**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	275	275	275	274	274
2000-word	Pearson Correlation	.512**	.241**	1	.482**	.314**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	345	275	345	344	344
3000-word	Pearson Correlation	.564**	.505**	.482**	1	.568**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	344	274	344	344	343
5000-word	Pearson Correlation	.521**	.635**	.314**	.568**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	344	274	344	343	344
** Correlation is significant at the 0.01 level (2-tailed).						

Appendix C: Multiple comparisons of VLT scores at each frequency band

Dependent Variable	(I) TALL-Level	(J) TALL-Level	Mean Difference (I-J)	Std. Error	Sig.
AWL	2	3	-1.474*	.482	.027
		4	-3.127*	.448	.000
		5	-4.008*	.582	.000
	3	2	1.474*	.482	.027
		4	-1.653*	.351	.000
		5	-2.535*	.511	.000
	4	2	3.127*	.448	.000
		3	1.653*	.351	.000
		5	-.882	.479	.337
	5	2	4.008*	.582	.000
		3	2.535*	.511	.000
		4	.882	.479	.337
2000-word	2	3	-.118	.315	.986
		4	-.764	.293	.081
		5	-1.219*	.381	.018
	3	2	.118	.315	.986
		4	-.645	.230	.050
		5	-1.100*	.335	.014
	4	2	.764	.293	.081
		3	.645	.230	.050
		5	-.455	.314	.551
	5	2	1.219*	.381	.018
		3	1.100*	.335	.014
		4	.455	.314	.551
3000-word	2	3	-1.250*	.317	.002
		4	-2.428*	.295	.000
		5	-3.038*	.383	.000
	3	2	1.250*	.317	.002
		4	-1.178*	.231	.000
		5	-1.788*	.337	.000
	4	2	2.428*	.295	.000
		3	1.178*	.231	.000
		5	-.609	.316	.295
	5	2	3.038*	.383	.000
		3	1.788*	.337	.000
		4	.609	.316	.295

5000-word	2	3	-.961	.745	.646
		4	-7.511*	.693	.000
		5	-8.620*	.900	.000
	3	2	.961	.745	.646
		4	-6.550*	.543	.000
		5	-7.660*	.790	.000
	4	2	7.511*	.693	.000
		3	6.550*	.543	.000
		5	-1.109	.741	.525
	5	2	8.620*	.900	.000
		3	7.660*	.790	.000
		4	1.109	.741	.525
* The mean difference is significant at the 0.05 level.					

Appendix D: Groups as identified by the Scheffe test at each word frequency band

Table 1: Groups at the AWL as identified by the Scheffe test

TALL-Level	N	Means		
		Group 1	Group 2	Group 3
2	38	25.71		
3	76		27.18	
4	129			28.84
5	32			29.72

Table 2: Groups at the 2000-word band as identified by the Scheffe test

TALL-Level	N	Means	
		Group 1	Group 2
2	38	28.50	
3	76	28.62	
4	129	29.26	29.26
5	32		29.72

Table 3: Groups at the 3000-word band as identified by the Scheffe test

TALL-Level	N	Means		
		Group 1	Group 2	Group 3
2	38	26.37		
3	76		27.62	
4	128			28.80
5	32			29.41

Table 4: Groups at the 5000-word band as identified by the Scheffe test

TALL-Level	N	Means	
		Group 1	Group 2
2	38	20.47	
3	76	21.43	
4	128		27.98
5	32		29.09

Appendix E: Multiple regression analysis results

Table 1: Multiple regression analysis coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.668[a]	.446	.438	.654
[a] Predictors: (Constant), 5000-word, 2000-word, AWL, 3000-word				

Table 2: Multiple regression analysis significance

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.471	4	23.118	53.977	.000[b]
	Residual	114.781	268	.428		
	Total	207.253	272			
[a] Dependent Variable: TALL-Level						
[b] Predictors: (Constant), 5000-word, 2000-word, AWL, 3000-word						

Table 3: Multiple regression analysis coefficients at word bands

Coefficients[a]						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.716	.924		-1.858	.064
	AWL	.062	.022	.175	2.825	.005
	2000-word	-.007	.035	-.011	-.196	.845
	3000-word	.063	.030	.133	2.068	.040
	5000-word	.078	.010	.458	7.611	.000
[a] Dependent Variable: TALL-Level						

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"They do not know much, but then, you have to cover the syllabus": The quality imperative – a dilemma for teachers in early grade multilingual classrooms in Kenyan primary schools

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Abstract
The centrality of language in any education system cannot be overemphasised. Wolff (2006: 50) sums this up by stating that "language is not everything in education, but without language everything is nothing in education". As such, language mediates knowledge acquisition even when the content of education is not language. The question then arises as to which language is best to use in education. There are no straight answers to this, as education in most countries of the world takes place in multilingual contexts. In Kenya, the language-in-education policy supports the use of the learner's first language as the language of instruction in the first three years of school. The policy, however, remains largely unimplemented for various reasons, among them the multiplicity of first languages that may be represented in one classroom. This article reports on some outcomes of a recently completed doctoral study that investigated teachers' attitudes, skills and strategies in their management of linguistic diversity in multilingual classrooms. Specifically, the article reports on what informs teachers' language choices and prioritisations beyond the policy rhetoric. The study disclosed that the language of examinations and textbooks, the pressure to cover the syllabus, and individual teachers' language repertoires primarily determine which languages are prioritised and how they are used. The findings suggest that quality education for all may remain elusive in multilingual contexts until the language question has been adequately addressed.

Keywords: language choices, multilingual classrooms, language of instruction, language-in-education policy

1. Introduction

Sixty years ago, at a meeting sponsored by the United Nations Education, Science and Cultural Organisation (UNESCO), a team of experts deliberating on the issues of language in education unanimously agreed that the best language to use to teach children who are starting school is their mother tongue (MT)[1]. About 40 years later, at the World Education Forum held in Jomtien,

[1] "Mother tongue" (MT) and "first language" (L1) are used interchangeably in this article.

Thailand in 1990, delegates from 155 countries as well as representatives from 150 governmental and non-governmental organisations all affirmed the perspective that education is a fundamental human right. At this meeting, Education for All (EFA) ideals were articulated in that participating countries were urged to intensify their efforts to address the basic learning needs for all.

The Jomtien EFA targets were only minimally implemented by the year 2000, when another World EFA forum was held in Dakar, Senegal. Here, delegates from over 100 countries adopted the Dakar Framework for Action. The framework reaffirms the commitment to achieving education for all by the year 2015, and UNESCO was tasked with the overall responsibility of co-ordinating the efforts of stakeholders/role players in the work. The Dakar framework further identifies language as a possible barrier to access to schooling. It suggests the use of local languages as a key component in determining the quality and relevance of learning, and therefore, recommends bilingual education for ethnic minorities and respect of their linguistic identities (UNESCO 2000).

In the last decade or so, other education stakeholders and funders have published position papers on the benefits of using the MT in the early years of a child's education (see Save the Children 2007, 2009). UNESCO published another position paper in 2003, entitled "Education in a multilingual world", reiterating their earlier position on the use of learners' MTs in the early years of schooling. The United Nations' Literacy Decade (UNLD 2003-2012) emphasises language issues as part of literacy policy formulation, programme design, capacity-building and research, in the context of enhancing relevance and community participation (Robinson 2004: 44). The Decade of Education for Sustainable Development (DESD 2005-2014) echoes the EFA view of language not only as an important aspect of cultural diversity but also a means of expressing local knowledge and a factor in relevant and effective learning (Robinson 2004).

2. The study

In response to the early declarations, many countries moved fast to formulate language-in-education policies in keeping with their commitments to the attainment of EFA goals. For example, in Kenya, the language-in-education policy supports the use of the learner's first language (L1) as the language of instruction in the first three years of school. Although the policy has been in place for nearly 40 years, it remains largely unimplemented for a number of reasons, among them the multiplicity of L1s that may be represented in one classroom.

This article will refer to data and findings of a recent study, the aim of which was to examine teachers' attitudes, skills and strategies in the management of linguistic diversity amongst year-one learners in multilingual classrooms in four Kenyan primary schools (see Nyaga 2013). The study attended to pertinent aspects of the development of language and literacy skills in the MT as well as other languages of learning. The data for the study were collected through classroom observations, interviews with teachers following the classroom observations, and documentary analysis. The research sites were purposively selected to represent minimal, moderate and high linguistic diversity among the learners as would be anticipated for the rural (schools Y and Z), the peri-urban (school X), and the urban (school W) schools, respectively. All the names of the schools, teachers and learners used in this article are pseudonyms for ethical reasons. The data were analysed following the qualitative content analysis procedures proposed by Henning, Van Rensburg and Smit (2010).

3. The basis for teachers' language choices

One of the objectives of this study was to investigate the strategies that teachers in multilingual classrooms employ to accommodate the linguistic diversity of their learners while keeping educational goals in mind. In the four schools that participated, I noted that teachers often intuitively and unconsciously used a variety of strategies in dealing with linguistic diversity. These included code switching, translating and interpreting, repetition, ritualised participation strategies, verbal and non-verbal scaffolds, and (for some teachers) speaking in the various L1s of the learners. Observations of how the different strategies were employed in actual practice provided important insight into what informed teachers' language choices and how they prioritised these choices in the classrooms. The three primary determining factors as to which strategies would be used when and how were found to be (i) the language of textbooks and examinations, (ii) teachers' own proficiency in the different languages encountered among the learners, and (iii) pressure to cover the prescribed syllabus. These three factors, and how each manifested in the classroom interactions, will be explained and illustrated in the remainder of this article.

3.1 Language of textbooks and examinations

English is the language of all the textbooks used in all schools and in every subject, except those used for teaching Kiswahili and those for teaching the MT as a subject (e.g. Kitharaka in school Z). Thus, teaching and learning materials are not available in the local languages. Also, in virtual defiance of the policy of mother tongue education (MTE) in the first three years, all examinations are set in English – even for standards 1 to 3 where learners aged between 6 and 9 years have often had no prior exposure to English for literacy or learning purposes. The official motivation for this practice is that textbooks and examinations produced in English can be accessed by as many schools in the country as possible. This ensures uniformity in terms of content and standard of work tested at each level of education. Although Kenya's Ministry of Education (MoE) prescribes that examinations should be school-based, this practice of purchasing textbooks and examination papers published centrally continues in total disregard of the *de jure* directives of the language-in-education policy. Any attempts to change the status quo are met with limiting conditions within the schools, such as a lack of equipment for the printing of their own examination papers.

Tests have been identified as one of the most powerful mechanisms used to manipulate implicit language policies: ideologies that support a dominant language at the expense of educational opportunities for minority language speakers are often imposed and perpetuated in the requirement of language tests or the setting of tests in a language accessible only to the elites (see Shohamy 2004, 2006; Broadfoot 1996). Shohamy, for example, finds that tests have been used to "affect language priorities, language practices and criteria of correctness" (Shohamy 2006: 93), resulting in inclusion of some and exclusion of others. Given the power of test results in determining social order, she argues, those who teach and learn have no option but to comply (Shohamy 2006: 93).

I argue here that compliance with an educational system in a multilingual community that provides teaching and assessment materials in English only, when there is mostly late access to English as a second language (L2), prioritises the language of the tests over other languages regardless of what the declared policy determines on language-in-education. The Kenyan

teachers who participated in this study all deferred to the power of the tests in their language choices in the classrooms. The following extract illustrates how teachers used English in examination preparation, regardless of the policy of MTE. In the extracts that follow, local language text is italicised while English text and translations are in normal type. Teacher's turns are marked with T while learner(s)' turns are marked with L(s).

Extract 1 – School Y (Social Studies lesson)

(1) T: *Twasyokaa twona nyomba ingi twasya isu ni* semi-permanent. *Twasya ni semi*^[2]
[Then we saw another type of house which we called semi-permanent. We said they are semi^]
(2) Ls: Permanent!
(3) T: Semi-permanent. *Twona nyomba ingi twasya isu i* permanent. *Na ingi nasyo twasya ni* temporary.
[Semi-permanent. We saw other houses that we called permanent. And others which we said they are temporary]

In this extract, in a grade 1 classroom, teacher Y switches between Kikamba and English. In her code switching, Kikamba is the matrix language[3] (Myers-Scotton 2006) but key concepts in the topic she is teaching, such as 'semi-permanent', 'permanent' and 'temporary', are given in English, as is evident in turns (1) and (3). This she does because the subject of Social Studies is examined in English, as are all other content subjects in the observed classrooms. Kikamba is the medium of instruction (MoI) in this classroom, the L1 of a majority of the children and of the teacher. Thus, the teacher gives the key terms in English because learners are likely to come across them in the tests. This practice was observed in all study sites regardless of what the predominant MoI was. The following extract gives a further example:

Extract 2 – School Z (Science lesson)

(4) T: Proteins *ni iria itumbithagia gukura* - to grow - *gukura* - to grow
[Proteins are those foods which help us to grow - to grow - to grow]
(5) Ls: To grow
(6) T: Carbohydrates - *uga* carbohydrates
[Carbohydrates - say carbohydrates]
(7) Ls: Carbohydrates
(8) T: *Kairi*
[Again]
(9) Ls: Carbohydrates
(10) T: *Twaciitire* carbohydrates. *Na i cio itunenkagira inya* - energy. *Igatunenkera mbi yo?*
[We called them carbohydrates. And they are the ones that give us energy-energy. They give us what?]

[2] The symbol ^ is used to indicate the rising intonation usually placed at the end of an incomplete word or sentence mainly to evoke a response from learners (by completing the word or sentence) when teachers employ "ritualised participation strategies" in classes.

[3] Myers-Scotton's (2006) Matrix Language Framework (MLF) has been used in studies on code switching to determine the matrix language. However, the MLF model was not employed in this study as this was not a study on code switching per se; code switching only emerged as one among the many strategies that this study was seeking to document. As such, the term "matrix language" is used here to refer to the language in which the conversation begins, while the language switched to or inserted into the matrix language is referred to as the "embedded language".

(11) Ls: Energy
(12) T: *Inu ingi twaciitire* vitamins - *twaciitire ata?*
[The others we called them vitamins - we called them what?]
(13) Ls: Vitamins

Extract 2 is taken from a science lesson where it is evident that, as in extract 1, teacher Z code switches between Kiembu (matrix language) and English when teaching. This she does by giving the key concepts in English – 'proteins', 'carbohydrates' and 'vitamins' in turns (4), (6) and (12), respectively – even though Kiembu is the preferred MoI in her context. She goes on to use Kiembu to describe the benefits of the different food nutrients, but key concepts such as 'grow' in turn (4) and 'energy' in turn (10) are given in English.

Both teachers Y and Z are aware of their learners' limited proficiency in English. This, rather than just the MTE policy, explains why they do not use the language as MoI. However, because they have to prepare their learners for English examinations, they keep bouncing between English and their preferred MoIs (Kikamba in school Y and Kiembu in school Z), as demonstrated above. This use of the two languages reflects competing desires of the teachers, namely the desire to help the learners understand what is being taught, and the desire to prepare them for examinations that will be written in English.

Following such observations, I concluded that teachers use English as a preparatory precaution for English examinations. Indeed, as Pinnock, Mackenzie, Pearce and Young (2011: 12) warn, when examinations are conducted in national and international languages, it becomes difficult to convince teachers to teach in the local language because if they do, their learners will not be ready for the examinations. Here, the code switching between different languages represents the teachers' awareness of the fact that the learners are not proficient in the language of assessments. Teachers, thus, code switch to ensure that learners not only understand but also know the critical English terms in the content subjects. Sometimes teachers would use two languages that were "foreign" to a majority of the young learners. For example, in the urban school the MT used for teaching is Kiswahili which is an L2 for many learners, and English is also introduced due to assessment taking place in this language, as stated earlier. Teachers had their reasons for their classroom language practices. For instance, the following extract from an interview with teacher Z explains why she used English words even though she would later have to translate them into Kiswahili. Teacher Z's views in this extract are representative of teachers' views in general:

> I speak in English because […] if it is Science, I cannot give the notes in Kiswahili because they will be tested in English. So I have to write the English words. Because like now, the question will come: "We use nose to ____ (dash)". They will have to be tested in English.

Teacher Z was aware that the learners in her classroom had very low English language proficiency levels since they had only just been introduced to the language, but she still used Kiswahili-English code switching and code mixing. She says that she does this because she has at the forefront of her mind the English examinations her learners are due to write. She even gives an example of the format in which questions are likely to be given in the examinations in English – "We use the nose to _____ (dash)". For this and many other similar questions, learners have to supply an answer in English.

Shohamy (2001) reports similar observations in her study of a new national reading comprehension test in Israel. She found that the introduction of the test forced teachers to engage in teaching "test-like" materials as reflected in the kinds of texts used and questions they asked in the classroom. When that happens, the alternative of teaching reading in a more integrated manner is not considered. Even at a much higher level, Shohamy found that the introduction of an oral English test in grade 12 resulted in teaching "test-like" content focusing only on tasks included in the tests while ignoring others (Shohamy 2001). In my study, I found that the form and content of what could be expected in tests set by external organisations strongly determined both the teaching and the exercises given to the learners at the end of a lesson. The fact that teachers give lesson notes in English to learners who cannot yet read – not even in their L1 – is indicative of the kind of control that tests have had on teachers' language behaviour and classroom practices.

3.2 The language proficiency of individual teachers

My survey of the four schools where data was collected showed that it is no straightforward matter to decide which particular indigenous language should count as the MT to be used in the first three years of schooling. This is because very few schools have learners that represent a single indigenous language community. Even in rural schools, where there is less language diversity than in the urban areas, a certain degree of diversity was clear and was at times accounted for by the appointment of a teacher who does not speak the community language(s). That means that , in all cases, schools have to rely on the fact that the majority of trained teachers are proficient in a number of languages. Thus, although the multilingualism of the community is minimally acknowledged in the language-in-education policy, there is a tacit assumption that teachers are multilingual and can manage teaching multilingual groups of learners.

Some of the teachers who participated in this study indicated that when they noticed learners struggling with the school languages (e.g. with English or Kiswhaili), they would use the learners' L1s wherever possible. For instance, Teacher W1[4] would speak Dholuo, albeit irregularly, to one of the learners in her class who found the school languages, English and Kiswahili, difficult to follow. The teacher explained this practice by saying "*nikitaka aelewe ninatumia* mother tongue" ('when I want him/her to understand, I use the mother tongue' [Dholuo]). In this particular case, the learner's L1 also happens to be the teacher's L1, so it was quite telling that she felt she had to justify the assistance she was giving. Regular educational considerations would probably welcome and commend such efforts to include a learner who is unfamiliar with the languages of learning.

In a number of instances, this teacher also used words from other languages representing the L1s of learners to overcome a problem often encountered in multilingual communication, namely a "temporary word-finding difficulty, when a word from the other language [is] substituted for a momentarily inaccessible word" (Rose and Van Dulm 2006: 6). For example,

[4] At the time of the study, there were two teachers assigned to the same class in school W and who took turns to teach the class. For the purposes of this study, these teachers were assigned the codes "teacher W1" and "teacher W2" for the class teacher and assistant teacher, respectively. This is a rare scenario considering the high teacher-learners ratio in Kenyan public schools. However, the school had experienced massive transfers of learners and low enrolments following the post-election violence that rocked the country in 2007/2008. The area where the school is located was among the places worst hit by the violence in Nairobi.

in other explanations, she used *waruu* and *minji*, which are Kikuyu words for "Irish potatoes" and "garden peas" respectively, and *mbuui*, which is the Dholuo word for "spider".

In one of the informal discussions with teacher Y, I asked her how she managed to accommodate the different languages represented in her classroom. She explained that since she could speak all three languages represented in her class, she could easily switch from Kikamba (the MoI) to Kitharaka or Kimbeere[5] whenever there was a need to clarify something to a learner who could not follow the Kikamba explanation. In the classroom observations, teacher Y was found to speak Kitharaka once in a while to Tharaka L1 learners when she felt they had difficulty following in Kikamba.

3.3 Pressure to cover the syllabus

My study also revealed that the pressure to cover the syllabus pushed teachers to proceed unabatedly in a single language in the classroom, even if this language was limitedly accessible to many learners. It would, for example, take twice as much time to cover a topic if the teachers were to translate everything said in English into Kiswahili. It would, therefore, appear that the pressure for syllabus coverage prevails, while translation as a strategy falls off the teachers' balancing act, even if only a few learners will be afloat by the time the syllabus has been covered. This is reflected in the words of teacher X when she stated in an interview that "[t]hey do not know much, but then, you have to cover the syllabus".

The following two extracts from lessons in school W will illustrate this further:

Extract 3 – School W (Mathematics lesson)

(14) T: We want to do take away. *Tunataka kutoa.*
(15) T: We will use our fingers. *Tutatumia tu vidole zetu.*
(16) T: Take away *ni kutoa.*
(17) T: Five take away one.
(18) T: Everyone show me your five fingers. *Kila mtu anionyeshe vidole tano.*

This extract illustrates how everything teacher W2 says in English she repeats in Kiswahili. Since Kiswahili is the preferred MoI in this particular context, teacher W2 could be using English for two reasons. Firstly, because all the materials for teaching content subjects are in English, teacher W2 could be finding it easier to follow the materials directly and then translate them into Kiswahili. Secondly, it is also possible that teacher W2 is using English as a preparatory mechanism for English examinations (cf. section 3.1). Teacher W2 is keenly aware that her learners are not proficient in the language of the textbooks and examinations. Hence, she translates everything she says in English into Kiswahili to enhance learners' understanding of the content, even though not all of the learners are proficient in Kiswahili. However, in a different lesson by teacher W1 in the same classroom, she proceeds with the lesson in English as if completely oblivious to the language challenge amongst her learners. The following extract illustrates this:

[5] Kitharaka, Kimbeere and Kikamba belong to the same language family and therefore are, to some degree, mutually intelligible.

Extract 4 – School W (Social Studies lesson)

(19) T: Now last time you discussed with teacher [W2] the types of houses. Types of^
(20) Ls: Houses
(21) T: Types of what?
(22) Ls: Houses
(23) T: Yes, the types of houses we have in our communities. We are still looking at the types of houses. You talked about two types of houses. Remind me the types of houses you talked about. Do not look at the walls because there were labels on the walls with the types of houses. Tell me one of the houses you talked about.
(24) Ls: Sticks.

As can be seen from this extract, teacher W1 proceeds with this Social Studies lesson in English. She is aware that there are learners in this class who do not speak English or Kiswahili but she just carries on with the lesson in English, ignoring the language reality in her classroom. This could be interpreted to mean that sometimes teachers may feel overwhelmed by having to deal with linguistically diverse learners. When they feel overwhelmed, they may not employ any inclusive strategies, even when they know that their learners do not understand what they are saying.

This interpretation is in line with the words of teacher W1 when she says that "*nikitaka aelewe ninatumia* mother tongue" ('when I want him/her to understand, I use the mother tongue'), as discussed in section 3.2. This could be interpreted to mean that even when teachers are aware that learners do not understand what they are talking about and want to help them, these teachers may sometimes become overwhelmed by the challenge and just carry on with lessons as if the language barrier was non-existent. The fact that this teacher used Dholuo translations and code switching to explain content to an individual Dholuo-L1 child to enhance understanding, means that this teacher was aware of some of the ways in which she could make her classroom more inclusive but chose not to use them in certain instances.

A similar situation was observed in school Y where, although the teacher had reported in an interview that she spoke Kitharaka and Kimbeere to Tharaka and Mbeere children respectively to enhance their understanding, no instances of speaking Kimbeere to Kimbeere-L1 children were observed throughout the time of my visit to her classroom. Instead, the teacher taught in Kikamba and switched between all other languages – Kitharaka, Kiswahili and English – but not Kimbeere. What this may mean is that Kimbeere-L1 children are less included in classroom interactions and may not understand most of what is said in Kikamba. This was happening despite the fact that the teacher was aware that not all her learners could understand Kikamba well, as reflected in her response to the question regarding her learners' proficiency in Kikamba. Her response was that they understand Kikamba, "*hii lugha ya kuongea*" ('the spoken form of language') – referring to the Basic Interpersonal Communicative Skills (BICS) theorised by Cummins (1980). It is possible that having to switch between all the languages represented in a classroom may overwhelm the teacher, even when he/she has good intentions of being linguistically inclusive to her learners, and may result in one or more languages being completely forgotten in the process.
Following these findings, suggestions are made in the next section for improving language choices and practices in multilingual learning contexts. I have termed these the "new imperatives for education, training and learning" in light of the post-2015 EFA agenda.

4. New imperatives for education, training and learning

The negative effects of ill-prepared teachers on language-in-education policy implementation have been documented in a number of studies (see Plüddeman, Mati and Mahlalela-Thusi 2000; Zappa-Hollman 2007). Although all of the teachers in the current study were graduates from accredited teacher training colleges (TTCs) in Kenya, they all reported that they had not received any training in particular on how to deal with linguistically diverse learners. It has also been documented elsewhere that the TTC curriculum does not directly address the teaching of MTs as it is assumed that anyone who can speak a language can also use it for instruction or teach learners to read it (see Bamgbose 1991, Musau 2003).

Byrnes, Kiger and Manning (1997: 642) assert that "the most obvious avenue for more effectively preparing teachers to work with language minority students is through formal training". According to these authors, formal training in teaching linguistically diverse learners should include "carefully planned presentations and field experiences that focus on attitudes necessary to understand and appreciate language development and cultural diversity" (Byrnes et al. 1997: 642). The findings of this study point to the need for restructuring the teacher education curriculum to include aspects of language awareness such as psycholinguistics, sociolinguistics, language planning, and language and education. This would give teachers a broader basis from which to make language choices in their classrooms.

Powell (1996: 60) suggests that "as students in classrooms continue to become increasingly diverse, […] new instructional demands have come to the forefront of classroom teaching". This calls for teachers to be ever vigilant in their attempts to be inclusive of learners who come from diverse as opposed to bounded systems. Commensurate with teachers' vigilance is the need for teacher education programmes to incorporate this changing nature of the classroom by adapting their programmes so that teachers are equipped with the requisite skills for dealing with multilingual learning environments, which are now the norm rather than the exception everywhere. This is imperative in the thinking and deliberations on quality education, training and learning.

5. Conclusion

This article provides a glimpse into the implementation of the Kenyan language-in-education policy in multilingual classrooms. I find that although the language-in-education policy supports the use of MTs, no resources are allocated towards producing textbooks and other school materials in the languages advocated for by the policy. Instead, materials are published exclusively in English (except those for teaching Kiswahili as a language subject) despite the fact that the recommended MoI for urban schools is Kiswahili and a variety of indigenous languages in the rural areas. English is preferred as the MoI over all other languages as reflected in the textbooks and examinations which are printed and written, respectively, in English. Similarly, initial teacher preparation does not prepare the teachers for multilingual teaching environments. Thus, government policy may have good intentions in terms of support of early learning through the medium of the MT, but policy implementation is undermined by limited supportive actions beyond the policy rhetoric.

Commenting on Tanzanian learners' expressed desire to be instructed in English even though they understood Kiswahili better, Roy-Campbell (1992) views this as indicative of the

perception of where power is located in society (cf. Nyaga 2013, Ssentanda, 2013). Yates (1995) views the anomaly of preference of little understood languages as MoI over familiar languages as indicative that language preference is not simply a matter of pedagogical effectiveness but is also linked to the wider political and socio-political factors, amongst them the perceived status of different languages. In the Kenyan classrooms studied, the power of English over other languages is evident in teachers' classroom practices, the examinations and the textbooks used. The perceived economic utility of English in the broader socio-political context mirrors in the classrooms through what I call here the "perceived examination utility" of English. The perceived examination utility of English in the observed classrooms is reflected in the language choices and prioritisations teachers make in these classrooms. In this regard, Alexander (2005) suggests that research should be undertaken that will demonstrate the economic rationality of Mother Tongue-Based Multilingual Education (MTBMLE) beyond pedagogical and psycholinguistic advantages, with an ultimate goal of showing the business and government sectors as well as society in general that local languages have market value.

King (2004: 39) observes that in plurilingual societies, multilingualism is viewed more as a way of life than a problem to be solved. She finds that in such societies, people have somehow "developed an ethos which balances and respects the use of different languages in the daily life" of the community (King 2004: 39). According to her, the challenge is for education systems to adapt these complex realities of language use in these societies in order to provide quality education where there is a balance between the learners' needs and the social, political and cultural demands of the society. In my view, a critical question here would therefore be: what is in the community that enables community members to manage their multilingualism so well, and which schools could borrow to facilitate positively tapping into linguistic diversity as a resource as opposed to seeing it as a problem? In the answer to this question lies the solution to managing linguistic diversity in multilingual learning environments. In the African context, such a solution would seek to capitalise on the fact that many people grow up as multilinguals (see, for example, Banda 2009, 2010; Glanz 2013; Heugh, Benson, Bogale and Yohannes 2007) and that they function very well linguistically in society. I argue here that with proper placement and allocation of teachers, this societal multilingualism could be harnessed to promote meaningful learning and, consequently, education quality would be greatly improved. Once teachers are placed in the classrooms, attention to all ends in the continua of biliteracy (Hornberger 2003) would yield desirable results.

The interrogation of and engagement with a community's multilingual practices are necessary in the creation of an enabling environment for academic development, which should be a deliberate aim of any education system in any multilingual context. Only in such an environment can linguistic diversity be exploited and/or harnessed to assure academic development and advancement of all learners, regardless of their linguistic backgrounds, in both the specific context of this research and other similar contexts.

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A needs analysis for communication by pharmacists in a multilingual setting: First steps towards syllabus and materials design

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Abstract

Despite the efforts to manage South Africa's language and culture diversity, in practice, the linguistic landscape has become increasingly English. This is problematic in contexts such as rural areas where people are not able to communicate in English, and communication on even a fairly proficient level is not a given. Medical contexts, in particular, may create critical situations of practical (life or death) importance, as healthcare professionals are not necessarily trained or equipped to communicate in an efficient and culturally sensitive manner. Moreover, healthcare communication challenges are manifold because of the diverse views on the nature of a medical encounter. This article reports on the first empirical steps taken to bridge the communication gap between patient and medical practitioner (specifically pharmacists). These steps include identifying an appropriate theoretical framework, developing and conducting a needs analysis (among 255 pharmacists who are experts-by-experience), and designing a syllabus and course materials. The findings show that most respondents experience communication in a foreign language to be significantly more problematic than communication in general. Additionally, the qualitative data suggest that support is needed especially for African languages. Language learning materials should cover a wide range of professional topics supplemented with a communication module focusing primarily on history taking and

ensuring the correct use of medication. Most importantly, learning materials should be to-the-point and easy to apply, as most practitioners have limited time. These findings might, in turn, inform policy issues regarding responsible and efficient functioning in a multilingual professional environment, where clear and transparent communication can be a matter of life or death.

Keywords: needs analysis, healthcare, professional communication, communication training

1. Introduction: Context and problem

South Africa is a multilingual country with 11 official languages, all of which have the same status, rights and privileges as stipulated in the Constitution of the Republic of South Africa (South African Government 1997). Since 1994, the South African Government has made progress in providing a framework and establishing bodies to manage language diversity in the country. However, the South African linguistic landscape has become increasingly English over the last 20 years. Whereas English is often considered to be a lingua franca, it is only the fourth-largest language in South Africa and is spoken by less than 50% of the population, with isiZulu being the largest, followed by isiXhosa and Afrikaans as the second and third most popular languages, respectively, in South African households (South African Government 2013).

Communication at a proficient level is thus not necessarily a given, and service encounters may be highly challenging in, for instance, rural areas and/or healthcare settings where clients/patients are unable to communicate in English. When considering the service providers' angle, where most professionals are proficient in Afrikaans and/or English, they are not necessarily trained or equipped to communicate in an efficient and culturally sensitive manner, nor are they proficient in one or more of the African languages (cf. the recent introduction of language learning in the healthcare curriculum). Moreover, in a healthcare setting, challenges include not only the number of languages and cultures involved, but also "the diverse views on the nature of a medical encounter" (Van de Poel and Fourie 2013: 333), coming to the fore in, for example, the relationship between the healthcare professional and the patient, the interpretation of the interactants' status and power, and the interpretation of the sources and nature of illness.

This complex nature of healthcare communication was recognised by the Faculty of Health Sciences and the Centre for Academic and Professional Language Practice of North-West University's (NWU) Potchefstroom Campus. Consequently, with collaboration and support from the University of Antwerp and the Communication for Professionals network (cf. Communication for Professionals 2014), it was decided to address this matter by developing multilingual[1] blended vocational language and communication training materials for students registered for the BPharm (Pharmacy) qualification. The ultimate goal was to develop course materials that will enhance efficient functioning in a multilingual work environment where adequate, accurate and appropriate communication is of critical importance. Hence, the guiding question for this study was: How can programme and materials design be informed by theory and by drawing on pharmacists as experts-by-experience in intercultural professional communication?

[1] A template for materials development was developed in English and was used as a basis for materials in other languages (Afrikaans and Setswana as the other official languages of NWU, as well as isiZulu and isiXhosa).

The purpose of this article is to report on the initial steps taken in the course design and materials development process which comprised the identification of an appropriate theoretical framework as well as an in-depth needs analysis. The report will also signify how the course design was informed by theory and needs.

2. Theoretical framework

The domain of English for Specific Purposes (ESP) was deemed to be an appropriate conceptual point of departure. The reason for this is that ESP, by definition, typically attempts to meet the identifiable needs of learners, makes use of the underlying practices of the disciplines it serves, and concentrates on language suitable to the specific environment in terms of lexis, grammar, style, genre and discourse (Dudley-Evans 2001). In what is to follow, a more systematic and detailed explication of ESP will be presented.

2.1 English language learning and training for specific purposes

ESP is divided into two major subdomains (Carkin 2005). First, English for Academic Purposes (EAP) concerns itself with English used in academic contexts and more specifically with the genres involved. It focuses on "learning academic language through academic tasks, texts, and content" and it encompasses "needs analyses, evaluation, academic skills, disciplinary content, and tasks in support of student learning in tertiary educational contexts" (Carkin 2005: 85). English for Occupational Purposes (EOP) is the second subdomain of ESP and includes "English language used by both professionals (for instance, in medicine, business, law) and by non-professional workers (in vocational[2] contexts)" (Carkin 2005: 85).

Another important notion closely associated with ESP is 'intercultural communication'. ESP teachers and learners are not only involved with teaching or learning language, but also with the development of intercultural competence and acculturation. The success of an ESP course does not only depend on the learner's proficiency in the target language, but also on their ability to integrate successfully in a new work environment or study culture (see Fatihi 2003, Warrington 2005). Thus, the ESP-learner may benefit substantially from an emphasis on intercultural knowledge and skills (Berbyuk-Lindström 2008). However, as acculturation is a highly sensitive and individual process, incorporating intercultural content which will serve all learners in one class complicates the design of an ESP course.

2.2 Language for specific purposes

Since many professionals nowadays move between cultures, these professionals often need more than English as a lingua franca or as a language for wider communication. In other words, they need to acquire (some of) the specific language of the community in which they are working. The language to be learned, therefore, is not only a language for specific purposes; it is also a language for intercultural communication. In these instances, the term "ESP" is broadened to Language for Specific Purposes (LSP; Gatehouse 2001) which may take the form of an additional language and remain restricted to particular domains or functions.

[2] We use the term "vocational" in our article to refer to professional communication in general.

LSP teaching (being contact teaching, autonomous learning or blended learning) aims to fulfil the communicative needs of speakers when facing a particular academic or professional context. The courses aim "to help the learners become better equipped linguistically to cope with the communicative demands they face in their work or study situation" (Basturkmen and Elder 2006: 672). The importance of the learners' needs is one of the defining characteristics of LSP, as materials and courses are based on the results of a needs analysis (Brown 1995, Dudley-Evans 2001). Moreover, as LSP teaching and syllabus design often arise from pressing situations, they are "driven largely by practical rather than theoretical concerns" (Basturkmen and Elder 2006: 673).

There are a number of key issues in the development of an LSP course (Gatehouse 2001). Several abilities are required for successful communication in occupational settings. As a result, LSP programmes usually outline the needs of learners so as to provide them with the jargon of their context as well as to offer more general language content. However, the balance between general and specific proficiency has to be determined. It should be noted that there can be overlap in how these two considerations are addressed; also, the needs of individual language learners can differ. In addition to language or jargon use specific to their occupation, LSP-learners often require a set of more general skills which feed communicative competence, such as how to write a report or how to chair a meeting. These skills often help or allow language-discordant professionals – often people who lack proficiency in the language(s) of their professional environment – to integrate into the workforce, to establish social relationships, and to be more open to lifelong learning. Material developers need to incorporate these features in accordance with the ultimate goal of designing a language and communication course that will contribute to efficiency in a multilingual work environment. Thus, a needs analysis and careful examination of the occupational context needs to precede materials design.

2.2.1 Towards designing a syllabus for specific needs

Professional learners are often identified as a heterogeneous group. Being who they are, they will have to be presented with diversified, broad, easily accessible, adequate and appropriate content which reflects their professional context as closely as possible (Ali and Salih 2013). This brings about a number of challenges which have to be taken into account when designing a LSP programme, namely the inclusion of low-level proficiency learners, the integration of several skills in the course materials, the creation of a platform where a balance between content knowledge and general language knowledge is achieved, as well as assurance that the relevant voices are heard and their needs addressed (Basturkmen and Elder 2006: 677).

2.2.2 Towards materials development for healthcare professionals

Since LSP learning often takes place when the learner is already engaged in the professional context, the learner may not optimally benefit from conventional contact teaching. Professionals in mobile contexts – i.e. professionals who are not bound to one working environment or region – have relatively little time for contact teaching and, as a result, materials are often made available for autonomous learning. However, irrespective of whether the materials are printed or available electronically (i.e. accessible online or via mobile phone), learners often do not know how to deal with these materials independently and thus require support (Van de Poel and Fourie 2013). To this end, blended learning (Bonk and Graham 2006)

can be a solution, where online autonomous learning can be supported by contact sessions with a teacher, expert, monitor, tutor or peer.

3. Research design

As indicated earlier, the present study was carried out as a first step to inform the language and communication materials design process for pharmacists in South Africa. Thus, within the theoretical framework of the study, the actual needs of practicing pharmacists had to be identified. In the empirical part of the study, a needs analysis investigated the different roles pharmacists have in their professional contexts, the communicative challenges they face, and their perceived language-learning needs. These data were then mapped onto the curricular needs formulated by the Faculty of Health Sciences at NWU, and transformed into a syllabus as a foundation for online/mobile materials development. The next section will briefly introduce the concept of 'needs analysis'. The following section will then present and discuss the empirical investigation.

3.1 Needs analysis

Berwick (1989: 56) argues that a need refers to a gap between *what is* and *what should/could be*. In order to overcome this gap in syllabus and course design, one should be well informed about the true needs, challenges and interests of students/learners. Data to this end are typically gathered by means of a needs analysis. Brown (1995: 35) refers to a needs analysis as "the activities involved in [systematically] gathering [both subjective and objective] information that will serve as the basis for [defining, developing and validating] a [defensible syllabus] that will meet the learning needs of a particular group of students". This is confirmed by Richards (2001). A needs analysis is a powerful tool that clarifies, verifies and validates the true needs of students/learners and not only the perceived needs as determined by, e.g. language practitioners. Indeed, it has the power to shape syllabi and learning materials (course design), and it warrants the needs, gaps and wants or interests of students/learners (Lepetit and Cichocki 2002; Long 2005).

According to Hutchinson and Waters (1987: 55), needs can be divided into target needs and learning needs. Target needs are what a person should be able to do in the **target language use situation**: (i) what the student/learner needs to know to function effectively in a particular context; (ii) what hindrances the student/learner will face in this particular context; and (iii) what the student/learner sees as important or interesting and wants to learn. Learning needs are what the student/learner needs to do **in order to learn**. In keeping with Hutchinson and Waters (1987), the learning needs should also be reflected by the learning route (materials), and not only the target needs as is often the case. For the purposes of this study, both the target and learning needs inventories were informed by Gasiorek and Van de Poel (2012) and Van de Poel, Vanagt, Schrimpf and Gasiorek (2013), relying on Basturkmen and Elder (2006), Dudley-Evans (2001), Flowerdew (2013) and Gatehouse (2001), among others, and taking into account the insights presented in the work by Beardsley, Kimberlin and Tindall (2012) and McDonough and Bennett (2006). In what follows, we will describe the in-depth needs analysis conducted for this study. In the final section, the course design, informed by theory and needs, will be outlined.

3.2 Empirical investigation

3.2.1 Instruments and procedure

As indicated above, the original *Medics on the Move* needs analysis instrument (reported in Gasiorek and Van de Poel 2012; Van de Poel 2009 and 2011; Van de Poel and Brunfaut 2010; Van de Poel and Gasiorek 2012a and 2012b; Van de Poel, Vanagt, Schrimpf and Gasiorek 2013) was adapted and extended to target pharmacist-specific topics as well as the South African context. The changes made for this new context were based on intercultural communication research and the expertise of qualified South African pharmacists.

The questionnaire used to gather information included a needs inventory with two components containing both closed and open-ended questions.[3] The first component (the communication component) asked participants about their professional communication experiences, expectations and needs. The second or pedagogical component consisted of three questions which explored the participants' needs and wishes with regard to communication training and learning. These questions occasionally overlapped with those in the communication component, allowing for verification of responses.

The questionnaire was piloted for validation purposes among staff at the School of Pharmacy at NWU in September 2013. In October 2013, an online invitation in five languages (English, Afrikaans, Setswana, isiXhosa, Sesotho) and a link to the (English) survey was sent to 10,602 e-mail accounts kept at the official NWU registry as well as 40 NWU staff members at the School of Pharmacy, and 64 Master's and PhD students enrolled in this particular school. After two months, the total number of complete responses (i.e. responses to all questions) was 255, representing a response rate of only 2%[4]. The low response rate may be due to the extent of applicability of the survey to the addressees' working environments, lack of interest, lack of time, passive e-mail accounts, the rather academic tone of the invitation and the questionnaire, the fact that the survey was only available in English, amongst other things. Despite the length of the survey, the respondents appeared to have given detailed responses and even sent the researchers grateful, positive feedback upon completion of the survey. Although the response rate shows a low percentage, it is nevertheless a fair-sized sample. All respondents gave informed consent for the data to be used.

3.2.2 Participants

As noted above, 255 pharmacists voluntarily completed the online questionnaire as far as it was applicable to their professional situation. The gender distribution (69.6% females, 30.4% males) is generally representative of the pharmaceutical professional population in South Africa (South African Government 2013). Of the respondents, 40.8% were over 50 years old, 26.6% were between 30 and 40 years of age, and roughly 20% were between 40 and 50 years of age. The remainder of the participants were younger than 30 (25-30: 9.2%; 20-25: 1.0%).

In terms of professional background, the participants had on average 20.29 years of experience in pharmacy (SD = 12.23). Most respondents were practitioners and thus worked in a pharmacy

[3] Additional information was also gathered with this questionnaire, but it is outside the scope of this paper, and therefore will not be reported or discussed here.

[4] Note that approximately 1,600 emails were returned as undeliverable and calculations were adapted accordingly.

(76.5%), followed by 15.8% who selected "other" (e.g. active in research, the pharmaceutical industry, and/or in pharmaceutical consultancy). Finally, some academic staff (6.6%) and two students (1%) also participated. Approximately one third (30.6%) of participants reported that they were currently employed in retail pharmacies. The remaining participants reported being employed in "other" situations (e.g. regulation, administration, consultancy (21.9%); industrial pharmacy (11.7%); private hospital (11.7%); government sector (11.2%); research and education (6.1%); and education and sales (0.5%)).

With regard to language use[5], almost half of the participants use Afrikaans as their first language (46.43%), while English is the first language of 39.8% of the participants. The other languages are distributed in the following way: Sesotho (2.55%), isiXhosa (1.02%) or isiZulu, Shona, Tshivenda, Xitsonga, Dutch, or German (all 0.51%). Most respondents (89.8%) claimed to speak as a second language: English (58.52%), Afrikaans (36.93%), isiXhosa (1.70%), or Gujarati, Italian, Sesotho, isiZulu (all 0.57%). A considerable number (26.02%) speak a third language, and some a fourth language (12%).

Two-thirds of the respondents (67.86%) use English as their primary professional language, followed by Afrikaans (21.94%) or both (0.51%). For four respondents (2.04%), another language was dominant in professional contexts (Sesotho sa Leboa, Xitsonga, isiZulu). Participants reported speaking these dominant languages for 38 hours per week on average. Just under three-quarters (72.45%) reported using a second professional language: Afrikaans (53.52% of 142 respondents, same sample for the percentages to follow here), English (31.69%), Zulu (5.63%), isiXhosa (1.41%), or isiNdebele, Sesotho, Sesotho sa Leboa, Setswana, Dutch, Italian, Mandarin, Portuguese, or Russian (all 0.7%). These second professional languages are spoken for 13 hours per week on average. A minority reported the use of a third professional language (16.8%) and a fourth language (4.6%), averaging 9 and 4 hours of use per week, respectively. Together, the respondents speak 10 of the 11 official languages: Afrikaans, English, isiZulu, isiXhosa, Setswana, Sesotho, Sesotho sa Leboa, Tshivenda, isiNdebele, and Xitsonga (thus all but siSwati). It should be noted, however, that most comments on these demographic questions indicated that knowledge of African languages is quite basic or non-existent: "ZULU IS VERY POOR", "I battle with Zulu [as second professional language]", "Swahili, just to help myself", "Wish I had learnt some Africann language", "Not very fluent in Zulu", "basic xhosa", "some knowledge of Xhosa, but very rusty", "Spoke Xhosa as a child, since lost it".[6]

4. Results and discussion

4.1 Communication

The communication component of the needs inventory required respondents to indicate the following on a 5-point Likert scale (ranging from 1 = "very problematic" to 5 = "not problematic at all"):

[5] The total sample size was used for calculating the percentages unless mentioned otherwise, even though 11 respondents did not answer the questions pertaining to language use.

[6] For greater legibility and focus on the ideas rather than the linguistic proficiency of the respondents, the responses are reproduced verbatim and have not been corrected.

(i) To what extent they found "communication in general" problematic with patients/clients, colleagues, doctors and other professional contacts, and to specify or give an example (open-ended);
(ii) To what extent they found communication with the same people problematic "in a language other than [their] first language", to fill in which language they had in mind, and to give an "example of problematic communication in a language other than [their] first language";
(iii) To what extent they found several elements important whilst communicating with patients/clients (see Table 2 for a complete list);
(iv) To state whether they would consider the following as "barriers for conducting effective communication" in their profession: lack of interest, low priority, lack of skills, lack of knowledge, lack of resources, other (and if they selected the latter, to specify why).

4.1.1 Communication in general is considered unproblematic

In general, respondents (n = 154 for these items) did not find communication in this context problematic[7] with any group. As can be seen in Table 1, all means are well above the midpoint of the scale (where 1 = "very problematic" and 5 = "not problematic at all").

Table 1: Extent to which communication with different targets is considered problematic

	General		Second/Other Language			
	M	*SD*	*M*	*SD*	*t(153)*	*p*
Patients/clients	3.84	1.07	3.31	1.24	6.85	< .001
Colleagues	4.38	0.79	3.74	1.16	7.21	< .001
Doctors	4.09	0.96	3.58	1.15	5.74	< .001
Other professional contacts	4.10	0.90	3.54	1.15	6.86	< .001

Open-ended responses indicated that problems arise from the lack of fluency in second and/or third languages ("especially with Xhosa-speaking patients", remarked one participant, although another indicated that there is "in general no problem if someone speaks Afrikaans or English"), scientific terminology, and different cultural and historical backgrounds (see Appendix A[8].1-3). Some respondents commented that when problems occur with patients, it is because: (i) "they [i.e. the patients] are usually uninformed or confused about conditions, medications, criteria for medication"; (ii) they do not speak/understand English or Afrikaans in rural areas; (iii) they attach different meanings to language possibly due to different health beliefs from their respective cultures (see Appendix A.4); or (iv) they are simply "difficult people" who do not "accept" the responses they get from the pharmacist (see Appendix A.5). Problems with doctors and specialists are ascribed to the limitation of their verbal skills to "areas within which they do not feel threatened" and hierarchy being a barrier to collaboration or the equal exchange of ideas: "communication with doctors is improving, but sometimes still hampered by personal pride vs. patient interest, e.g. confirming/questioning an antibiotic dose for a child and although

[7] Yet, as one respondent reported, "in [an] NGO setting [these] answers apply. In retail however different answers would apply."
[8] Appendix A contains the responses to open-ended questions and serves as qualitative data for the study to supplement the quantitative data reported in this section.

having reason for concern, will be told to respect the doctor and not bother him/her with useless queries."

Notably, respondents also indicated that communication in a language different from their first language was not problematic. As with communication in general, means were all above the scale midpoint. However, four paired-samples t-tests comparing participants' evaluations of communication in a language that is not their first language and their evaluations of communication in general with the four target groups (patients, colleagues, doctors, and other professionals), showed that foreign language communication was experienced by all target groups as significantly more problematic than communication in general ($p < .001$; see Table 1). An independent-samples t-test comparing retail pharmacists to everyone else, for both communicative situations for each target group (total of 8 tests), did not indicate a significant effect of current employment on communication problems.

Open-ended responses indicated that problems do arise from the practitioner's limited active vocabulary knowledge (Appendix A.2), pronunciation (producing and understanding – see Appendix A.6), difficulties with grammar in the foreign language (Appendix A.7), the absence of labels for certain conditions in the patient's mother tongue, the patient's illiteracy (Appendix A.8), and the language used being different from the interactant's mother tongue (Appendix A.1). Language-discordant situations are reported (by some) to be especially problematic in discussions about "sensitive areas" (for example, "when one has to explain inserting a vaginal preparation or a suppository"), where it is "difficult to be professional and diplomatic". In line with the biographical finding that most practitioners seem to be fluent in English and/or Afrikaans but not in African languages[9], problems seem to occur when patients do not speak or understand English or Afrikaans (see Appendix A.9).

4.1.2 Elements of importance while communicating with patients/clients

Collectively, respondents indicated that "good listening skills" was the most important element while communicating with patients or clients (see Table 2). Other important elements included: being able to ask questions, knowledge of the patient's language and culture (i.e. knowledge about culturally-sensitive topics), being able to speak clearly, being able to respond reflectively, summarising what has been said, using simple vocabulary, and using simple sentences.

[9] Upon initial review, this seems mainly due to infrequent use, not due to unwillingness to learn.

Table 2: Pharmacists' ratings of the importance of aspects of professional communication in a second/foreign language (from most to least important)

	M	*SD*
Good listening skills	1.50	0.75
Being able to ask questions	1.59	0.76
Using simple vocabulary	1.66	0.81
Using simple sentences	1.67	0.80
Being able to speak clearly	1.68	0.77
Empathy	1.70	0.88
Being able to respond reflectively	1.71	0.78
Appropriate eye contact	1.74	0.87
Summarising what has been said	1.76	0.84
Knowledge of their culture (sensitive topics, etc.)	1.82	0.84
Appropriate body language	1.83	0.88
Knowledge of their language	1.84	0.85
Appropriate use of silence during communication	1.89	0.88
Direct face-to-face communication (no phone, no interpreter)	1.95	1.02
Experience talking with them	2.12	0.88
Knowledge of cultural hierarchies	2.23	0.96
Knowledge of jargon and abbreviations	2.34	1.01
Using pictures or drawings	2.45	1.08

The open-ended, qualitative comments suggest that there is a need especially for language and communicative support in history taking (covering people skills and passive vocabulary knowledge) and ensuring the correct use of medication (covering passive and active knowledge of instructions and compliance) – see Appendix A.10-11. For this part of the questionnaire, respondents also voluntarily described how to solve communication problems on the job (see Appendix A.12).

4.1.3 Perceived barriers for conducting effective communication

When asked which of the following aspects were barriers for conducting effective communication in their profession, participants selected lack of knowledge (67.69%), lack of skills (63.85%), lack of resources (41.54%), lack of interest (30.77%), and low priority (26.92%). Open-ended responses pointed to time constraints and lack of respect or engagement. Some examples communicated verbally by the respondents were as follows: "Lack of respect from other medical proffessions for my proffesion"; "Bad salaries of certain staff and not investing in training staff which strains their development. Bad attitude of certain people who does not accept responsibility for their function in the process"; "pharmacists have lost the passion for pharmaceutical care and the provision of information and education". Also, a lack of self-awareness was raised as a barrier, as noted by one respondent: "Lack of realising what contributes to a communication problem, and how our individual styles impact on the patient."

4.2 Pedagogical needs

The pedagogical component of the needs inventory required respondents to indicate on a 5-point Likert scale to what extent they would like to learn the listed languages and topics if they "were to take a communication course for pharmaceutical purposes" (with lower scores indicating a greater desire to learn a given language or topic).

Respondents were also asked to indicate what they think the focus of a syllabus for effective oral communication for pharmacists should be. The options provided were: speech functions, cultural functions, social functions, language structures, communication principles and structures, active student participation, or other. Another question asked participants to indicate how a communication course for pharmacists should be taught: face-to-face, with printed course materials, with online materials, with mobile support, or other. For this question, endorsing multiple options was allowed. Finally, participants were asked who should teach these kinds of courses: a pharmacist specialising in communication for pharmacists, a language specialist working in the area of LSP (pharmacy), a pharmacist in collaboration with a language specialist, or someone else. Respondents could also add comments.

4.2.1 Learning, training, teaching

Collectively, respondents preferred to learn isiZulu for pharmaceutical purposes (M = 2.40, SD = 1.27), and were also open to isiXhosa (M = 2.84, SD = 1.32), Afrikaans (M = 3.09, SD = 1.31), Setswana (M = 3.02, SD = 1.30), Sesotho (M = 3.07, SD = 1.26), and more English (M = 2.91, SD = 1.49).

In terms of content, respondents indicated that they wanted to learn more about nearly all the topics suggested: communicative strategies (M = 1.92, SD = 0.98), how to deal with drug abuse and prevention (M = 1.90, SD = 0.94), how to use simple and clear sentences (M = 1.89, SD = 0.99), how to recognise patients' emotions (M = 1.96, SD = 1.02), medical terminology in another language (M = 2.03, SD = 1.09), cultural limitations regarding medication consumption (for instance, not taking medicine containing alcohol due to religious reasons; M = 2.01, SD = 0.90), alternative medicine (M = 2.07, SD = 0.90), cultural customs and sensitivities (M = 2.12, SD = 1.04), and cultural hierarchies (M = 2.45, SD = 1.11).

Some open responses were quite emotionally-loaded, reflecting potential ongoing frustrations whilst communicating professionally: "useless to learn about patient's emotions and reflection etc. if you can't even penetrate their inaccurate ideas about health and can't communicate with them due to language barriers. I find it totally useless"; "My answers about cultural sensitivities and customs are based on my believe that cultures that oppress women or others (hierarchies) should not be respected- instead they should be the ones getting with the times. We are living in the 21st century and I find these social norms and behaviours unacceptable and will not contribute to them in way, shape or form."

A syllabus for oral communication focusing on communication principles and structures was considered most important (64.86% from 74 participants, same sample for the percentages to follow here), followed by a syllabus focusing on active student participation (54.05%), speech functions (47.30%), language structures (43.24%), cultural functions (33.78%), and social functions (32.43%). One respondent requested that we "please start with first year students already with

workshops". A majority of 64.86% indicated that a communication course for pharmacy students should be taught by a pharmacist in collaboration with a language specialist, followed by 20.27% recommending a language specialist working in the area of LSP (pharmacy), and 14.86% favouring a pharmacist specialising in communication for pharmacists. One respondent suggested adding "[…] a person knowing the culture of the target language group", thereby confirming the need for attention to the culturally-determined aspects of communication.

With regard to teaching methods, the majority (87.84%) believed the course should be taught face-to-face. Having online materials (36.49%) was also considered important, but this could also be alongside printed course materials (21.62%) and with mobile support (21.62%). Time was mentioned as the "biggest constraint", and workshops were suggested "to reinforce behaviour".

5. From theory to needs analysis to materials design

5.1 Summary of the needs analysis

Whereas most respondents seem to manage professional language-discordant encounters, they experience communication in a foreign language to be significantly more problematic than communication in general. Importantly, problems in second, third, fourth, and even fifth languages are reported to be mainly due to infrequent use rather than unwillingness to learn. The qualitative data suggest that support is needed especially in African languages, and less so in English and Afrikaans. However, the quantitative results suggest that the respondents prefer a communication course for pharmaceutical purposes mainly for isiZulu and isiXhosa and, to a (nearly equally) lesser extent, for English, Afrikaans, Setswana and Sesotho.

Learning materials should cover basic vocabulary (as active vocabulary is limited), scientific terminology and simple explanations for patients/clients, sensitive topics (for instance, related to sexual issues, treatments applying to the genital area, etc.), pronunciation tips, grammatical support, and how to ask questions. Problems arising from different cultural and historical backgrounds, strict adherence to professional hierarchies, different intellectual abilities or illiteracy also highlight the importance of a more general communication module. This component should encourage creativity whilst communicating (for instance, using gestures to support language), active listening, checking of one's communication partner's and one's own understanding of the exchanged messages (by, e.g. summarising), a focus on patient-centred healthcare, awareness of the impact of one's own communication skills and style on others, and, ideally, an introduction to alternative medicine and cultural customs. Two main areas in practitioner-patient interaction to which these materials should apply are history taking (covering people skills and vocabulary) and ensuring the correct use of medication (covering passive and active knowledge of instructions and compliance).

The majority of participants indicated that they prefer a communication course for pharmacy students to be taught face-to-face by a pharmacist in collaboration with a language specialist. Alongside printed course materials, online materials and mobile support are also valued. Most importantly, learning materials should be to-the-point and easy to apply, as most practitioners have limited time to study and to interact with patients/clients, colleagues and other professional contacts.

5.2 Formulating goals and objectives

The needs analysis indicates that it is important for practitioners to use language effectively in a professional context and, in particular, to: (i) develop general communication skills; (ii) learn about their clients' cultures, especially when related to (the use of) medicine; and (iii) learn medical terminology alongside other profession-specific vocabulary in different languages. Based on the participants' perceived needs, the goals and objectives outlined in the following sections were established to help students to communicate successfully with both clients and other healthcare professionals in English, Afrikaans, isiZulu, isiXhosa and Setswana.

5.2.1 Overall learning goals

Pharmacists should be able to communicate with their clients and colleagues in a professional and socially appropriate way at a proficiency level where they can: (i) understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in their field of specialisation; (ii) interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party; and (iii) produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue, giving the advantages and disadvantages of various options in each case.

Upon completion of a language and communication programme designed for pharmacy students, learners should:

(i) Have developed general social communication skills (including assessing the other person's specific communicative needs and preferences, recognising their emotions and responding accordingly, producing simple and clear utterances, etc.) in order to improve their conversations with clients and other healthcare professionals they are likely to encounter as a practitioner;
(ii) Be aware of the existence of cultural differences regarding medical practice and medicinal consumption among their clients, and take these differences into account while communicating with clients and providing healthcare; and
(iii) Be able to understand, "translate" and explain medical terminology and key profession-specific phrases in English and Afrikaans, and effectively use the *Communication for Professionals* communication tools in isiZulu, isiXhosa and Setswana.

5.2.2 Specific outcomes

While learning or training with and using the proposed language and communication programme in the clinical setting, students should meet a number of specific outcomes in English, Afrikaans, isiZulu, isiXhosa, and Setswana with an accuracy of at least 80% in the test phase. They should be able to:

(i) Identify different sorts of communication barriers (linguistic, medical, social, emotional, religious, political, etc.) in day-to-day healthcare scenarios;
(ii) Overcome communication barriers by constructing a conversation which minimises potential discrepancies between their own intellectual, social and moral features and those of their clients by, for instance, adjusting their language use to the client's needs by correctly asking for information and/or through active listening;

(iii) Identify the cultural and language backgrounds of their clients while providing healthcare in order to cater for every client's healthcare needs, beliefs, and preferences; and
(iv) Use basic communication and interactive strategies so they can greet their clients, ask about their personal situation (concerning their visit), and say goodbye to them.

Moreover, for Afrikaans and English, learners should be able to:

(i) Ask clients simple and clear questions about their medical history by making use of the consultation timeline;
(ii) "Translate", describe, and explain medical terminology that is frequently used in the pharmacy (for instance, related to the (consumption of the) medicine that is being sold);
(iii) Prescribe a pharmaceutical product without language mistakes;
(iv) Give clear instructions on how to use the pharmaceutical product (medical terminology together with reference to everyday life and potential dangers);
(v) Give a 50-word oral response to a hypothetical question asked by a client, with the former deemed as satisfactory by at least 80% of an exam jury made up of experienced professionals; and
(vi) Report with 80% accuracy the medical history and healthcare needs of a client to a colleague.

Since isiZulu, isiXhosa and Setswana can be identified or labelled as "less widely taught", the approach to learning how to function professionally in any of these languages should be more pragmatic both content-wise (focusing on a limited selection of highly significant and frequent language functions) as well as pedagogically, where strategic and "just-in-time" learning may be most effective. To this end, during contact sessions, learners will be introduced to the online/mobile materials and how to use them in a language-discordant clinical setting. By adopting a blended approach, the programme not only advocates online/mobile and lifelong learning, it also supports the development of an autonomous attitude which learners will need in order to become the competent professionals they strive to be.

In terms of the specific outcomes for the African languages, the learners should be able to:

(i) Identify socially and culturally appropriate phrases in the initial and final phases of the encounter;
(ii) Adequately use the verbal and non-verbal interaction patterns required in these phases;
(iii) Be familiar with the bilingual consultation timeline for history taking and medicinal consumption as presented in the *Communication for Professionals* online materials;
(iv) Effectively make use of this consultation timeline in the clinical setting by, specifically, identifying the phase of the encounter, isolating the question(s) to be asked, gauging the best language in which to ask it, asking the question, and ensuring appropriate feedback and successful communication.

5.2.3 Outlining the programme

Even though the different languages addressed in this programme serve different functions and will have to be learned in different degrees, the look and feel as well as the outline of the

programme remain the same for all languages, even though the syllabus is most comprehensive for English and Afrikaans and covers 10 topics. The learning line is gradual, from easy to more complex, but also caters for repetition of more challenging language content. Figure 1 is a screenshot taken from the *Communication for Professionals – Pharmacists* online materials for English, which were informed by the theoretical insights as explained above, as well as by the needs, wants and wishes of practicing pharmacists.

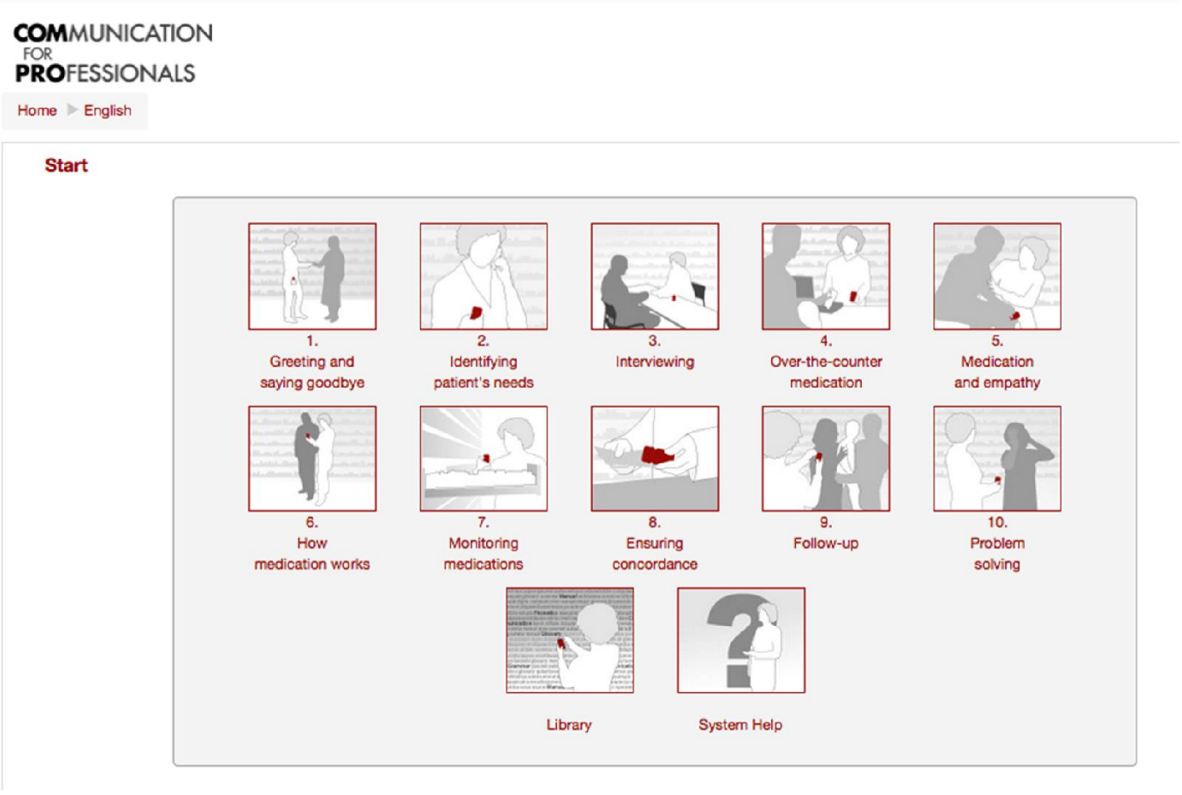

Figure 1. Screenshot of the *Communication for Professionals – Pharmacists* start-up page with various topics, Library and System Help

The topics cover different types of content captured in scenarios. Listed below are a few examples to illustrate the interactive communicative content as well the content embedded in the consultation timeline:

1. Greeting and saying goodbye: Opening and closing an encounter
    - Greeting a patient
    - Identifying a patient
    - Social talk
    - Starting counselling
    - Saying goodbye

2. Identifying patient's needs: Selling prescription medication
    - The prescription
    - Products used
    - Verifying the doctor's advice

- Contacting the family doctor over the telephone
- Early demand for a repeat prescription

3. Interviewing: Patient assessment
    - Identification
    - History taking
    - Medication overview
    - Current medical conditions
    - Medication record

5.2.4 Preview of a scenario

Each topic is developed around short scenarios. A scenario represents the communicative functions performed by a pharmacist in clinical practice. For example, the second topic "Identifying patient's needs" contains five scenarios which are elaborated on in training at the levels of sound, meaning, language form (grammar), and communication. Figure 2 is a screenshot taken from the *Communication for Professionals – Pharmacists* online materials, providing an illustration of a scenario in the second topic. The first scenario in the second topic deals with getting a prescription filled.

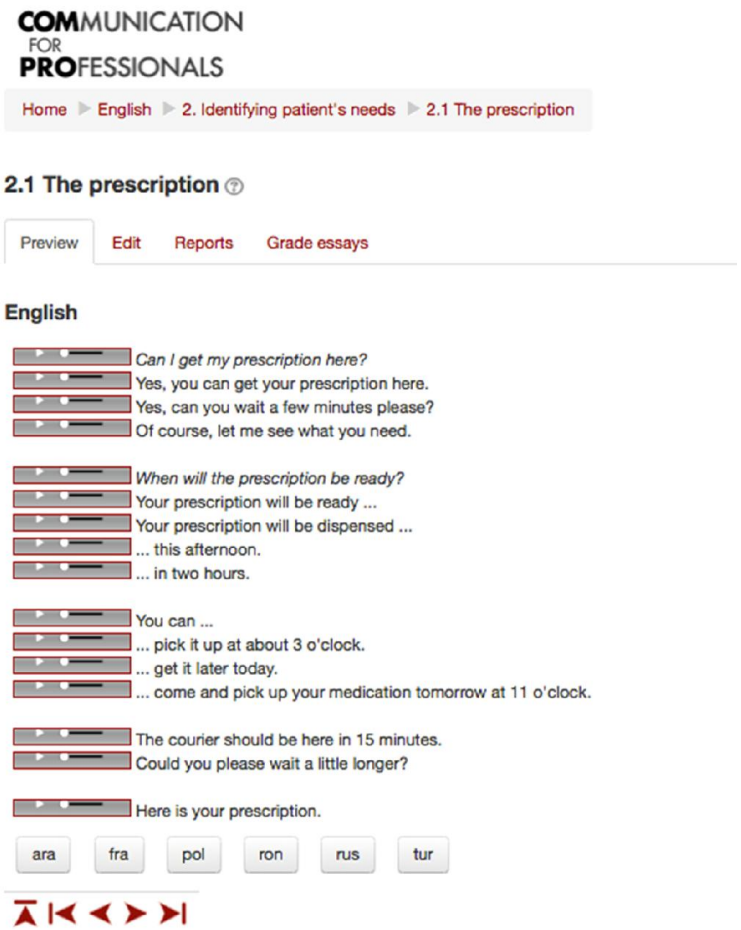

Figure 2. Screenshot of a scenario from *Communication for Professionals – Pharmacists*

5.2.5 Training materials

Learners can practise the different components of the target language as well as the communicative functions that are required in a clinical setting. *Communication for Professionals – Pharmacists* provides practice for sounds, word meaning, language structure as well as communication skills. Figure 3 is a screenshot taken from the online materials, providing an illustration of one of the communication exercises. Learners have to complete utterances and listen for hints and tips. After completing an exercise, they can check their answers, and a mark and feedback for remedial training is then provided. The feedback will point learners to either the scenarios, the wordmaps (new words presented in semantic fields or word families) or support materials in the Library.

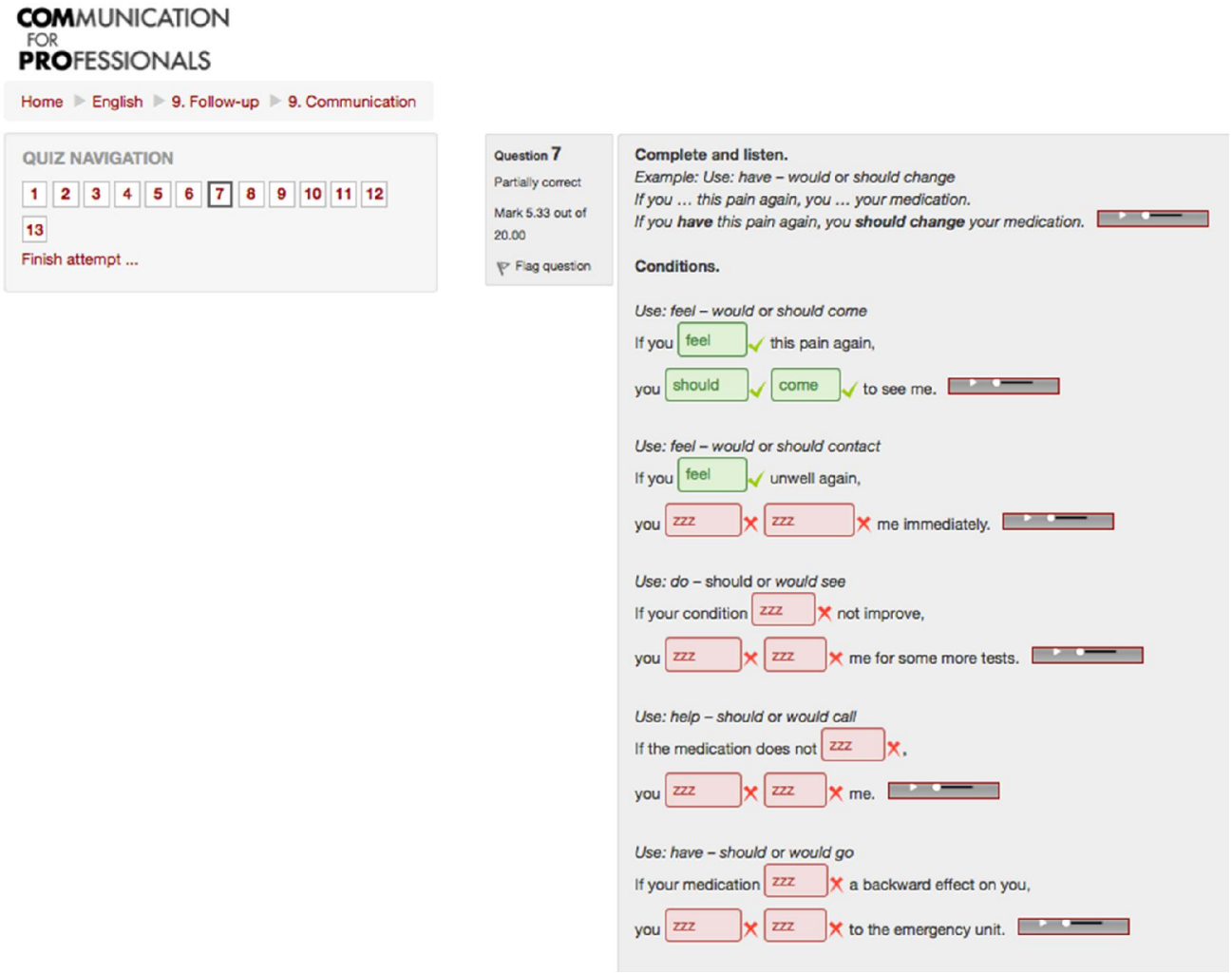

Figure 3. Screenshot of a completed and corrected exercise (without feedback) from *Communication for Professionals – Pharmacists*

5.2.6 Additional materials: The Library

In order to support learning and realise the required communicative outcome, additional materials are provided in the Library. Since pharmacists generally have an analytical learning style, background information to language components can stimulate the learning process. To

this end, the Library contains the following tools: a pronunciation manual with videos showing air stream mechanisms, articulation and medical terms exemplifying the sounds; a wordlist with audio examples and translations to access the scenarios easily; a user-friendly and contextualised grammar overview as a support to access the topics; and communication strategies and tips which should facilitate effective interaction in the foreign language and culture (Figure 4).

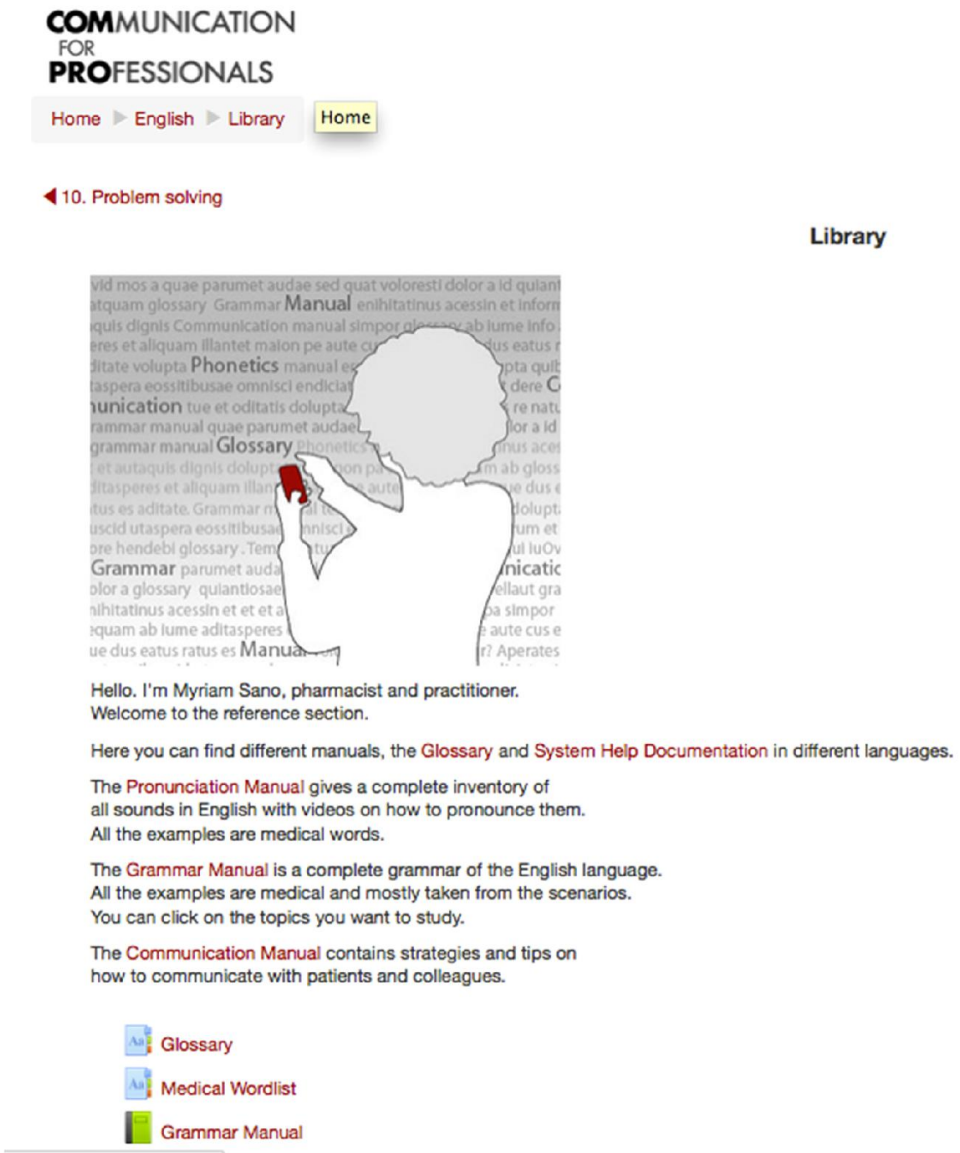

Figure 4. Screenshot of additional materials available in the Library of *Communication for Professionals – Pharmacists*

6. Conclusion

The guiding question for this article was: How can programme and materials design be informed by theory, and by drawing on pharmacists as experts-by-experience in intercultural professional communication? Through this study, we reported on how we managed the development process of a communication programme to be implemented at a South African

university while drawing on the voices of stakeholders (i.e. teachers, students, alumni, professionals) engaged in pharmaceutical communication. In doing so, we identified in the first phase of the project a workable theoretical framework, i.e. Language for Specific Purposes. We then developed and conducted a needs analysis in the second phase of the project, the results of which were translated into a framework for syllabus and programme design. The ultimate goal of this process was to develop course materials to enhance (pre-)professionals' efficient functioning in a multilingual work environment where appropriate communication is of critical importance. We set out to investigate whether professionals could be relied upon to inform intercultural professional communication course content, and have never before arrived at such a rich database from which to work. This multilayered process may have the power to inform guidelines about responsible and effective functioning in a multilingual work environment where clear and transparent communication, more often than not, is a matter of life or death.

When performing a needs analysis, a vital component is an evaluation of the process of implementation. Since we have just concluded the conceptual phase of the analysis, our next step is to plan a usability study of the implementation of the course materials in which we will determine how learners evaluate the programme as a whole (both in contact teaching and online) and what the possible impact of this programme is on healthcare communication. A further research project following from this study will be the translatability and adaptability of the programme (materials and approach) into the African languages. Ultimately, we are interested in investigating equivalence among different programmes under the *Communication for Professionals – Pharmacists* umbrella.

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Appendix A: Qualitative data on communication

(The data have been reproduced here with their original spelling.)

(1) Problems due to lack of fluency in 2nd/3rd/… languages, but rarely in English or Afrikaans	"Cannot ask questions to ascertain symptoms or give instructions to people who cannot understand English or Afrikaans" "I do not understand any African languages as sometimes needed in private sector (when the patient only understand African languages especially in rural areas). Fortunately it is easy to get someone who can interpret the patients concerns so that the patient can be helped accordingly." "Although in my current job I do not use other South African languages, I worked in retail pharmacy for 5 years and there were some instances were knowledge of an African Language would have been beneficial. Some people are able to better explain problems in their own language, people coming to suburban pharmacies from squatter camps may not speak English" "English is easier to communicate in - in the manufacturing environment all process and equipment are trained in English" "I am fully conversant in both English and Afrikaans. These two languages are the dominant languages in business" "I work in a rural setting and English is not spoken or understood by most patients"
(2) Problems with specific terminology in 2nd/3rd/… language	"I can instruct Patient and Klients in layman terms exceptionally well I have forgiotten the scientific terms that I studied because I do not converse in those terms anymore.." "Medical terms are difficult to translate" "Communication with professionals could be a slight problem if there were technical subjects to be discussed - I would battle with eg medical terms due to lack of use in my present employment!" "I have spoken so little Afrikaans since Community service, that it is difficult to come up with the right vocabulary, specifically when speaking with doctors and colleagues where requirements are more technical" "I rarely deal with the public and almost everyone else speaks English. On the odd occasion, someone prefers to speak Afrikaans which I understand easily, but do not speak fluently. The scientific nature of the work makes it even harder to find the words to express myself. However, I make it clear that if the other person understands English, that we each speak our own language, and that works."
(3) Problems due to different cultural/historical backgrounds	*Comment on general communication problems:* "Patient has different cultural values and norms, making it hard for me to medicate" *Comments on language-discordant communication problems:* "explaining allergies, side effects and drug interactions with traditional medicines" "I advise on legal/ethical/professional matters. With the vast differences in cultural and language backgrouds amongst many, it is not always possible to communicate the finer nuances of professional legal/ethical problems."
(4) Problems due to different semiotics	"Most patients who speak an african native language like tswana and sotho etc are very problematic to communicate with, not because they can't speak english, but because english that they use mean something different to them than we understand. Also, these people's cultural health beliefs are a great obstacle. They believe if you're tired, you must have "gal". "Gal" can mean constipation, or it can just mean that (even if you have regular bowel movements) your bowels must be "cleaned". They therefore come to you

	complaining about "gal", which will have them get something for constipation, but they are not constipated, they are tired, which means they probably can have blood sugar problems, vitamin B deficiency, etc. "Gal" is also the description given for phlegm, sinus, diahrroea , vomiting etc. They believe these symptoms are due to "gal", which means the bowels need to be emptied. Huge obstacle."
	"Many African languages don't have the typical concepts that is prevalent in european languages, e.g. the word allergy does not exist in Xhosa. So I have to ask this the long way round: 'have you taken any medicines before that caused you to itch or that you know of that is bad for you?'"
(5) Problems due to other's "refusal" to speak English	"when the doctor or patient refuses to be spoken to in English. I would then have to skeap in afrikaans
	"When a doctor refuses to speak English and only wants to communicate in Afrikaans. This is rare though. I have only encountered this once in my professional life."
(6) Pronunciation problems	"Pronunciation of certain conditions and drugs is the most common problem"
(7) Grammatical problems	"tenses"; "Six cases, 2 genders and neutral and different endings depending on singular or plural"
(8) Problems due to patient's illiteracy	"Portugese customers from Mozambique – Illiterate people from rural community who needs instructions how to take their medicine"
	"COUNSELLING PATIENTS WHO ARE ILLITERATE"
	"Knowing the persons education back ground will help you to know how to approuch the person/client"
(9) Mainly problems in African languages	"Communicating with patients and colleagues in a black language about medical conditions and describing symptoms."
	"Understanding and communication to a patient that does not understand english / afrikaans"
(10) Need for support in history taking	"problem in understanding what people want and sickness explanation"
	"Patients get comfortable when communicated in the language they understands and most of them open up more."
	"words sound similar to my ear and I can give the patient wrong medication. […] I cannot get a full history to make my diagnosis"
	"Proving credibility and being sure that the patient is understanding important information"
(11) Need for support in ensuring the correct use of medication	"My main problem is to try and make the patient listen so that he/she knows when and how to take their medicine eg.telling a patient to take a tablet 3 times daily,then when making sure that they know the dosage asking them how many times a day they should take their pills they answer twice a day.I have been in pharmacy for 40yrs and never been able to resolve this problem."
(12) Problem solving on the job	"Confirm if all instructions were understood and ask for the patient to repeat them"
	"Reflecting back to make sure that I have understood and interpreted all the information it correctly."
	"A negative reaction from a client/patient would be a blank stare this is when the counsellor or assistant is called to translate"
	"Face to face communication is ideal but an interpreter is important to me when I have a foreign client. Also, telephonic communication is also important for convenience" "Google translator on iPhone is very useful."
	"All the necessary communication is left to the pharmacist assistants"
	"If it's an older patient, be prepared to listen to the story of her life etc"

	"Be sincere and kind" "Interact with respect" "Listening is very important as are enabling questions. ie questions aimed at evoking answers which will help you to understand the patient/query better." "Being aware of the cultural and ethnicity of the symptoms under discussion as well as having an understanding of the persons financial standing, hence affordability will greatly enhance the communication. - If the most expensive is offered to the poorest as first option the patient will in embarrassment immediately switch off - given alternatives with a choice of cost will always provide the patient with the upper hand of self choice.- A very important point that is lost to the business man intent on high profit sales volume"

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The logo on the front cover depicts Simon van der Stel, Dutch governor of the Cape of Good Hope from 1679 to 1699, and the founder of Stellenbosch. We have chosen to portray Van der Stel in our logo for reasons of symbolism that relate to his historical significance, his intellectual qualities, and his creole descent. Simon van der Stel was the man who, in founding the town of Stellenbosch, took a deliberate initiative towards establishing the permanency of the young Dutch settlement at the Cape of Good Hope. He has been portrayed as a man endowed with special intellectual qualities, who set great store by clear, factual thinking --- a quality which we value. His creoleness, to us, is symbolic both of the melting pot from which emerged the South Africa of the 18th century and of the kind of future that we envisage: a future unmarred by the racist divide that plagued our country in the past. Our commitment to a future free of racism, as well as our reasons for portraying Simon van der Stel in the **SPIL** logo, are stated more fully in **SPIL** 17 of 1988.