Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi -Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo - Ijenali

Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig -Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo -

Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa

iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo -Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo

- Jenala yo Dyondzisa Ririmi
- Tydskrif vir Taalonderrig

Journal for Language Teaching - Ijenali
yokuFundisa iLimi IJenali yokuFundisa
iLwimi - Ibhuku
Lokufundisa Ulimi
Tšenale ya tša
Go ruta Polelo Buka ya Thuto
ya Puo - Jenale
ya Thuto ya Dipuo
Ijenali Yekufundzisa
Lulwimi - Jena?a ya u
Gudisa Nyambo - Jenala

Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi -Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language

Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi -Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo -Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi

Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo -Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig -Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo -Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa

iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale va tša Go ruta

Rosemary Wildsmith-Cromarty North-West University

BUILDING A KNOWLEDGE BASE FOR LANGUAGE TEACHING THROUGH TRANSLANGUAGING

Abstract

The aim of the research reported on in this article was to explore the effects on student learning and performance of the use of two languages of instruction, viz. isiZulu and English, in a course on the teaching of isiZulu as an additional language at school level. The course was for third year BA students considering a language teaching career. The content of the course came from the Applied Linguistics field and had not been translated from English into isiZulu. In addition, the discipline content was taught by a non-isiZulu speaking applied linguistics lecturer who had recently joined a three-year major course in isiZulu but was not fluent. The course was team taught by the Applied Linguist and an isiZulu lecturer who made the content accessible to the students through translation of difficult terms and concepts into isiZulu. Students were free to use either language. The research questions focused on how the two languages interacted naturally within a translanguaging framework in order to scaffold learning, and whether and how the use of isiZulu would facilitate understanding of key disciplinary concepts

when the terminology had not yet been developed. Class sessions were recorded and transcribed with informed consent. Instances of translanguaging were analyzed in terms of the functions they were fulfilling within a broad discourse analysis framework. Findings revealed that what began as planned and systematic code-switching became. over time. translanguaging. Students appreciated the affordance for meaningful engagement with the subject content as they found it easier to challenge the lecturers and to present their own points of view in isiZulu. The experience also created rich affordances for building an academic discourse in isiZulu. Finally, teaching on the course created learning experiences for the lecturers who increased their knowledge of the languages concerned and the subject content respectively.

Keywords: applied linguistics; codeswitching; isiZulu; language learning; languages of learning and teaching (LoLTs); language scaffolding; tertiary level; translanguaging.

Journal for Language Teaching, Volume 52, Number 2, pp. 100 – 120. 2018. ISSN 0259-9570. https://dx.doi.org/10.4314/jlt.v52i2.5

Building a knowledge base for language teaching through translanguaging Rosemary Wildsmith-Cromarty^{1.} North-West University

1. Introduction

In terms of the *Constitution of the Republic of South Africa* (RSA, 1996), our cultural diversity is a valuable national asset and must be protected. To this purpose, the *Language Policy for Higher Education* (DoE LPHE, 2002) required all Higher Education Institutions (HEIs) to develop language policies in which languages of instruction are regulated, and in which monitoring policies must be included. This means that institutions are tasked with the promotion of multilingualism and the development of the official languages as languages of learning and teaching. However, since 1995, language policy debates and ministerial task teams have had to contend with the entrenchment of English in the educational domain; its role in occupying a privileged position in relation to the indigenous languages (Makalela & McCabe, 2013) and its contribution to declining literacy levels (Heugh, 2013).

At tertiary level, a number of institutions have developed language plans in line with the language policy which include the development of the indigenous languages as languages of instruction (Turner & Wildsmith-Cromarty, 2014). There have also been a number of studies involving the use of African languages as languages of instruction. They range from dual medium instruction in teacher education courses for the Foundation Phase (Grades 1 - 3) (Pluddemann et al, 2010; Mashiya, 2010; Mbatha, 2010); multilingual approaches to the teaching of South African history using historical isiZulu materials (Du Toit, 2016); the use of the African languages in tutorials (Kamwendo, Hlongwa & Mkhize, 2014) and the use of the African languages in clinical practice settings and in debriefing sessions in the health sciences (Engelbrecht and Wildsmith, 2010). What underlies these initiatives is the affordance of an academic space for the African languages and the active engagement of students, especially mother tongue speakers of African languages, in an effort to introduce content in the African language into the classroom alongside English. Running parallel to these initiatives was a drive to develop discipline terminologies and to produce materials translated into the African languages.

This article describes a study of the use of two complementary languages in a third year humanities semester course at tertiary level within a participatory, action research

¹ Note that although Prof. Wildsmith-Cromarty is the Guest Editor of this edition of the *Journal for Language Teaching*, it is confirmed here that Prof. Van Dyk, the Editor in Chief, took responsibility for the double blind peer review process for this article.

approach. The two languages were isiZulu and English as these were the languages mostly used on campus and in the environment. The institution where the course was offered has a bilingual language policy which aims to see many disciplines offering courses through both languages eventually (Kamwendo et al, 2014; Turner & Wildsmith-Cromarty, 2014).

In terms of language use, which is the focus of this article, the course content was mainly delivered in English, while isiZulu was used to explain, clarify and expand key concepts. It thus began as a dual medium or bilingual pedagogic approach using code-switching in a planned and systematic way (Jacobson, 1990; Setati, 2008; Williams, 1996). After a few lectures, however, the functional code-switching became merged into a single, fluid 'corriente' (Garcia, Johnson & Seltzer, 2017) of complementary language use, with participants using both languages for most functions – a phenomenon that has come to be known as *translanguaging*, to be discussed in more detail in the theoretical section.

The primary aim of the research was two-fold:

- 1. To monitor the effect of the use of two languages on the acquisition of knowledge in the discipline
- 2. To monitor the functions of the African language in the dialogic context of classroom lessons and discussions.

The research questions emanating from these aims were as follows:

- 1. How does the use of both isiZulu and English affect student learning, teaching and, ultimately, knowledge construction?
- 2. What functions is the African language fulfilling in the learning and teaching process? Do they change over time? If so, how?

These questions will be addressed in relation to selected extracts from the transcriptions obtained from the audio-recordings of classroom events.

The study fits within a participatory action research paradigm in so far as both students and lecturers contributed to the research, the former using their prior linguistic and sociocultural knowledge of isiZulu, and the latter contributing their expertise in both the subject discipline and the language respectively. These contributions helped to build academic terminology and discourse in isiZulu in the sub- discipline of language teaching, from the ground as it were. It was an organic process that opened up exciting affordances for creative work in concept development in the discipline.

2. Languaging in the classroom

Languages afford access to epistemologies (Heugh, 2015; Probyn, 2015; Makalela, 2016; Mkhize, 2016) as it is in and through language that we come to know. Without recourse to a familiar means of communication and expression, deep learning cannot occur as there is no real frame of reference for the acquisition of new knowledge (Carstens, 2016). In contexts where teachers and learners share the same languages, code-switching occurs which facilitates access to knowledge of the discipline in question (Probyn, 2015; Setati, 2008; Thokwe & Schafer, 2009). However, "the potential to use two languages in the classroom in a structured and systematic way to support learning has not been generally recognized or developed" (Probyn, 2009:123).

There have been attempts in the literature to distinguish *translation* from *code-switching* (Lewis, Jones and Baker, 2012) where *translation* refers to the rephrasing of the subject content or task instructions in the African language, and code-switching refers to a more reactive type of use of language where the teacher attempts to briefly clarify an issue in the home language to avoid misunderstanding. Such practices are generally short switches between languages for purposes of clarification. They are common in classroom contexts where the LoLT is the norm and therefore the use of other languages is necessarily brief.

Translanguaging, on the other hand, is using two languages "to organize and mediate mental processes in learning" (Baker, 2011:288) so that one language can engage with and reinforce the other. This is different to brief translations and code switches for clarification purposes. The term was then further extended by Garcia (2009), Garcia & Li Wei (2014), Li Wei (2011) and Garcia et al (2017) and Canagarajah (2011; 2017) to include a focus on what speakers *do* with their languages rather than on the languages themselves. Their focus was predominantly on immigrant students to the USA from Asian or Latin American countries. For Garcia and Li Wei (2014:2), translanguaging is:

...an approach to the use of language, bilingualism, and the education of bilinguals that considers the language practices of bilinguals not as two autonomous language systems, as has been traditionally the case, but as one linguistic repertoire with features that have been societally constructed as belonging to two separate languages.

Thus a translanguaging pedagogy builds on bilingualism or multilingualism (Heugh, 2015; Makalela, 2015; 2016; 2018; Mkhize, 2016; Probyn, 2015) thereby allowing the richness and complexity of diverse language practices to be utilized in the construction of knowledge. It has more recently been applied to African contexts by Heugh (2015); Probyn (2015) Makalela (2015; 2016; 2018), among others.

The bilingual approach adopted as pedagogy for the course on teaching isiZulu resembled the *original* dual language pedagogy as conceptualized by Williams (1996) and named *trawsieitu* in Welsh, which subsequently became translanguaging in English. The term originally described the use of both Welsh and English for instructional purposes in

schools. Its original application was therefore to education and in particular as a reaction to the separation of languages as bounded entities, i.e. as two parallel monolingualisms (Lewis, Jones and Baker, 2012). For Baker (2011: 288), translanguaging, as an emerging term, involved "...gaining understanding and knowledge through the use of two languages", which was precisely what underpinned the pedagogy used on the course described in this article – the concurrent, intentional use of two languages in the classroom which mutually support each other "in order to increase understanding and in order to augment the pupils' ability in both languages" (Williams, 2002:40).

Similar research has been carried out by Ramani, Kekana, Modiba and Joseph (2007) and Probyn (2015). Ramani et al (2007) conceptualized and implemented a dual medium undergraduate degree in Sesotho sa Leboa (Northern Sotho or Sepedi) and English at the University of Limpopo. Their central argument was that discipline-specific terminology can be developed 'bottom-up' through pedagogic processes which, in turn, implies that the process is participatory and inclusive of all participants, students and lecturers. The researchers used cognitively demanding tasks for grasping new concepts and encouraged the use of the African language to achieve this. Their central tenet was that the African language was sufficiently developed to be used as a medium of instruction for such tasks, and that any specialist terms that are lacking can be creatively constructed by using translation strategies such as transference, omission and transliteration. Thus knowledge construction and the building up of terminology was located within the pedagogy and classroom discourse itself which is similar to the aims of the current study.

Probyn (2015) investigated science teachers' classroom languaging practices in order to explore how they used language to bridge discourses from one language to another and from everyday understandings to scientific understandings of concepts and discourses. Her findings showed that teachers tended to use relatively short episodes of code-switching, usually to address learners' lack of comprehension, but these were not sustained. Code-switching in these instances were therefore unplanned and not intentional or systematic. However, there was one teacher in her sample who did use the African language systematically for facilitating learners' understanding of the subject matter and for exploring concepts. This is what is known as *pedagogical translanguaging* because it makes use of both languages in a coherent, systematic and integrated way in facilitating understanding and building an academic discourse. This is the type of language use that the current study also attempted to explore.

Similarly, Madiba (2010; 2013) also supports an organic process for terminology development and argues that languages develop through use and therefore waiting for terminology to be developed by various committees and language boards before using them in the academic domain is a flawed process. This was the main thrust of the development of the Multilingualism Education Project at the University of Cape Town, which was underpinned by Language Management theory which focuses on and supports implementation of policy at the micro-level. Problems thus arising from language use at this level can be effectively and creatively addressed by the participants thereby giving them agency in the development of the academic discourse in the various disciplines.

3. Methodology

The research approach was exploratory-interpretive and, to some extent, participatory, as all participants in the learning events were considered credible contributors to the building of subject content knowledge in the African language. The research thus falls into a critical pedagogic and action research paradigm in so far as it focuses on the linguistic and cognitive emancipation and empowerment (Freire,1972; 1985) of the participants through the use of both English and an African language. Heller (2007) recognizes the role of individual agents in the effective implementation of a language policy, which is different from the top-down approach most often used by government authorities. By contrast, a bottom-up, ethnographic approach to such implementation ensures that the relevant social actors (students and lecturers in this case) use their various linguistic resources in the joint construction of knowledge. In so doing, they modify, adapt and create new knowledge (Madiba, 2013).

The course was located within the isiZulu discipline and focused on the learning and teaching of additional languages (FAL), in this case, isiZulu, at school level. Topics included language learning and teaching theories, language pedagogy, typological analyses of isiZulu and English and the analysis of learner data taken from previous research studies. It was thus form-focused (Pica, 2009; Spada, 2011), and the content was drawn from applied linguistic and psycholinguistic theory including contrastive analysis, error analysis, interlanguage analysis and sociocultural theory. The pedagogy consisted of a collaborative, interdisciplinary approach where two lecturers taught as a team and contributed their expertise from their respective disciplines using the two languages. The methodological approach was also task-based and problem-oriented with students working in groups collaboratively. For a more detailed description of the course itself, including underlying theories informing course design, rationale, tasks and activities and assessment protocols see Wildsmith-Cromarty, (2013).

Forty second and third year humanities students contributed to the development of the course over two years. The course was team taught using both English and isiZulu during this developmental period. Apart from the research investigating how the two languages aligned with each other in terms of functions, other reasons for this were:

- 1. To explore how the theory could be made more accessible and relevant to the students through the use of the African language.
- 2. To gradually build a disciplinary discourse, initially through translation, which would lead to the creation of alternate terms in isiZulu. This would allow opportunities for terminology development through dialogue relating to core concepts in the discipline.
- 3. To induct the isiZulu lecturer (ZL) into the discourse of the discipline so that she could eventually take over the course and teach it through the isiZulu medium.
- 4. To afford opportunities for the Applied Linguistics (AL) lecturer to deepen her knowledge of isiZulu, and especially of isiZulu academic discourse.

The course consisted of 12 double lectures of 90 minutes each, delivered once a week. All lectures were audio recorded and later transcribed. This amounted to 1080 minutes or 18 hours of audio recordings. Group work, however, was not recorded as the main intention was to capture the presentational language and how this was versioned into the complementary language through lecturer translation and explanation, and through student – lecturer dialogue and discussion. Longer stretches of discourse incorporating both languages were obtained in this way which then afforded an opportunity to assess the functions and role that each language played in the discourse.

The course design was learner-centred, and incorporated a reflective and critical approach to learning which was visible in the materials and tasks for the students. The course content embodied a psycholinguistic, developmental approach to language learning (Schmitt, 2010; Simpson, 2011), as the focus was on the learner's creative ability to construct language which naturally leads to errors or interlanguage forms. Language learning was perceived as rule-governed behaviour with learners as active, creative participants. It was this aspect of the course that the students found conceptually difficult, because it necessitated their putting themselves into the shoes of the learner as it were and developing a meta-awareness of the nature of their own language and the challenges it might pose for learning. This aspect will be demonstrated further on in this article in an extract showing how the lecturer uses translanguaging in an effort to explain the key concepts.

The pedagogical approach was inductive as we worked from learner data that had been derived from the findings of previous research studies on the acquisition of isiZulu morphology. We hoped that students would internalize our pedagogical model for later use in their own classrooms. Tasks were presented in worksheets with various linguistic problems to solve and the focus was very much on the typology of the languages in question and the differences between them. The only linguistic element not covered was tone (see Wildsmith-Cromarty, 2013 for a more detailed discussion and description of the course itself).

4. The development of a disciplinary discourse

4.1 Discourse Analysis and functions of language use

Discourse analysis focuses on naturally occurring language in use and derives from a linguistic and sociological theoretical basis. One of its exponents, Conversation Analysis (CA), has its roots in ethnomethodology which is concerned with the cross-cultural analyses of "knowing" and "doing" (Schiffrin, 1994). This extends to linguistic events where "knowledge and action are deeply linked and mutually constitutive" (Schiffrin, 1994:233). As conversational participants continuously engage in negotiating, creating and interpreting knowledge during the course of their interactions, knowledge is generated, which then creates and sustains further activity. Such interactions not only

demonstrate knowledge but are also critical to knowledge creation. In the case of the current research, such knowledge was created through two different languages which, through a translanguaging lens, appeared to fulfil similar functions in the discourse. CA is also concerned with how language is organized above the sentence, especially in relation to turn-taking, language or lexical choices, sequence organization and the overall structure of the interaction. These theoretical perspectives underpinned the analysis of the extracts in this article.

4.2 Analysis of translanguaging

Two extracts from the course lectures will be presented here. The first extract is taken from a lecture on questionnaire development. The students were given an assignment which involved developing questions for their own isiZulu learners, with whom they would be working for their major assignment. The students' task was to develop ten questions on language learning and language use for these learners. From the learners' responses to the questionnaire, they would then develop an intervention to help their learners overcome various linguistic challenges, based on an analysis of their needs. The intervention would also be informed by an interlanguage analysis which students would carry out on their learner's data. The extract is taken from a feedback lesson on the questionnaires that students brought with them to class. One of the students has too much information packed into one question. The applied linguistics (AL) lecturer considers this to be too densely packed, and subsequently tries to find a way to express this concept in isiZulu. The following discussion between lecturers and students ensues.

Extract 1

- [Key: AL = Applied Linguistics lecturer; ZL = isiZulu lecturer; S1, S2, S3 = students]
- S1: Akucaci kahle...it's not clear....
- AL: Mmm? Can you spell that?
- S1: In *isiZulu: A-K-U-C-A-C-I-L-E*
- AL: Oh, *Akucacile*...OK, so it's not clear. Right....and the reason why is because the question is too dense....it carries too much information..."dense" means that there is too much information embedded in that one sentence...(Looking at the student in question)..You haven't simplified it by asking separate questions.....
- S1: Kusaxubile....kusaxakekile....(it's still mixed up, entangled...) (Students laugh)
- AL: (Aside) This is just we need...the development of equivalent concepts in the home language...

- S2: Kusho ukuthi imisho ixubekile..(it means that the sentences are mixed up)
- AL: So the first word means...
- S2: K-U-X-U-B-E-K-I-L-E
- AL: *Kuxubekile*....it's dense? I was trying to tell you that the questions are too densely packed with too much information....so now we have a few words to choose from ...(looking at another student who is nodding her head negatively)....she doesn't agree with that*kuxubekile*?
- ZL: *Kuxubekile akusho akasho ukuthi kuxubekile...ufake izinto eziningi (Kuxubekile,* it is mixed up, that is not what she is saying...you put a lot of things...
- S1: *Kuxubekile…kusho ukuthi imix masala, kuhlangene* (it is mixed....it means it is a mixture of various things....all mixed up)
- ZL: Manje kusho ukuthi...(now it means that)...akasho ukuthi kunokuningi...(she is not saying that there is a range of things)...akasho ukuthi kuhlangene....(she is not saying it is mixed together)...kusho ukuthi kuningi kakhulu okushoyo kuleyonto oyibhalile (it means that there are a lot of things in what you have written... akukhona okuxubekile (it is not that it is mixed). Kusho ukuthi le nto ushoyo wena indlela oyibheke ngayo izinto eziningi kanyekanye (it means that what you are saying, the way in which you put it, there are lots of things all at the same time)...I don't know...akulona igama elilodwa elichaza lokho okushoyo, alikho igama elilodwa (There isn't a single word to explain what she said, there isn't a single word).
- AL: It's dense like a forest
- ZL: It is compacted, yes, but in *isiZulu alikho elilodwa elichaza lokho* (it is not this alone that explains it). It has components of other things as well.

In Extract 1, isiZulu is used 3 times for explanation, 4 times for term creation and translation and twice for spelling. English is used once for explanation and twice for presentation of content. Thus, in terms of the overall structure of the interaction, isiZulu dominates at a rate of 9 turns to 3. Of the 15 turns in the extract, students take 6 turns, the AL lecturer takes 6 turns and the ZL lecturer takes 3 turns. Although ZL has fewer turns, they are longer and more substantial as she conveys substantial information. The sequence of interaction is fairly equal as no participant dominates the interaction. Linguistic choices revolve around terminology creation in isiZulu. We can therefore see active knowledge generation (Schiffrin, 1994) by means of the various functions in both languages, but especially of isiZulu.

In terms of detail, students offer a number of alternatives as possible equivalents for the English word "dense": *akucacile* (not clear), *kusaxubile* (mixed together), *kusaxakekile*

(entangled) and Kuxubekile (mixed up), none of which explain the core meaning of dense which means that there is so much information that it becomes unclear. So we could say that from the above discussion, the first option, akucacile, addresses one of the semantic features of "dense", i.e. lack of clarity. However, other semantic features such as "too much" or an "overload" of information are not addressed by any of the options provided. Instead, the students focus on words that have "mixing" as a semantic feature, which is incorrect. At this point the isiZulu lecturer (ZL) steps in with a full explanation in isiZulu of the reasons why the words they chose did not express the meaning of the source word "dense". This is extended discourse which serves to clarify conceptual misunderstandings while at the same time building an academic register in the students' home language. Although no single equivalent term was created for "dense" during this lesson, the paraphrase "kusho ukuthi kuningi kakhulu okushoyo kuleyo nto oyibhalile (It means that there are a lot of things in what you have written) sufficed to help the students understand the various semantic features required for an equivalent meaning. This is later reinforced when the lecturer says Kusho ukuthi le nto ushoyo wena indlela oyibheke ngayo izinto eziningi kanyekanye (It means that what you are saying...the way in which you put it, there are lots of things all at the same time). She then reverts to English "but it's not the same as saying it is compacted and in isiZulu alikho elilodwa elichaza lokho. It has components of the other things as well". This extract demonstrates how translanguaging is used to deconstruct the meaning of terms in order to find equivalents in the African language by focusing on semantic features.

The second extract is taken from a discussion on isiZulu additional language learner data. The data represent various stages of interlanguage development with earlier stages representing formulaic speech (Ellis, 2008). This type of earlier speech consists of forms heard in the environment and reproduced within the limits of the learner's knowledge, for example, *'saphila' in place of 'ngisaphila' (I am fine). The next stage is still formulaic, but of the full form, what Ellis (2008) refers to as "formulaic chunks" such as 'Ngizombiza' (I will ask him or her), or 'Angazi' (I don't know). However, the learners still cannot analyze the various elements that constitute these forms in order to produce, for example, Uzombiza (You/she/he will ask him or her - depending on tone), Uzobabiza (You/he/she will ask them - depending on tone), or 'Awazi' (you/she/ he does not know). The third stage is the beginning of the creative phase, in which learners have learned some of the rules but do not apply them consistently. Structures during this interlanguage phase normally show simplification resulting in a reduced form brought about by omission of linguistic elements, such as morphology, for example omission of the noun class prefix in *'Umama geza inja' (Mother washes the dog), instead of 'Umama ugeza inja', and omission of the morpheme /nga/ in *Bahamba isikhatisini? (What time are they going?) instead of Bahamba ngasikhatisini? (At what time are they going?). The next stage of interlanguage development is fully creative – the learner has 'noticed' (Robinson, 2003) the morphology required but tends towards overgeneralization, resulting in structures such as *Amadoda uyawathandi ubisi (Men do not like milk) with overgeneralization of the noun class prefix /u/ instead of /a/, and the use of the continuous morpheme /ya/ which does not apply in this context as there is an object /ubisi/. The appropriate form would be Amadoda awuthandi ubisi (Men do

not like milk). Another example of overgeneralization commonly found in the learner data was that of the anaphoric pronouns (Suzman, 1999; Wildsmith-Cromarty, 2003) with structures such as the following: **Zonke abafundi bayahamba* (All the students are going) and **Izicathulo muhle* (nice shoes) instead of the correct agreement such as *Bonke abafundi bayahamba* and *Izicathulo zinhle*.

Both lecturers (AL and ZL) are attempting to explain how students should go about analyzing the data, and what the various interlanguage stages mean in relation to the developmental stages of learning a new language. The students find this somewhat challenging as they have to understand the data from the learners' perspective. Utterances in isiZulu are in *italics,* followed by the English translations in parentheses.

Extract 2

- [**Key:** AL = Applied Linguistics lecturer; ZL = isiZulu lecturer; S1, S2, S3 = students]
- AL: What this shows is that they are working with rules. They have got the agreement, but it's the wrong one. They have understood the concord *izi zi* (*eg. izigebengu zihamba*) (the thieves are going) but the learner has put the incorrect morpheme... that's the important thing to remember....the learner is working with the rules but they are using the wrong ones....
- ZL: We are going to come back and look at the summary...we haven't done that yet.....
- AL: I need to know that you have a good understanding of what we are doing before I give you the theory......
- ZL: Remember that you have got to say Umfundi ushiyeni omission (the learner has left [it] out ...omission), umfundi loyo ubhalile ushiyeni (the learner who has written this, has left out something...what?) hhayi ukuthi wena usufakani entsha (it's not that you have to add new things)...okay....usho ukuthi umfundi ufakeni ngaphezulu engadingekile yi-addition leyo (say that the learner has added something over and above what is not needed this is addition)...ubheke ukuthi endaweni ethile ufakeni (look at the place where she put it) mhlawumbe bekufanele kube khona "u-ya", yena wafaka "u-sa" (maybe there is a need for there to be "u-ya" [but] she puts "u-sa")...so ireplacement leyo (this is replacement). Hhayi ukuthi wena angithi "ngifika isikhati" instead of "ngifika ngasikhatisini" (What time shall I arrive?), (It's not that you (yourselves) say "ngifika isikhati"). Bekufanele akusho ukuthi uyena ureplasayo....umfundi ureplasile...not wena. (It is necessary to say that s/he replaced it...the learner replaced it...not you).
- S1: ...and "Untombi uyakupheke ukudla"?(The girl is cooking the food). Uthe.... Untombi – u...? (And "Untombi uyakupheke ukudla"...Do you say Untombi – u?)

- ZL: Ubonile...uyakwazi lokho kodwa ushintshile wafaka u u (You see...she knows that but she changes it, she puts u u)
- AL:... kodwa akwenze right.....(But she has done it right (the concord))
- ZL: ...uyawazi umthetho usewusebenzisa noma yilaphi (She knows the rule and she uses it even here)
- S4: Sicela ukubuza....so...."untombi" singasho uright? (So we can say that untombi is right?)
- ZL: Yebo, yebo...(Yes, yes)... uyashintsha...kodwa umfundi lana ushintsha igama (she is changing it but this learner changes the word)...ewrong lapho... iprefix ewrong...(its wrong this...the prefix is wrong)...ngesikhati ubhala kufanele ukuchaze lokho (when you write you must explain this)..yini eyenze ukuthi abhale ngaleyo indlela...(what is it that made her write in that way).

In Extract 2, isiZulu is used 4 times for explanation, once for reinforcement of explanation and twice for requesting clarification. English is used once for explanation. Thus, in terms of the overall structure of the interaction, isiZulu dominates at a rate of 7 turns to 1. Of the 10 turns in the extract, students take 2 turns, the AL lecturer takes 3 turns and the ZL lecturer takes 5 turns. ZL has far longer and more substantial turns as she is attempting to explain complex content in isiZulu. The sequence of interaction is dominated by the two lecturers with students interjecting purely for clarification. Linguistic choices consist more of 'borrowings' in this extract, in the absence of terminology.

In the above extract, the students are trying to come to terms with the errors that additional language learners make, such as omission, substitution or replacement, simplification and overgeneralization. They seem to find it challenging to describe an erroneous linguistic structure, such as **untombi* (girl), as "right" if accompanied by the concord */u/* as in *uyapheka* (She is cooking) or *uyakupheka ukudla* (She is cooking food). *Intombi* (girl) normally takes the noun class prefix */i/*, so that the structure should be *Intombi iyakupheka ukudla* (The girl is cooking food). This is a conceptual challenge as they are missing the point that such structures show evidence of an interlanguage stage, i.e. overgeneralization. The learner has indeed been consistent with the error as s/he has used the correct concord */u/* for the noun *untombi*. S/he merely chose the incorrect noun class prefix to begin with but the structure still shows evidence of rule-learning.

The isiZulu lecturer embarks on translanguaging to try and make this clear to the students. Interspersed with isiZulu are a number of English words and phrases which cannot be considered as strictly code-switching or code-mixing as it applies to the discourse as a whole. She begins by framing her instruction: "Remember you've got to say" and then continues in isiZulu, where she explains, through paraphrase, what each interlanguage stage means and how the students should tackle the analysis of their data. She uses the English technical terms for these interlanguage stages, but she also creates borrowings by using the noun class prefix, eg. *ireplacement leyo*. This word has

various manifestations in her discourse: *oreplasayo* and *ureplasile* as in the sentences *bekufanele akusho ukuthi uyena oreplasayo* (it is necessary to say that she replaced it), and *Umfundi ureplasile...not wena* (The learner replaced it...not you). It has become embedded in the "corriente" of her discourse as she draws on her linguistic repertoire in order to facilitate understanding (Garcia et al, 2017).

The following three turns are interesting because it marks a shift in this "corriente" of explanation and instruction. A student requests confirmation that an error such as an incorrect prefix on a word, with a corresponding incorrect concord, is actually correct: Uthe untombi – u? (Do you say Untombi – u?) This guestion reveals that the student has not yet taken the learner's perspective in terms of trying to understand the error. The lecturer responds with the explanation that although she (learner) does know the rule, she changes it to /u - u/ (instead of /i - i/. The next turn shows translanguaging working across interlocutors, i.e. across the discourse as a whole. The applied linguistics lecturer adds her bit to the discourse, not in English, but in isiZulu: kodwa akwenze right (but she has done it right). This is evidence that she has tapped into the translanguaging corriente - she has been carried by the flow of the discourse and spontaneously adds to it. This also shows that she was able to follow the discourse and interaction in isiZulu. This had a two-fold effect: it kept the corriente flowing as there was no need for translation of the isiZulu, and it deepened her own knowledge of the language, especially the academic discourse. The isiZulu lecturer, however, continues with her previous explanation to the student when she is interrupted by another student who asks the same question as the previous student: Untombi singasho uright? (So can we say that untombi is right?). For the first time, the isiZulu lecturer finally understands where the problem for the students lies and concedes: *iwrong lapho....iprefix iwrong* (It's wrong this...the prefix is wrong), only to continue telling them how to analyse the learners' data.

The translanguaging in evidence in the above extracts challenges the view that languages are separate and bounded (Makalela, 2015) as they are used interchangeably by all participants in the interaction and all for one purpose – to build knowledge in the discipline (Schiffrin, 1994). Canagarajah, (2017) explains this in terms of an epistemological shift away from structuralist perspectives on language learning and teaching to a post-structuralist stance from which languages are seen as resources from which one draws in any communicative act. This was certainly in evidence in the dialogues and interactions ensuing from the presentation of content in this course.

The first research question asked how the use of both isiZulu and English affects student learning, teaching and, ultimately, knowledge construction. In relation to the evidence in the extracts above, we could say that it acts as a scaffold for conceptual learning and that it allows for a fluid and flexible dialogue among lecturers and students because potential language barriers have been removed. The second question asked what functions the African language is fulfilling in the learning and teaching process? Do they change over time? If so, how? Initially, at the beginning of the course, the functions consisted of explanation and clarification with some paraphrasing in isiZulu of what was presented in English. Over time, however, the function changed to being presentational, alongside

English. The course was later taught purely in isiZulu after the two-year pilot study, which implies that the academic discourse including terminology had been developed sufficiently for this to happen.

4.3 Student feedback

It was necessary to find out how the students themselves experienced the course as it was the first time they had been taught bilingually by two lecturers simultaneously. The questionnaires were handed out at the last lecture, before study leave, which meant that the returns were poor (25%). Nevertheless the feedback from the students was valuable in helping us to improve the course. Selected responses from students will be provided under each question.

Question 1: What did you learn from this course? Do you think it will be useful in your future work?

I learned many strategies, skills and approaches for teaching isiZulu to second language speakers. I think it will be very useful in my future work.

What I learn (sic) from the course is the method of teaching second language in isiZulu. This course will be useful to me in future as I plan to be a lecturer. Because when the teacher notes the problem areas of the language it makes it easier for the teacher to improve or to change the method used.

I learned that any language which is not your mother tongue is not easy for one to express herself with it (sic).

Question 2: What did you learn from your English-speaking lecturer?

I have learned that when an English-speaking lecturer speaks, he (sic) never minds that there are those students who use English as their second language.

I learned how to teach isiZulu non-mother tongue students and methods of teaching and approaches.

I have learned that teaching second language speakers is not easy. It needs time and a commitment to teach learners. I have also learned that without help from teaching approaches for effective language learning, teaching can be doomed to failure.

I learned that she was prepared for teaching the course and that she knew what she was teaching although she could not really express herself in isiZulu. The content of her lessons was comprehensive. I have also learned to copy her style of handling lessons.

Question 3: What did you learn from your isiZulu-speaking lecturer?

The isiZulu lecturer was very important in that she could understand where there was miscommunication between us (students) and the English-speaking lecturer. She helped by explaining, describing and clarifying everything problematic.

This lecturer was supplying examples in isiZulu so I learned how to teach isiZulu nonmother tongue speakers using these examples because they were helpful.

Question 4: Do you think that these two lecturers worked well together? Did they enrich the learning experience for you?

Yes, of course they worked well together. They made the learning process better, simpler and faster. They made it easier to understand the learning.

Yes, because without the theory we wouldn't know how to teach second language speakers. Without provision of examples in isiZulu we would be lost.

Yes, they worked well and enriched the learning experience for us. I can now apply the methods that were taught to another learning environment.

Yes, when we fail to understand the English lecturer, the isiZulu lecturer helps with clarification.

Question 5: How did you feel about using BOTH languages in this class?

It helped in the sense that it made learning very easy. One understands better the language of his mother tongue (sic).

I felt flexible (sic) because one chooses the language that a person can express him/ herself (sic) clearly. If a student don't (sic) understand English, isiZulu was used to clarify some points. The purpose of attending lectures is to gain knowledge and the use of both languages helps to gain knowledge easily. It was very effective for me.

It was interesting as it helped many of us who were not understanding many things in English. So the use of isiZulu was making things easier for us to understand the course.

Making use of both languages was helpful. It helps me to be able to express myself through my native language where I find myself being left behind. It helped to clarify the words I couldn't manage to understand in my non-mother tongue language.

Question 6: How did you feel about being able to write your essays, assignments and examinations in the language of your choice?

It gave much confidence (sic) in the way I expressed myself in that language.

That was a great pleasure to me. It gave me a choice to choose a language that I can express myself in clearly and confidently.

I think that is very interesting as people will pass exams and there would be no excuse of (sic) failing.

I feel encouraged in the way that I manage to express myself coherently (sic).

Students generally agreed that they had learned about language teaching approaches and methods from both lecturers. From the English lecturer they learned a pedagogical style to emulate, teaching methods and approaches and that, at times, she was difficult to follow! From the isiZulu lecturer they gained deeper insights into the process of language learning and teaching, especially through the provision of examples. She also explained and clarified the content for them especially if there were misunderstandings. All students felt that the lecturers worked well together and complemented each other. From one they received the theory and from the other, extended explanations and elaborations of the theory, and exemplification of the theory. All students agreed that the use of both languages during lectures increased epistemological access for them. They gained confidence in expressing themselves and found understanding course content much easier. This also applied to the last question which asked about writing exams and assignments in isiZulu. Students responded that it gave them more confidence to express themselves more clearly and that they felt encouraged by it. They also responded that there would be no excuse for failing exams now.

5. Conclusion

This article has described an intervention at tertiary level using a dual medium approach through translanguaging. It would seem from the interactions among the participants and the interactions between the two languages, that epistemological access to the discipline content was indeed made easier for the students. It also fulfilled the aim of gradually building an academic register in the discourse of the discipline, i.e. applied linguistics, and, more specifically, language learning and teaching. This occurred through explanation and clarification of the content in isiZulu. This led to lengthy discussions on alternative terminology which enriched the academic discourse. The lecturers were also enriched by the interactions and discussions. The isiZulu lecturer (ZL) was inducted into the discourse of the discipline so that she could eventually take over the course and teach it solely through the medium of isiZulu. The Applied Linguistics (AL) lecturer deepened her knowledge of isiZulu, especially its use in academic discourse. In sum, all participants found the experience enriching, and learning was mutual.

Although team-teaching might be perceived as an expensive activity, it is very effective for creating a 'community of practice' from which all participants learn from each other. This is especially so if more than one language is used because this levels the playing field. Power relations change, which opens the way for more effective dialogue. Although the English lecturer was responsible for presenting the course content, the power gradually transferred to the isiZulu lecturer who made the content accessible to the students through their own language. This, in turn, empowered them to challenge the lecturers and express themselves more clearly. This also built their confidence. Discipline specialists and language specialists could work together very effectively in developing academic courses in more than one language, as demonstrated in this study.

[Acknowledgement is due to the isiZulu lecturer, my colleague and student, Mary Gordon, who co-taught the course with me.]

References

- Baker, C. 2011. *Foundations of bilingual education and bilingualism.* 5th Ed. Bristol: Multilingual Matters.
- Canagarajah, S. 2011. Translanguaging in the classroom: Emerging issues for research and pedagogy. In: Li Wei Ed., *Applied Linguistics Review.* Vol 2: 1 27. Berlin: De Gruyter.
- Canagarajah, S. 2017. Translingual practice as spatial repertoires: Expanding the paradigm beyond structuralist orientations. *Applied Linguistics* .pp. 1 25. Doi:10.1093/applin/amx041.
- Carstens, A. 2016. Designing linguistically flexible scaffolding for subject-specific academic literacy interventions. *Per Linguam.* 32 (3): 1 12. http://dx.doi. org/10.5785/32-3-690.
- Department of Education (DoE), 2002. *Language Policy for Higher Education (LPHE)*. Pretoria: Government Printer.
- Du Toit, M. 2016. A multilingual approach to teaching South African history. In: Kaschula, R.H. & Wolff, H.E. Eds. *Multilingual education for Africa: Concepts and practices.* Pretoria: UNISA Press. pp. 132 – 148.
- Ellis, R. 2008. *The study of second language acquisition.* 2nd ed. Oxford: Oxford University Press.
- Engelbrecht, C. & Wildsmith, R. 2010. Exploring multilingualism in a problem-based learning setting: Implications for classroom and clinical practice in the nursing discipline. *Alternation.* 17 (1): 108 137.
- Freire, P. 1972. *The pedagogy of the oppressed*. Harmondsworth: Penguin.

- Freire, P. 1985. *The politics of education: Culture, power and liberation.* Trans. by D. Macedo & S. Hadley. MA: Bergin.
- Garcia, O. 2009. *Bilingual Education in the 21st Century: a global perspective.* Malden: Wiley/Blackwell.
- Garcia. O. & Li Wei. 2014. *Translanguaging: Language, bilingualism and education.* London: Palgrave Macmillan.
- Garcia, O., Ibarra Johnson, S. & Seltzer, K. 2017. *The translanguaging classroom: Leveraging student bilingualism for learning.* Philadelphia: Caslon.
- Heller, M. 2007. Bilingualism as ideology and practice. In: Heller, M. Ed. *Bilingualism: A social approach.* London: Palgrave Macmillan.
- Heugh, K. 2013. Multilingual education policy in South Africa constrained by theoretical and historical disconnections. *Annual Review of Applied Linguistics*. 33: 215 – 237.
- Heugh, K. 2015. Epistemologies in multilingual education: translanguaging and genre companions in conversation with policy and practice. *Language and Education*. 29 (3): 280-285.
- Jacobson, R. 1990. Allocating two languages as a key feature of a bilingual methodology. In: Jacobson, R. & Faltis, C. Eds. Language distribution issues in bilingual schooling. Clevedon, UK: Multilingual Matters. pp 3 – 17.
- Kamwendo, G., Hlongwa, N. & Mkhize, N. 2014. On medium of instruction and African scholarship: The case of isiZulu at the University of KwaZulu-Natal in South Africa. *Current Issues in Language Planning.* 15 (1): 75 89.
- Kaschula, R.H. and Wolff, H.E. (2016). Introduction the multilingual context of education in Africa. In R.H. Kaschula and E.Wolff. Eds. *Multilingual Education for Africa: Concepts and Practices.* Pretoria: UNISA Press. pp. 2 – 8.
- Lewis, G., Jones, B. & Baker, C. 2012. Translanguaging: origins and development from school to street and beyond. *Educational Research and Evaluation*. 18 (7): 641 – 654.
- Madiba, M. 2010. Fast-tracking concept learning to English as an Additional Language
- (EAL) students through corpus-based, multilingual glossaries. *Alter*nation. 17 (1):225 248.
- Madiba, M. 2013. Multilingual education in South African universities: Policies, pedagogy and practicality. *Linguistics and Education.* 24 (4): 385 395.

- Makalela, L. 2015. Moving out of linguistic boxes: The effects of translanguaging strategies for multilingual classrooms. *Language and Education*. 29 (3):200 221. DOI:10.1080/09500782.2014.994524.
- Makalela, L. 2016. Ubuntu translanguaging: An alternative framework for complex linguistic encounters. *Southern African Linguistics and Applied Language Studies*. 34 (3):187 196.
- Makalela, L. 2018. Reimagining multilingualism as a cultural competence in Africa: leaking boundaries, Ubuntu and multilanguaging in public spaces. Plenary address given at the BAAL Language in Africa SiG meeting 'African languages in public spaces: opportunities and challenges'. School of Oriental and African Studies, University of London.
- Makalela, L. & McCabe, R. 2013. Monolingualism in a historically Black South African University: A case of inheritance. *Linguistics in Education.* 24. http://www. sciencedirect.com/science/ar ticle/pii/S0898589813000569 Date of Access:10 October 2017.
- Mashiya, N. 2010. Mother tongue teaching at the University of KwaZulu-Natal: Opportunities and threats. *Alternation.* 17 (1): 92 107.
- Mbatha, T. 2014. Experiences of foundation phase teachers qualified in a dual-medium programme. *Per Linguam.* 30 (2): 37 50.
- Mkhize, D. 2016. Mediating epistemic access through everyday language resources in an English language classroom. *Southern African Linguistics and Applied Language Studies.* 34 (3): 227 – 240.
- Pica, T. 2009. Integrating content-based and task-based approaches for teaching, learning and research. In Cook, V. & Li Wei. 2009. Contemporary Applied Linguistics: Language teaching and learning. Vol 1: 75 – 98, London: Continuum.
- Pluddemann, P., Nomlomo, V. and Jabe, N. 2010. Using African languages for teacher education. *Alternation.* 17 (1): 72 91.
- Probyn, M.J. 2009. Smuggling the vernacular into the classroom: conflicts and tensions in classroom codeswitching in township/rural schools in South Africa. *International Journal of Bilingual Education and Bilingualism.* 12 (2): 123 – 136.
- Probyn, M.J. 2015. Pedagogical translanguaging: bridging discourses in South African science classrooms. *Language and Education.* 29 (3): 218 234.
- Ramani, E., Kekana, T., Modiba, M & Joseph, M. 2007. Terminology development versus concept development through discourse: insights from a dual-medium BA degree. *Southern African Linguistics and Applied Language Studies*. 25 (2) : 207 223.

- Republic of South Africa, 1996. Constitution of South Africa. Pretoria: Government Printer.
- Robinson, P. 2003. Attention and memory during SLA. In Doughty, C. & Long, M.H. Eds. 2003. *The Handbook of Second Language Acquisition.* Oxford: Blackwell.

Schiffrin, D. 1994. Approaches to discourse. Oxford: Blackwell.

- Schmitt, N. (Ed.) 2010. An introduction to Applied Linguistics. New York: Hodder Education.
- Setati, M. 2008. Access to mathematics versus access to the language of power: The struggle in multilingual mathematics classrooms. *South African Journal of Education.* 28 (1): 103 – 116.
- Simpson, J. (Ed.) 2011. The Routledge Handbook of Applied Linguistics. London: Routledge.
- Spada, N. 2011. Beyond form-focused instruction. Language Teachin. 44 (2): 225 236.
- Suzman, S. 1999. Learn Zulu the way children do. *South African of African Languages.* 19 (2): 134 147.
- Thokwe, T. & Schafer, M. 2009. Investigating code-switching of English second language (ESL) teachers in the teaching of mathematics: A grade 9 and 10 case study. In Schafer, M. & Macnamara, C. Eds. *Proceedings of the 17th Annual meeting of the Southern African Association for research in mathematics, science and technology education (SAARMSTE), Grahamstown.*
- Turner, N. & Wildsmith-Cromarty, R. 2014. Challenges to the implementation of bilingual/ multilingual language policies at tertiary institutions in South Africa (1995 – 2012). Language Matters. 45 (3): 295 – 312.
- Wei, L. 2011. Moment analysis and translanguaging space: Discursive construction of identities by multilingual Chinese youth in Britain. *Journal of Pragmatic.* 43: 1222 – 1235.
- Wildsmith-Cromarty, R. 2003. Do learners learn Zulu the way children do? A response to Suzman. South African Journal of African Languages. 23 (3): 175 188.
- Wildsmith-Cromarty, R. 2013. A problem-based, form-focused course design for teaching isiZulu as an additional language. *Southern African Linguistics and Applied Language Studies*. 31 (2) :219 233. DOI: 10.2989/16073614.2013.815942.

- Williams, C. 1996. Secondary education: Teaching in the bilingual situation. In Williams, C., Lewis, G. & Baker, C. Eds. *The language policy: Taking stock.* Llangefni, UK: CAI. pp 39 – 78.
- Williams, C. 2002. Ennill iaith:Astudiaeth o sefyllfa drochi yn 11 16 oed [A language gained: A study of language immersion at 11 – 16 years of age]. Bangor, Wales: School of Education. Retrieved from http://www.bangor.ac.uk/addysg/publications/ Ennill_laith.pdf.

ABOUT THE AUTHOR

Rosemary Wildsmith-Cromarty

Rosemary Wildsmith-Cromarty holds an MA in Applied Linguistics from the University of Essex and a PhD from the Institute of Education, University of London. She has been a Visiting Scholar at SOAS, University of London, University of Guadalahara, Mexico, Wilfred Laurier University, Ontario, Canada and Dalian Maritime University, China. She headed the School of Language, Literature and Linguistics at the University of KwaZulu-Natal from 2004 – 2011. She currently holds the Research chair for Early Childhood Development and Education at North-West University. She has served on provincial and national language bodies and is on the Editorial Board for Language Teaching: Surveys and Studies. She was co-editor for the journal Southern African Linguistics and Applied Language Studies from 2009 – 2012. Her publications focus on multilingualism, language and literacy acquisition, language teaching, language policy and onomastics. She is currently interested in language education and cognitive development and how learners navigate their developmental path in linguistically complex learning environments. As an enthusiastic hiker and mountaineer, she is also interested in the onomastic practice of naming in the rock-climbing world.

Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi -Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo - Ijenali

Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig -Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo -

Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa

iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo -Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo

- Jenala yo Dyondzisa Ririmi
- Tydskrif vir Taalonderrig

Journal for Language Teaching - Ijenali
yokuFundisa iLimi IJenali yokuFundisa
iLwimi - Ibhuku
Lokufundisa Ulimi
Tšenale ya tša
Go ruta Polelo Buka ya Thuto
ya Puo - Jenale
ya Thuto ya Dipuo
- Ijenali Yekufundzisa
Lulwimi - Jena?a ya u
Gudisa Nyambo - Jenala

Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi -Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language

Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi -Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo -Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi

Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo - Jenale ya Thuto ya Dipuo -Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig -Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale ya tša Go ruta Polelo - Buka ya Thuto ya Puo -Jenale ya Thuto ya Dipuo - Ijenali Yekufundzisa Lulwimi - Jena?a ya u Gudisa Nyambo - Jenala yo Dyondzisa Ririmi - Tydskrif vir Taalonderrig - Journal for Language Teaching - Ijenali yokuFundisa iLimi - IJenali yokuFundisa

iiLwimi - Ibhuku Lokufundisa Ulimi - Tšenale va tša Go ruta