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**To cite this article:** Rosemary Wildsmith-Cromarty, Maryna Reyneke, Kotie Kaiser & Dolly Dlavane (2025) Scaffolding understanding of disciplinary concepts using African Languages in Higher Education, *Journal of Multilingual and Multicultural Development*, 46:7, 2116-2132, DOI: [10.1080/01434632.2023.2282630](https://doi.org/10.1080/01434632.2023.2282630)

**To link to this article:** <https://doi.org/10.1080/01434632.2023.2282630>



Published online: 26 Dec 2023.



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# Scaffolding understanding of disciplinary concepts using African Languages in Higher Education

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## ABSTRACT

The paper reports on a study to implement multilingualism using African languages at a university in South Africa. We report on how scaffolds and translations were designed and used by lecturers in their implementation of multilingual pedagogies in classes. Findings revealed how the use of informal translations and explanations by lecturers using students themselves as resources, what Heugh refers to as ‘horizontal multilingualism’, encourages students’ agency and voice and how these attempts can contribute towards the development of more formal, academic terminology, what Heugh refers to as ‘vertical multilingualism’. We conclude that although lecturers are willing to embrace the ‘multilingualism as resource paradigm’, certain scaffolds need to be in place to facilitate greater use of the African languages. As a recommendation towards this goal, we present a scaffolding model which outlines the various steps in the process of moving from formal academic texts and concepts in English to formal academic texts and concepts in Setswana and Sesotho via simplified translations and translanguaging. In this way, we are extending Ruiz’s original framework to include language, not just as a problem, right or resource, but also as a responsibility.

## ARTICLE HISTORY

Received 7 November 2022  
Accepted 6 November 2023

## KEYWORDS

Multilingual pedagogies;  
Scaffolding understanding;  
Higher education;  
Translation;  
Translanguaging; Language  
planning; Epistemic justice

## Introduction

The Language Policy for Higher Education in South Africa (RSA DoE 2002) stipulated the increasing inclusion and use of the nine indigenous, African languages at tertiary level. In 2020, the Department of Higher Education produced the Language Policy Framework for Public Higher Education Institutions (RSA DHET 2020) which provides guidelines on implementation of multilingualism at tertiary level. The North-West University’s institutional language policy (North-West University 2018; 2022) is in alignment with the framework, and recognises four official languages for scholarly pursuits, namely, Sesotho, Setswana, Afrikaans, and English. It is based on the orientations of language as a right and language as a resource (Ruiz 1984) as it aims to elevate the academic status of Setswana and Sesotho as complementary languages of learning and teaching. A simultaneous goal is the development of academic discourse in the African languages in the various disciplines in each faculty. There is therefore the need to promote conceptual understanding and access to knowledge using informal language varieties familiar to the students in the service of social equity and epistemic justice (Gutiérrez, Baquedano-López, and Tejeda 1999a; Guzula, McKinney, and Tyler 2016; Kerfoot and Bello-Nonjengele 2023), and the competing need to contribute towards

the development of more formal, standard academic registers in the selected African languages in the service of status planning (Abdulatief, Guzula, and McKinney 2021).

The focus of this paper is on addressing the gap between formal academic discourse in English at higher education level, and students' understanding of disciplinary concepts when their familiar languages are non-cognate with English. We examine these competing interests through a 'multilingualism-as-resource' lens (De Jong et al. 2016; De Jong, Yilmaz, and Maricha 2019) as it is realised through the short course for lecturers on multilingual pedagogies (Wildsmith-Cromarty et al. 2022). The study was granted ethical approval (NWU-01101-22-A7) by the North-West University Ethics Committee for Language Matters.

The purpose of the course is to prepare lecturers to use multilingual resources in their teaching. They are taught strategies for achieving this and for facilitating the use of their students' linguistic repertoires in learning (Coetzee-Van Rooy 2018). The examples discussed in this article are taken from the strategies used by the course participants who were attempting to include multilingual pedagogies in their teaching. Most of the course participants were non-African Language speakers who found using the African languages in their course materials and lectures challenging. The examples we present in this article show how they rose to the challenge and began to introduce multilingualism into their materials and lectures in small but creative ways.

The enthusiastic response of the lecturers in their engagement with multilingual pedagogies caused us to add a fourth 'ideological orientation' to Ruiz's (1984) model, which is 'multilingualism as a responsibility'. We demonstrate how lecturers can promote African languages even when they do not share the same language resources as their students, thus showing a responsible commitment to the issue of language for learning. It is the lecturer's multilingual orientation that shifts how African indigenous languages are valued for use in higher education.

Although much has been written about translanguaging in dual language bilingual programs (Garcia 2009; Garcia and Wei 2014) and in multilingual contexts where languages can leverage on each other (Makalela 2016), these studies generally involve bi – or multilingual teachers as well as students who speak the same (or similar) languages. Very little has been written about translanguaging *versus* translation (Baynham and Lee 2019) in the process of fostering understanding in contexts where learners and instructors may be multilingual but may not necessarily share the same languages. This is a gap in the literature that the current research attempts to fill. The research question guiding the study was:

How best can we promote multilingualism which includes indigenous languages with discipline specialists who already implement bilingual Afrikaans/English instructional practices but now need to include the African languages, which they do not necessarily speak or understand?

This paper explores the elements that need to be in place to effectively promote the use of students' linguistic repertoires in a higher educational setting (Ranjendram 2023). The most important requirement is a positive attitude towards multilingual learning and teaching (Bock and Stroud 2021), which then leads to awareness of and sensitivity towards students' multilingual repertoires on the part of lecturers (Coetzee-Van Rooy 2012; 2018). Such lecturers are willing to allow for a 'third space' in which different activity systems collaborate (Gutiérrez 2008; Gutiérrez, Baquedano-López, and Tejada 1999a); where students build knowledge (Abdulatief, Guzula, and McKinney 2021) by translating for each other (Wildsmith-Cromarty 2018), and, finally, they are willing to scaffold students' learning (Bruner 1986; Gutiérrez et al. 2011; Rose 2018) by deconstructing and simplifying academic texts and employing pedagogic strategies that address student multilingualism.

### Scaffolding as pedagogy

Vygotsky's (1978) idea of mediation and the zone of proximal development (ZPD) influenced the later work of Jerome Bruner (1986) who created the concept of scaffolding. The ZPD is the space in

which mediation occurs, and in the case of our model, where scaffolding of the content takes place. Scaffolding belongs to the social constructivist approach to pedagogy and, in our study, consists of simplification of complex concepts and their terminology, and the deconstruction and discussion of these concepts by students, what Gutiérrez (2008) refers to as a ‘third space’ for the use of hybrid language practices in the pursuit of learning. The result is a simplified discourse in the African language through discussion and translation. The created terminology is then subjected to quality control by experts for the development of a more formal academic discourse. The need to evaluate and verify the functional equivalence of translations and word coinage derived from students’ informal multilingual discourse practices has also been identified by Abdulatief, Guzula, and McKinney (2021), who affirm the importance of acknowledging and naming marginalised resources.

The scaffolding techniques that are used in the study to promote meaning-making in accessing knowledge, reminds one of work done by Rose and colleagues in developing scaffolding literacy strategies for indigenous secondary students in Australia (Rose, Gray, and Cowey 1999). These researchers report on the use of a sequence of strategies in supporting such students to read complex academic texts in English, deconstruct them and reconstruct them as a joint exercise, and then to apply what they have learned in terms of the features of the language, to their own writing. Often it is the features of the language – the specialised language patterns and the use of dense, abstract concepts and technical terms linked to specific disciplines – that become a barrier to learning, especially for those students who lack Cognitive Academic Language Proficiency (CALP) (Cummins 1979; Rose 2018). In later studies that focused on students with limited academic language proficiency entering tertiary studies, Rose et al. (2003) noted the struggle to make sense of academic discourse. However, scaffolding support proved to assist in the development of academic reading and writing skills. The researchers implemented strategies to support students in practicing reading and writing at the following three levels simultaneously: recognising, understanding, and using meanings, interpreting meanings within the context of specific disciplines and in relation to their own reflective experience, and critically analysing the construction of meaning in texts in the run up to constructing such meanings themselves (Rose et al. 2003, 41).

More specifically, four of the six main types of instructional scaffolding as identified by Walqui (2006:, 170) were employed by the lecturers in the study: bridging (scaffolding the academic discourse by deconstructing it into simpler, more descriptive paraphrases in English), contextualisation (discussing the disciplinary content through translanguaging by leveraging students’ linguistic repertoires in order to access this less formal version), schema building (translating simplified texts into the African languages including the students’ contributions), and text re-presenting (reconstructing informal text into more formal academic discourse in the African languages with the mediation of experts). By means of scaffolding techniques, speaking, writing and thinking are linked from a Sociocultural Theory perspective as higher-order cognitive skills are developed through socially mediated interactions in a classroom (Li and Zhang 2020; Wertsch, Tulviste, and Hagstrom 1993). Scaffolding strategies promote students’ critical engagement with academic content and contribute to the development of academic discourse in various disciplines. This study reports on the use of similar scaffolding strategies but focuses foremost on tapping into students’ home languages as resources to deconstruct academic texts to make meaning. In multilingual contexts such as South Africa, the use of translanguaging as a pedagogic strategy also needs to be explored.

### **Translanguaging as a multilingual method**

This study investigates multiple language use for epistemic access in a culturally rich and diverse higher education setting. Similar studies have researched the same phenomenon in various other contexts such as the United States (Cavazos 2022; García, Seltzer, and Witt 2018; Parmegiani 2022) and South Africa (Batyi 2022; Guzula, McKinney, and Tyler 2016). Most of these studies involved researchers/teachers who spoke their students’ languages. Only Parmegiani’s (2022)

study involved a lecturer who undertook to learn his students' language, i.e. Spanish, to leverage academic literacy in English onto academic literacy in Spanish. A similar situation pertains to the current study where the lecturers we are training in multilingual pedagogies are mostly bilingual in Afrikaans/English but do not speak the African languages.

In the current study, participants in the SLP are sensitised to the responsibility of acknowledging students' individual linguistic identities and are exposed to various strategies to include students in making meaning of academic content. This meaningful inclusion involves active participation (languageing) and translanguaging. Languageing in the dynamic and diverse South African context means that people use multiple languages interchangeably and in strategic ways to communicate and act in the world that they find themselves in on a daily basis (Wildsmith-Cromarty and Balfour 2019, 296). While *translation* is part of the act of communication: 'an interaction in one code . . . reproduced in another code' (Creese, Blackledge, and Hu 2018), *translanguaging*, an extension of the concept *languageing* (Guzula, McKinney, and Tyler 2016) refers to the process whereby multilingual students use all their languages to communicate in the teaching and learning space (García, Seltzer, and Witt 2018). Makalela (2016) explains that translanguaging is speaker-centred, assumes a repertoire and focuses on what speakers do with the languages in the process of making meaning of disciplinary content. For Gutiérrez et al. (1999), hybrid literacy practices are systematic, strategic and a collaborative way of making sense among students with similar repertoires, as they strive to achieve mutual understanding. We thus move away from traditional perspectives on languages as separate, to approaches that are inclusive of the hybrid linguistic practices of students (Gorter and Cenoz 2017; Gutiérrez et al. 1999; 1999a; 2011).

Separation and exclusion of languages restricts epistemic access for some students and their chance to attain academic success (Otheguy, García, and Reid 2018). On the other hand, *trans* - languageing (moving across languages with informal translations and explanations among students and lecturers in the process of making meaning) allows for students' creative, critical, and transformative involvement (Wei 2011). For Heugh (2021), the informal use of multilingualism is what she terms 'horizontal' multilingualism, which has mostly been regarded as unacceptable in the formal educational domain (Magqwashu 2014; Probyn 2015). There is thus a gap between the use of student repertoires in accessing disciplinary concepts and their meanings, and the formal English academic discourse in which they are presented. Heugh describes the latter as 'vertical' multilingualism which relates to hierarchies of power, limited access, and exclusion. She argues for 'legitimation' of the local languages as part of student repertoires to develop fully bi/multilingual students who are also confident in English. She makes the point that use of both the local and international languages should be explicit, systematic, and purposeful and that resources should also be bi/multilingual. This leads to 'functional' multilingualism, which is the main goal of the NWU Language Policy (North-West University 2018; 2022) with its recognition of four languages for learning and teaching.

## Research methodology

Within an interpretive, post-modern research design, where the world is viewed as complex and multi-layered, and reality is seen as transitional and constructed from multiple perspectives, both qualitative and quantitative data were collected from the short course participants from both online questionnaires and assignments focusing on the development of strategies for using multilingual pedagogies as well as from the translators of the terminology. From this perspective, data collection, analysis and interpretation are socially and culturally constructed (Grbich 2007). The research methodology used for this qualitative study is Action Research (AR) which is based in practice and undertaken by practitioners (course teachers and lecturer participants) to develop and change practice (Munn-Giddings 2012). AR becomes participatory when it actively engages stakeholders in the development and implementation of interventions, with the goal of the collaboration being structural transformation and empowerment as awareness is raised of

participants' abilities and resources to transform their teaching (Bhana 1999). AR falls within a 'critical theoretic paradigm' in seeking to improve aspects of social life and institutions (Carr and Kemmis 1986).

AR is iterative as it combines theory and practice in cycles of action and reflection aimed at solving a common problem, while deepening understanding of the broader social, psychological, economic, and political forces that have shaped the issue (Bhana 1999). It does this by drawing on the resources of all participants in addressing the needs of the community in question, in this case, university students and their lecturers. PAR stems from the understanding that knowledge(s) is multiple, and that those who have been excluded from knowledge-generation need to be active participants in the research process. The nature of collected data, analytic methods, and resulting reflections and actions emerge out of collaborative engagement within a community in partnership with the researchers.

From the input received from the SLP on multilingual pedagogies, course participants created multilingual interventions for their own courses which were then evaluated as assignments. Critical reflections from both the course teachers and the participants on their assignments and on their experiences implementing their interventions fed into the revision of (a) the SLP course itself, and (b) the lecturers' interventions with their own students, thereby creating multiple iterations of the Action Research cycle at different levels. Data analysis within an AR project is concerned with learning about and implementing change. Because AR is associated with practice, the materials created become the 'data', such as the participants' assignments in this study. Data then become new affordances for action.

### **Sample**

The sample population from which our data are drawn, consists of 30 lecturers from the NWU who are teaching in the 8 faculties across three campuses in South Africa (Wildsmith-Cromarty et al. 2022). These lecturers teach modules where either Afrikaans or English are the languages of instruction and they either volunteered or were nominated by faculty management to take part in the institution's multilingual initiative, including the short learning programme on multilingual pedagogies. Participants had provided informed consent to be part of the study and the study itself had been given ethical clearance (Wildsmith-Cromarty et al. 2022).

### **Data collection**

The data generated for this paper are drawn from individual and group assignments that were completed by participants. Initially the plan was to observe lecturers in their face-to-face classes or to record classes and then discuss and analyse the extent to which lecturers could use multilingual pedagogies to enhance learning in their classes. However, due to the Covid19 pandemic, lecturers had to switch to emergency remote teaching for all classes and they shared the videos, PowerPoint presentations with voice-overs and other materials that they generated for their online classes as part of their assignments for the course on the university's online learning management system (eFundi).

### **Data analysis**

Data from the assignments were thematically analysed in terms of the following strategies: scaffolding and translating formal academic discourse in English; using digital platforms (such as the university's learning management system (eFundi) or WhatsApp groups to encourage student engagement with the content). The examples presented below show creative ways to include translanguageing where there were no contact lectures at the time.

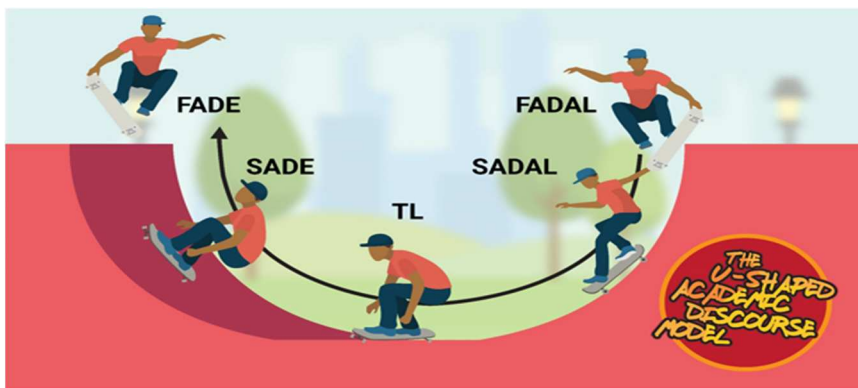
## Interventions and examples

### A scaffolding model

As mentioned above, the multilingual pedagogies team responsible for designing the short course developed a model showing how lecturers could move from formal academic discourse in English to formal academic discourse in Setswana using scaffolding, including translanguaging and translation. The model consists of the following steps:

- scaffolding the discourse by deconstructing it into simpler, more descriptive paraphrases in English
- discussing the disciplinary content through translanguaging by leveraging students' linguistic repertoires in order to access this less formal version
- translating this version into the African languages (Setswana and Sesotho in this case) including the students' contributions
- reconstructing this version into more formal academic discourse in the two African languages with the mediation of experts.

The various steps in this process are illustrated in [Figure 1](#) below using the metaphor of a half pipe in skate boarding. In the process of conceptualising difficult terms and formal content in academic English, participants started with source texts in Formal Academic Discourse in English (FADE – top left of the figure) and then moved to Scaffolding Academic Discourse in English (SADE – below FADE on the left of the figure). The simplification and scaffolding were carried out by the lecturer concerned. The second step was to discuss the disciplinary content with students through translanguaging by leveraging students' linguistic repertoires to access this less formal version. The translanguaging stage is where student repertoires are used and where participants would use interactive methods and strategies to engage students in their own learning by using translanguaging and translation (TL – at the bottom of the half pipe in [Figure 1](#)). This is envisaged as the stage where students also help contribute to the development of terms which, in turn, can contribute towards the development of academic registers in the various disciplines. Remote online learning appeared to make this difficult for lecturers to achieve, especially without the help of African language speaking supplemental instructors, i.e. tutors or senior students in the discipline that could help facilitate learning for junior students through mediation (Vygotsky 1978). We present creative ways in which lecturers overcame this limitation. The next step for lecturers is then to get the simplified English descriptions of concepts translated into Simplified Academic Discourse in the African Language (SADAL – on the right of the half pipe). The final step is a quality control



**Figure 1.** The scaffolding model for academic discourse.

check and editing of the scaffolded text to create an academic register in the selected discipline, Formal Academic Discourse in the African Language (FADAL).

As part of the course, participants had to use examples from lectures to illustrate how they had utilised students' multilingual repertoires to encourage a better understanding of the concepts and content in their modules. The first step was to scaffold the academic discourse from English source texts on a specific topic by deconstructing it into simpler, more descriptive paraphrases in English. As this happened during the Covid19 pandemic, lecturers had to adapt their teaching to using online applications and programmes. These included the use of dictionaries and paraphrasing the dictionary definitions into more student-friendly definitions and using mind-maps to indicate relationships among different terms. The first example shows a Theology lecturer's attempt to use the scaffolding model.

### **Example 1 – theology**

The Theology lecturer is an Afrikaans speaker. The example shows how she attempted to scaffold understanding of a key concept 'Existentialism' in a series of power point slides. The slides appeared as follows, with voice-over in English only at this stage. The intention was to eventually have the voice-over or subtitles in Sestwana.

#### **Slide 1: what does the word 'existential' mean?**

- If something is existential it has to do with human existence.
- If you wrestle with big questions involving the meaning of life, you are having an existential crisis
- Existential can also relate to existence in a more concrete way

#### **Slide 2: mind-map (see Figure 2)**

This mind-map was in English but the next step for this lecturer would have been to:

- Ask the students to discuss it amongst themselves using their languages, and come up with translations of the text on the mind-map.
- Have the translations verified or edited by a qualified expert and specialist in the discipline so that the translation can be reconstructed into formal academic discourse.

#### **Slide 3: word cloud of related meanings**

This slide provides a word cloud of words related to the adjective 'existential' such as: undeniable, indisputable, factual, true, material, objective, established, demonstrable, genuine, empirical, provable, actual. In other words, they are semantically related. Again, this step provides an excellent opportunity for students to discuss the words in the cloud and provide translations for them in their own language. These could then contribute to the development of a term bank or glossary in the discipline. Partly because the teaching was entirely online at this stage, this did not take place, so the translanguaging stage in the model was omitted.

#### **Slide 4: word cloud of opposite meanings**

This slide presented a word cloud of words that have a meaning opposite to 'existential' and are therefore not semantically related. Some of these words included: postulatory, conceptual,

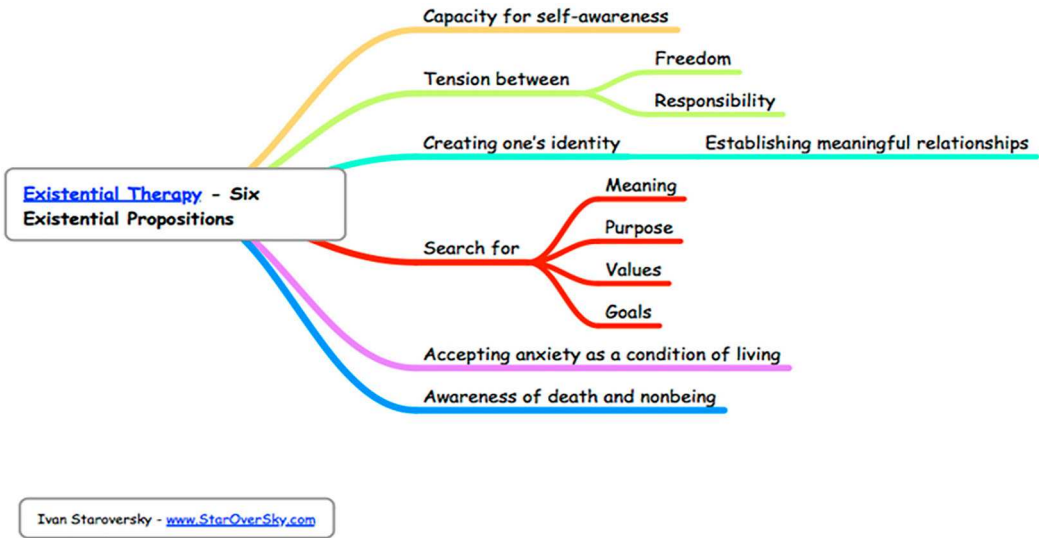


Figure 2. Six propositions for existential therapy.

conjecture, hypothesise, non-empirical, idealistic, unsubstantiated, abstract, non-factual. Again, a translanguaging exercise similar to that described under Step 3 would have allowed greater use of student repertoires.

**Slide 5: English – setswana translations**

This slide provided a Table 1 of English explanations of concepts related to existential reality of human suffering in Pastoral Studies, constructed by the lecturer. She then had them translated into Setswana to facilitate understanding of the concepts.

In the voice-over, the lecturer instructed the students to divide into groups and to discuss the meaning of the words and concepts appearing in the texts and also the different ways in which they can use the words in sentences. They were then instructed to report back to the whole group on the results of their discussions. Again, an opportunity was missed here for the students to create their own translations of the concepts first, in their own languages, before deciding on a version in Setswana. Then the students could have been shown the translation which appears on the right hand side of the table and compare their version with it. They could then be asked to reconstruct a translated version from both sets of translations. During such a process, students would be engaging on a much deeper level with the content and concepts of the discipline.

Expert opinion on the version provided by the lecturer identified a few gaps where English concepts were not consistently translated or omitted completely. There appears to be a mixture of simplified Setswana translations, which resemble spoken repertoires, and academic Setswana in the same table. This lecturer did not strictly follow the model presented above. However, this was an attempt at including the African language in her teaching and demonstrates that she was using language as a resource. The Setswana translated version in the first and third rows of the table correspond to a more formal academic standard Setswana.

For example, ‘meaning’ is translated as *bokao* and ‘purpose’ as *boikaelelo* which was not captured in the translations in rows two and four. Also, in Row 2, ‘innate’ was translated as *tlholego* which means ‘natural’ rather than innate. However, there is no direct translation for ‘innate’ at this stage. It would be a paraphrase, which is why simplification and scaffolding is necessary. In the fifth row, the translation has not been consistent with the previous translations, especially of ‘meaning’ and

**Table 1.** Setswana translations of concepts related to existential reality.

English	Setswana
This is indeed good news to people who are searching for the meaning and purpose of life.	Ruri seno ke dikgang tse di molemo mo bathing ba ba batlanang le bokao le boikaelelo jwa botshelo.
Unlike animals, we have an innate need to understand the meaning and purpose of life.	Go farologana le diphologolo, rona ka tlhologo fela re tlhoka go tlhaloganya bokao jwa botshelo.
According to the World Values Survey, one of the largest studies of human values ever conducted, a growing number of people in many countries are thinking about the 'meaning and purpose of life'.	Go ya ka nngwe ya dipatlisiso tse dikgolo tse di kileng tsa dirwa ke porojeke ya dipatlisiso ya World Values Survey, kaga mekgwa ya batho, palo e e nsteng e oketsega ya batho mo dinageng di le dintsi ba akanya ka 'bokao le boikaelelo jwa botshelo'.
However, those enjoying material prosperity may still experience inner emptiness and a lack of meaning and purpose in life.	Le fa go ntse jalo, batho bao ba ba humileng ba ka nna ba ikufiwa bas a kgotsofale e bile ba se na boikaelelo mo botshelong.
Only religion can answer our basic questions regarding the origin, purpose, and meaning of life.	Bodumedi ke jone fela bo ka arabang dipotso tsa rona tsa motheo tse di kaga gore botshelo bo tswa kae, boikaelelo, jwa jone ke bofe, le gore bokao jwa jone ke bofe.

'purpose'. The translator has used more pronouns and deictic markers and subjectival concords than in previous translations where *s/he* could merely have used *bokao and boikaelelo*. Although there were a few issues with the translations, this was a first attempt by a lecturer to help students understand disciplinary concepts in theology. Some simplification in both the English and Setswana versions might have added more clarification. [Table 2](#) below shows what the next step could have been for the translations in Row 3. We have provided a simplified version and then a more formal version.

The translation of the simplified and academic versions are as follows:

*Simplified version:* Even if its like that, those who are rich can feel unsatisfied and even not have purpose in life (the translation of 'meaning' has been omitted).

*Academic version:* Even if its like that, those who enjoy richness can still continue to experience inner emptiness and lack of meaning and purpose in life.

It is evident that some terminology is difficult to translate from English into the African language because it is highly nominalised and abstract, such as 'Material prosperity'. This is where paraphrase and description of the concept is necessary.

## Example 2: recreation studies

In [Figure 3](#) below, an Afrikaans speaking lecturer used the comments tool in the learning management system to display students' understanding of the concepts of 'leisure', 'recreation' and 'play' in Recreation Studies. Students were provided with English concepts and were instructed to add the same concept in Afrikaans, Sesotho or Setswana (depending on their home language) and then explain the concept in their home language or English. For the first concept, 'leisure', there was only one student who responded to the task in Setswana and one student who responded in Afrikaans. For the second concept, 'recreation', again, one student responded in Afrikaans and only one out of the three African language speaking students provided the concept and explanation in Setswana. A similar phenomenon is evident in the translations of the third concept, 'play'. As the implementation of multilingualism at the university is fairly new, it could take time for students

**Table 2.** Simplified and academic versions of text on Pastoral Care.

However, those enjoying material prosperity may still experience inner emptiness and a lack of meaning and purpose in life.	<p>Simplified version: <i>Le fa go ntse jalo, batho bao ba ba humileng ba ka nna ba ikutlwa ba sa kgotsofale e bile ba se na boikaelelo mo botshelong.</i></p> <p>Academic version: <i>Le fa go ntse jalo, ba ba itumelelang khumo ba ka tswela go itemogelo lolea ka fa teng le tlhalelo ya bokao le boikaelelo jwa botshelo.</i></p>
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to become accustomed to using their own languages in class and for tasks, especially where the lecturer concerned does not speak their language. It could also be that as most students have had their schooling through English at secondary level, they are not accustomed to using their own languages for learning, especially at tertiary level. These are challenges that are ongoing as we attempt to find solutions.

The students using Setswana, were using an informal variety. The concept ‘leisure’ was explained in Setswana as follows – ‘[K]e nako e mongwe a se nang tiro kgotsa go ikamanya le sengwe se se buang ka tiro mo gare fela a dira se se mo itumedisang ka nako eo’. The English translation of the student’s explanation is ‘it is the time when somebody who does not have work, or to relate with something

**2. Recreation**

See All 50 comments ...

See All 38 new comments ...

10-Apr-2021 (1 Year Ago) X [edit] [reply]

**AFRIKAANS**

Rekreasie is vryetyd aktiwiteite wat vir onspanning doeleindes gebruik word.

12-Apr-2021 (1 Year Ago) X [edit] [reply]

Activity done for enjoyment when you are not working.

16-Apr-2021 (1 Year Ago) X [edit] [reply]

**SETSWANA**

GO TSAYA KAROLO MO METSHAMEKONG YA NAKO YA BOIKHUTSO E E GO ITUMEDISANG

22-Apr-2021 (1 Year Ago) X [edit] [reply]

Activity where one do in their spare time

23-Apr-2021 (1 Year Ago) X [edit] [reply]

Activities we do on our free time/during leisure.

Add Comment

---

**3. Play**

See All 53 comments ...

See All 36 new comments ...

10-Apr-2021 (1 Year Ago) X [edit] [reply]

**AFRIKAANS**

N aktiwiteit wat fiesies uitgeoefen word soos om in n span of sportgroep te wees.

12-Apr-2021 (1 Year Ago) X [edit] [reply]

Play is when you engage a activity for enjoyment and recreation rather than a serious or practical purpose.

16-Apr-2021 (1 Year Ago) X [edit] [reply]

**SETSWANA**

MOTSHAMEKO O ELENG GORE MONGWE O IKAMANYA KA BOLOKOLOGI MO ELENG GORE BA DIRA DILO TSE BA TSHGOFATSANG

22-Apr-2021 (1 Year Ago) X [edit] [reply]

An activity that one does to have fun

23-Apr-2021 (1 Year Ago) X [edit] [reply]

play is activities we do for fun,mostly done by children.

Add Comment

**Figure 3.** Student explanations of the concepts of ‘leisure’, ‘recreation’ and ‘play’ in recreation studies.

that talks about work, doing what makes her happy at that time'. This back translation shows that this student has a grasp of the essential meaning of the concept but her articulation of it in Setswana was not easy for her. The second concept 'recreation' was explained in Setswana as '[G]o tsaya karolo mo metshamekong ya nako ya boikhutso e e go itumedisang'. Literally translated, the student's explanation for 'recreation' is 'to take part in sports during resting time, which makes you happy'. The student's understanding of the concept recreation captures three aspects, i.e. playing, resting and making happy, which does capture the essential meaning of recreation.

The third concept, 'play', was explained in Setswana as '[M]otshameko o eleng gore mongwe o ikamanya ka bolokologi mo eleng gore ba dira dilo tse ba tshegofatsang'. The literal translation of the student's explanation is as follows: 'play is the play wherein somebody relates freely where they do things that bless them'. It is not clear how the student arrives at the word 'tshegofatsang' (bless). In Setswana, blessing is *tshegofatso*. However, perhaps the student is meaning 'talent', so that if they can play a sport then they are blessed with a talent. The term is not explained in relation to young children's fun activities. It seems to be her own individual way of understanding it. This is precisely the point at which discussions could ensue about the nuances in meaning of these explanations using translanguaging and translation. Even though the data are sparse, the attempts by these students to use their own languages were not unsuccessful, and, hopefully, over time, more students will begin to use their repertoires. The lecturer believed that the strategy of setting up the glossary together with the students was working well.

### Example 3: mathematics education

To implement translanguaging in an online environment during Covid-19, the Mathematics Education lecturer created a WhatsApp group as a space for her students to discuss and explain difficult Mathematical concepts. The name of the group was *Mathsketeers*. The lecturer was an Afrikaans speaker with English proficiency (bilingual), and used Google Translate to communicate with her students so she could interact with them in an African language (Sesotho) on the WhatsApp group, as can be seen in [Figure 4](#) below. However, she also included a student assistant who could speak the African language in the module which created the affordances for the use of the students' repertoires in the learning-teaching experience. The lecturer began the conversation by asking the students to explain the phrase 'pigeonhole principle'.

The text in [Figure 4](#) above is only in English. Students were given the task of explaining the meaning of 'pigeonhole principle' on the group, using any resources they could find, including their own languages. The student representative responded to the challenge by sourcing a youtube video and placing the link on the group chat. This was followed by the lecturer asking them: 'Is there any volunteer who is willing to explain the pigeonhole principle to us'. She also encouraged them to feel free to use either English or their home languages. Students did not respond to this instruction at this point, either because they did not understand the concept, or they did not know how to express it in their language. The student assistant then began to frame the discussion in Sesotho, as can be seen in [Figure 5](#) below.

This asynchronous chat begins with the student assistant greeting all students in Sesotho (the literal translation in brackets):

'Dumelang hape' (Hello again)

'Kenale potso' (I have a question)

'Ha hona bothata' (There is no problem)

The communication that followed later on the same day was from another student who wrote '[K]e dumela hore ha ona le moo re fumanang bothata ka dipotso o tla kgona ho thusa ha a e le teng ka mona. Literally translated, the student was saying 'I believe that if there is somewhere where we find a problem with the questions she will be able to help if she is present in here'. The students are aware that the lecturer is not proficient in Sesotho, but because she encouraged them to communicate in Sesotho, and kick-started the process with the student assistant, they freely

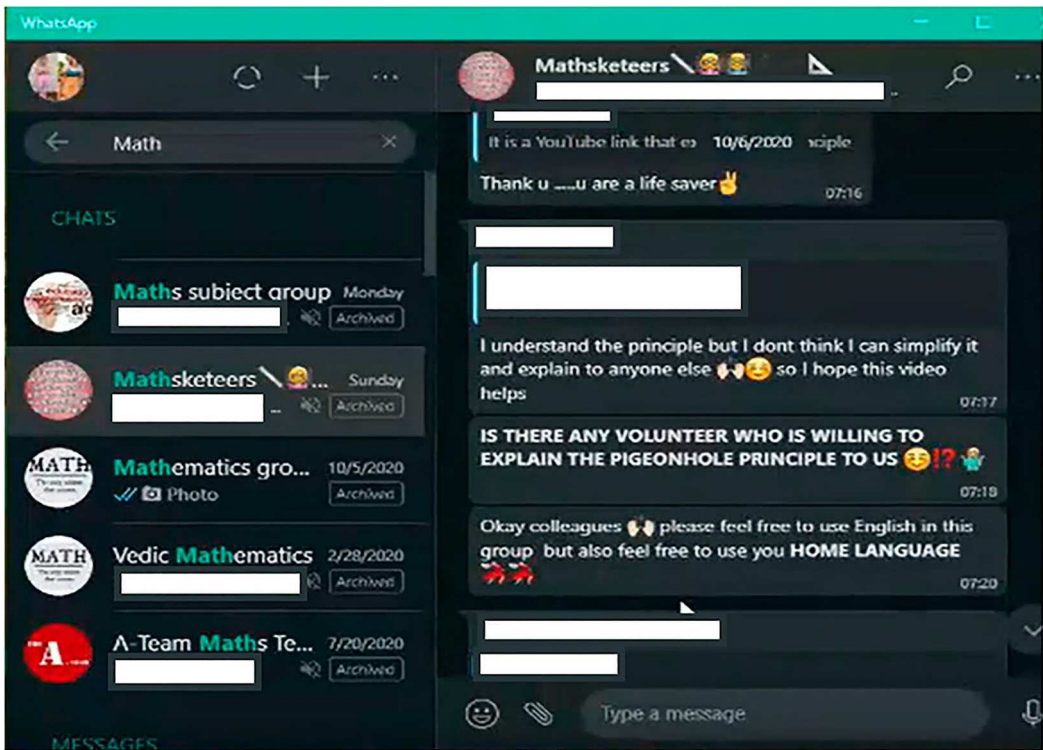


Figure 4. Discussing content using translanguaging on WhatsApp groups in Mathematics.

do so without fear of not being understood by their lecturer. The lecturer then responded '[B]aithuti, Keteng sehlopheng sena hore kebe karolo ya morero wa dipattiso, mantle (hantle?) le ho le tataisa'. Literally translated, the lecturer said 'Students, I am in this group so that I am part of the aim of this research, in order to guide you (correctly)'. The lecturer used Google translate for communicating with her students which is not always accurate. This took courage and determination to implement multilingualism at whatever cost.

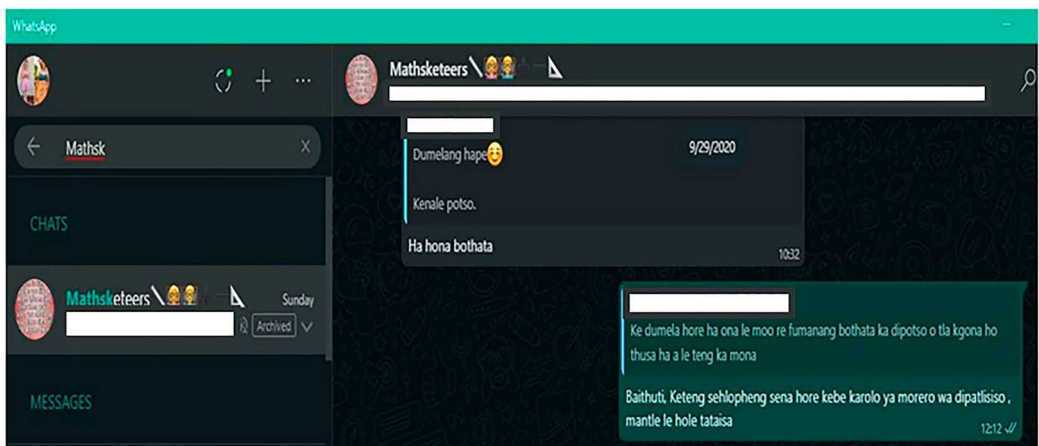


Figure 5. Encouraging the use of Sesotho.

The chat then continues in [Figure 6](#), where students are easily communicating with the student assistant in their own languages.

Following the task to explain the concept ‘pigeonhole principle’, the student assistant reminded the students in the above chat that ‘*Re nale sehlopha sena ho ... diphoso, le ho fedisa pherekanyo mabapi le dikahare tsa MAIP 121*’. Literally translated, the student tells them that ‘they have this group to ... (correct?) their mistakes and end confusion regarding the content of MAIP 121’ ([Figure 7](#)).

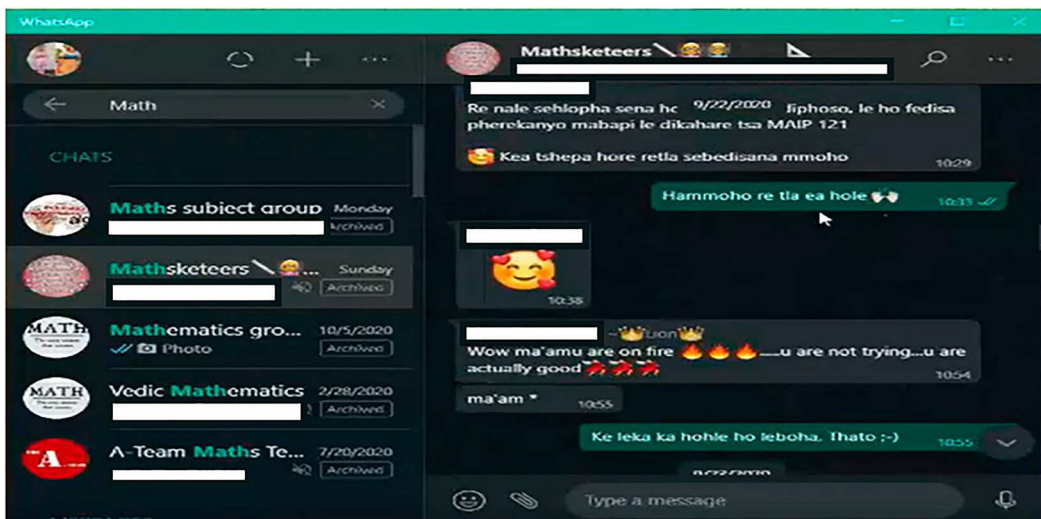
In this final communication by the student representative to the students, she said:

‘Dumelang baithuti mmoho. Ke tshepa hore le elletswa hore dikarolo tsa mosebetsi o kahara karolwana ya 1.3 dise dile teng. Jwale kakopo HAEBHA HONALE MOTHO ASAUTLWISISING HORE DIKARABO DI FUMANEHILE JWANG A BUE HORE RETLO KGONA HO THUSANANG’, after which the lecturer thanked her. The literal translation of what the student assistant said is ‘Hello fellow students. I trust that you have realized that the sections of the activity inside section 1.3 are already there. Now please IF THERE IS ANYONE WHO DOES NOT UNDERSTAND HOW THE ANSWERS WERE FOUND SHE MUST TALK SO THAT WE CAN HELP EACH OTHER’. The lecturer then thanked the student assistant by saying: [T]shehetso e kholo, re leboha X – ‘Great support, we thank X.’

Although none of the students had attempted to translate the concept ‘pigeonhole principle’ in their own languages, or even in English, the lecturer was seriously attempting to drive communication in the students’ own linguistic repertoires in spite of the fact that she was a non-African language speaker. She used the help of a more senior student which made the interaction more natural among the students. It is interesting that the African language was used more for framing the activity rather than for discussing the actual disciplinary content, which was the ultimate aim.

## Discussion

Our research question centred around the challenge of accommodating student repertoires for discipline specialists who do not speak the African languages being promoted by the language policy of the University. One of the ways of addressing this was to design a course in multilingual pedagogies that guides lecturers in their use of multilingual strategies to make their content more accessible to a diverse student body in the pursuit of epistemic justice (Gutiérrez et al. 2011; Guzula, McKinney, and Tyler 2016; Kerfoot and Bello-Nonjengele 2023), drawing on the theory of mediation (Vygotsky 1978) through scaffolding (Rose 2018) and multilingualism (Heugh 2021) using student



**Figure 6.** Continuation of chat about module in Sesotho.

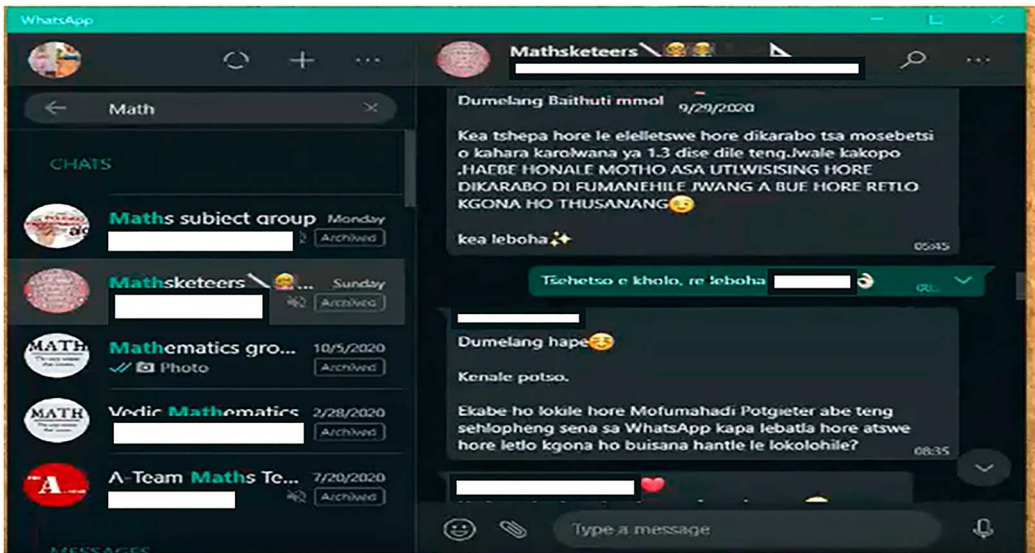


Figure 7. Final communication by representative to students.

repertoires (Coetzee-Van Rooy 2018; Makalela 2016). We also created a model for scaffolding academic discourse which we hoped would guide lecturers in deconstructing and then reconstructing challenging concepts in their disciplinary discourses (Rose 2018; Rose et al. 2003; Walqui 2006). In all the examples cited above, we show how lecturers put these strategies to use in their classes, whether online or in contact mode.

The Theology lecturer used scaffolding as her primary tool of mediation, breaking down the concepts for the students using the tools she had learned on the multilingual pedagogies course, using mind-maps, word clouds and translations (Rose 2018; Rose et al. 2003). The Recreation Studies lecturer used the Learning Management system, eFundi, as her platform and attempted to encourage her students to express their understandings of the key concepts in their own languages, thus affording them increased agency and participation (Kerfoot and Bello-Nonjengele 2023). The Mathematics lecturer created a WhatsApp group as a discussion forum. Her strategy was to include a supplemental instructor who was an African language speaker and senior student in the discipline. This lecturer also enrolled for a language course in Sesotho and used Google Translate as a resource to allow her participation in the discussions. In this way, she provided agency for herself as a mediator by avoiding exclusion on this platform due to linguistic incapability. This is all part of the implementation of multilingualism – a necessary step in moving towards inclusion of all students in the academy.

The data upon which this paper is based are limited in that they only include three examples of what the lecturers were capable of. Nevertheless, they reflect the beginning of a multilingual initiative that could gain traction over time. It could also be argued that the translanguaging aspect is mainly geared towards a monolingual outcome, i.e. towards obtaining a final degree through English, what Krause and Prinsloo (2016) call 'reproductional translanguaging' rather than languaging practices that build knowledge. This is where translanguaging is limited to single words, phrases, or short sentences which are translations of instructions of concepts. This is still a good place to start for our project, and hopefully, over time, translanguaging will become far more deeply integrated into the teaching and learning spaces at the university. Most studies on translanguaging involve teachers who can speak the languages of their students (Batyi 2022; Cavazos 2022; García, Seltzer, and Witt 2018). Our contribution to the field is that there are few studies that document the challenges teachers and lecturers face in using student repertoires when they themselves do not have those

repertoires or do not speak the languages involved in those repertoires, and how we may start to address and overcome them.

## Conclusion

In this paper, we have shown how lecturers have begun to introduce multilingualism into their teaching by facilitating access to knowledge and the understanding of concepts through encouraging the use of student repertoires, while simultaneously contributing to the drive to ‘intellectualise’ the African languages through the development of terminology and materials in the African indigenous languages. We have shown how non-African language speaking lecturers have risen to the challenge and designed materials to scaffold learning in a multilingual environment. The institution mandated a multilingual pedagogies course for lecturers in order to support and motivate them to include multilingualism in their teaching. Although far greater use could be made of the African languages in their pedagogy, this was a beginning. What is evident is that it will take time for staff to feel comfortable working in this space when they do not necessarily understand the African language in question. Concerns about their (in)capacity to be able to check the quality of translations are real. Capacity for verification from our Language support structures who oversee translation and interpreting services is stretched thin and urgently requires expansion.

On the positive side, the institution offers short language courses in the African languages for lecturers and many are making use of these, as can be seen from the Mathematics lecturer’s attempts to communicate with her students in their language. As mentioned previously, the institution also offers lecturers a short course in multilingual pedagogies. As more staff take advantage of these opportunities, it is hoped that the students may increase the use of their own languages for learning. This holds positive pedagogical implications for the implementation of multilingual teaching and learning going forward.

## Acknowledgements

The authors would like to thank the course participants who so generously shared their work with us and to the reviewers for their generous and insightful comments on this article.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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