Developing a multilingual mindset:

Promoting the development and use of students' strongest languages and empowering them in English as the academic lingua franca

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Overview

1. Focus
2. Triggers
3. Theories and models of bilingual learning
4. Overview of empirical studies
5. Report on pilot research
6. My vision for the UAL
1. Focus
Exploring the use of **translanguaging as a multilingual pedagogy**

- To draw upon students' L1s/main languages/strongest languages
- To support students in acquiring higher cognitive literacies in the LOLT(s)
- To explore opportunities in academic literacy classrooms for **term creation in students' L1s and the development of these languages into fully-fledged scientific languages**
2. Triggers
Three triggers

• **Students' struggles** to study through medium of English (conceptual access);
• **Government policy frameworks** for the promotion of multilingualism in HE
• **Involvement in a DHET-funded project** on establishing a Multilingual Open Education Resource Term Bank (OERTB) for Higher Education
Students' struggles to study through an L2

- Many studies confirming students' struggles

- Causes
  – globalisation (mass media, mobility); massification of HE; poor schooling conditions

- Language as a right x Language as a problem x language as a resource
  Drawing upon all students' linguistic repertoires to facilitate cognitive, social and affective processes in literacy and learning
Government policy frameworks
DOE 2002; 2003; DHET 2008; 2011; 2012a; 2012b

• Conceptual access and social inclusion (Stroud & Kerfoot 2013:396)

• To open implementational and ideological spaces for multilingual education (Hornberger & Link 2012; Madiba 2013)

Language Policy for Higher Education (DOE 2002);
Report on the Development of Indigenous Languages as Mediums of Instruction (DOE 2003) HOWEVER

• Policy failure/implementational failure:

A need for "radical re-conceptualisation of the design of academic language and literacy programmes" [...] "in which all available languages and semiotic resources are used and promoted in pursuit of learning" (Stroud & Kerfoot 2013)
OERTB Project

• Liaise with other universities to source existing multilingual glossaries
• **Build corpora** and create terminological resources for under-terminologised fields
• Make this information available via **online learning environments** in HE
• Encourage and facilitate the use of terminologies in **pedagogical contexts**
• **Standardise** terminologies
3. Theories and models of T & L in bi-/multiliterate contexts
Common underlying proficiency; Threshold hypothesis (Cummins 2000)

- There is a common language proficiency that underlies the use of both languages in bilingual learners
- A certain threshold language proficiency in at least one language is to be obtained before an L2 speaker can reap cognitive benefits
Cummins' (1996) four-quadrant model
<table>
<thead>
<tr>
<th>Context Embedded</th>
<th>Cognitively Undemanding</th>
<th>Context Reduced</th>
<th>Cognitively Demanding</th>
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</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Interpersonal communication in face to face contexts</td>
<td></td>
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<td></td>
<td><em>L1 /other vernaculars</em></td>
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<tr>
<td><strong>B</strong></td>
<td>Exploratory classroom talk about academic topics (incl. analysing, problem solving, reflecting)</td>
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<td><em>Flexible use of L1 and L2 (LOLT) + other modes of communication</em></td>
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<tr>
<td><strong>C</strong></td>
<td>Interpersonal communication in a-synchronous contexts</td>
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<td><em>L1/other vernaculars and/or L2</em></td>
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<tr>
<td><strong>D</strong></td>
<td>Higher-order reasoning; critical reading and writing of academic texts; use of terminology</td>
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<td></td>
<td><em>English (L2), Afrikaans; DHET imperative to develop African languages to this level</em></td>
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Several shifts: Informal to formal; talk to text; L1 to English; exploratory to discourse-specific
Hornberger's Continua of biliteracy model

Traditionally less powerful <-> traditionally more powerful

Contexts of biliteracy
micro <-> macro
oral <-> literate
bi(multi)lingual <-> monolingual

Development of biliteracy
reception <-> production
oral <-> written
L1 <-> L2

Content of biliteracy
minority <-> majority
vernacular <-> literary
contextualised <-> decontextualized

Media of biliteracy
simultaneous exposure <-> successive exposure
dissimilar structures <-> similar structures
divergent scripts <-> convergent scripts
Advantages of continua models

• Challenge educational policies and practices that privilege compartmentalised, monolingual, written, decontextualized language and literacy practices

• Open up spaces for implementing fluid, multilingual, contextualized practices and voices, e.g. through translanguaging
4. Translanguaging
A definition of translanguaging

"At least two languages are used in a functionally integrated manner to mediate cognitive, social and affective processes in literacy and learning" (Palmer, Martinez, Mateus & Henderson 2014:759).
Advantages of translanguaging

- **Cognitive**: mediate mental processes and understand subject matter (Garcia 2009; Lewis et al. 2012:645)

- **Cognitive**: developing 'weaker' language (Baker 2011:290)

- Facilitates co-operation

- **Metadiscursive** gains (Garcia 2011:147)

- Allows **flexible identities; plural selves**: (Pavlenko & Norton 2007; Creese & Blackledge 2010; Makalela 2015)

- Promotes **multimodality** (Wei 2011:1)

- **Platform for corpus development** (Madiba 2014, Paxton 2009)
Empirical studies in higher education in SA (past 10 yrs)

**Paxton 2009** – how bi- & multilingual students build on the L1 to make sense of new concepts; experiment with term creation

**Madiba 2010, 2014**; - multilingual glossaries to promote concept literacy through multilingual concept literacy tutorials

**Ramani et al. 2007** – challenge the view that corpus planning should precede acquisition planning; show how terminologisation can be facilitated through pedagogic processes

**Makalela 2014; 2015** - the effectiveness of fluid communicative language practices and identities among Nguni learners of Sepedi as an L2 through an 'ubuntu' lens;

**Van der Walt & Dornbrack 2011** – strategies that Afrikaans-English bilingual students use to mediate cognitively challenging material

**Van der Walt & Kidd 2013** – facilitate reading comprehension in English

**Boakye & Mbirimi 2015** – lecturers' views on translanguaging
5. Pilot research project
# Construction Economics

<table>
<thead>
<tr>
<th>Course</th>
<th>Group Langs</th>
<th>Class Size</th>
<th>MOI Language</th>
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</thead>
<tbody>
<tr>
<td>BWT 110 Building Science</td>
<td>English group L1 all 11 languages + N=90</td>
<td>90</td>
<td>English</td>
</tr>
<tr>
<td>BWT 110 Bouwetenskap</td>
<td>Afrikaans group L1 Afrikaans N=60</td>
<td>60</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>ALL 122 Academic Literacy</td>
<td>English group L1 all 11 languages + N=90</td>
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**Write a report on a site visit** ("boundary object")
Research questions

1. How effective is translanguaging as a meaning making strategy?
2. What are students’ attitudes to translanguaging as a pedagogical strategy?
3. How effective is translanguaging in facilitating L2 development (English)?
4. How effective is translanguaging in supporting term creation in African languages?
5. What are students’ attitudes to term creation in African languages?
6. How useful are students attempts at creating terms and writing definitions in African languages?
Data gathering

• Participants
  – English class 41: 9 IsiXhosa, 7 IsiZulu, 10 Sepedi, 7 Setswana, 4 Xitsonga, 4 Tshivenda, 16 English; Afrikaans class: 55

• Procedure
  – Read text on waste management
  – Receive concept map with English terms
  – Match terms with definitions
  – Translate terms & definitions into L1

• Administer questionnaire based on RQs
Data analysis (qualitative)

- **Themes** (a priori – literature based)
  - Translanguaging as a meaning making strategy **Q1, 2**
  - Gains in L2 development **Q3**
  - Attitudes toward terminologisation of the L1 **Q4, 5**

- **Reasons for positive/negative responses per theme** (a posteriori)

- **Preliminary exploration of results of term-creation and translation into the L1**
Findings
Theme 1: Scaffolding understanding

p. 17 Positive 78 (code 1)
Translanguaging facilitated understanding (28/41 Eng.; 50/55 Afr.)
  – See bigger picture
  – Distinguish between concepts
  – Simplify complex concepts
  – Safe space for negotiating meaning
  – Make myself understood

p. 18 Negative 21 (code 2)
Translanguaging did NOT facilitate understanding (15/41 Eng., 6/55 Afr.)
  – L1 too complex
  – Too much internal variation in L1
  – Lack of specialised vocabulary in L1
  – More proficient in English
  – English is language of scientific communication
Theme 2: L2 development

p. 21 Positive  72 (code 3)
English skills improved as a result of translanguaging (21/41 Eng.; 50/55 Afr.)
– L2 vocabulary expanded
– L2 confidence increased

p. 21 Negative  20 (code 4)
English skills did NOT develop as a result of translanguaging (15/41 Eng.; 5/55 Afr.)
– More proficient in English than L1
Theme 3: L1 terminologisation (only English group = 41)

**Positive**

**Code 5 p. 21**
Translanguaging = platform for term creation in African languages (31/41)
- Sense of agency

**Code 7 p. 23**
Intend using terms in future (22/41)
- Social cohesion between different L1 speakers on site
- Social cohesion among members of same L1 (identity)

**Negative/neutral**

**Code 6 p. 22**
Translanguaging = NOT platform for term creation in African languages (10/41)
- Only realised over time
- English is lingua franca

**Code 8 p. 23**
Do NOT intend using terms in future (19/41)
- L1 is complex
- Other speakers of the L1 may not understand (internal variation)
Value of students’ attempts at term creation and defining concepts

Term equivalents
For many English terms one- or two-word equivalents could be supplied:

**Xitsonga**
- **disposal** = **dispose**: lahla
- **re-produce**: endla nakambe
- **reduction/minimisation** = **reduce**: hunguta
- **incineration** = **incinerate**: hisa
- **repair**: lulamisa
- **refill**: ngetelela
- **second-hand use**: tirhisa nakambe
• A noun or an adverb often added to specialise meaning
  Xitsonga
  – **incinerate**: ku hisa thyaka (to burn dirt/waste)
  Tshivenda
  – **recycle**: u shumisa lu sa fheli (to use repeatedly)
• Nominalisation may be difficult to transfer to African languages
  Xitsonga
  – **landfill (n)**: ku tatasisa [mu]goji (v) (to fill up a hole)
  Tshivenda
  – **incineration (n)**: u fhisa (v) (to burn)
  – **landfill (n)**: tshigodini (derived n) (in the small hole) mugodi
    wa tshika (n) (hole of rubbish)
• Students largely unaware of transliteration as a term-creation strategy
  Sepedi
  – **recycle**: resaekele
  isiZulu
  – **second hand**: isekeni (second)
Possibility of harmonisation?

- For 5 out of the 11 terms the isiXhosa and isiZulu groups provided the exact same equivalent:
  
  **disposal**: ukulahla
  
  **reduction**: ukunciphisa
  
  **incineration**: uku(t)shisa
  
  **second-hand use**: isekeni
  
  **refill**: ukugcwaliisa futhi
Definitions

Meaning understood, but sometimes 'amateur' formulation

**recycle**

*IsiZulu*

*Students*

_ukuvuselela_ (revive)

Ukuthatha udoti udenze into ongayisebenzisa futhi (to take [any] dirt and make something that you can use again)

*Expert*

_ukuvuselela kabusha_ (to make something anew)

Ukuthatha izinsila bese wenza into enye ongayisebenzisa (to take waste, then make another thing that you can use)

*Afrikaans*

*Students*

_herwin_

Om vullis te transformeer en verskillende produkte te maak (to transform waste and make different products)

*Expert*

_herwin_

Om afvalprodukte te herverwerk en nuwe produkte daarvan te maak. (to use reprocessed waste for manufacturing new products)
Summary of results

1. Cognitive benefits
   – Paint bigger picture
   – Simplify complex concepts
   – Differentiate between concepts at the same hierarchical level

2. Affective benefits
   – Afrikaans group: space for group collaboration and speaking; build confidence in L2
   – English group: safe space for exploratory scientific talk in L1

3. L2 learning
   – Afrikaans group largely positive:
     • Appreciate opportunities to speak English in non-threatening environment
     • Vocabulary learning
   – English group less positive
     • English as a MOI to Gr 12; some never studied through L1
4. Process of terminologisation/intellectualisation
   – Positive: cohesion (inter- and intra-group)
   – Negative: L1 complexity

5. Students' attempts at supplying term equivalents and definitions in the L1
   – African languages can be used to discuss scientific concepts – students’ definitions are proof
   – For many English terms single- or two-word term equivalents can be found in African languages
   – Students in programmes other than languages cannot be expected to do the work of linguists – term-creation and defining should ideally be done by experts (language and subject-field)
   – Students are able to corroborate (or contest) expert created terminological information:
     • Use expert-created definitions for conceptualisation
     • Use expert-created terms as labels for concepts
     • Provide feedback → assist in standardisation and development of African languages as LOLTs.
7. My vision for the UAL
• Remain centrally involved in assisting students to master subject specific discourses in **scientific/professional English/Afrikaans** through a visible pedagogy (demystify academic discourse)

• Open up spaces for students to draw upon their unique sets of semiotic resources (**mother tongue** and multimodal resources)
Through implementing a functional multilingual pedagogy

Functions

• **Content acquisition:**
  - Curriculum access/
  - Facilitate understanding

• **Language acquisition:**
  - Support linguistic development, e.g. lexical, semantic, syntactic, morphological

• **Classroom management:**
  - Give directives; create movement to the next learning objective, stimulate participation

• **Interpersonal relations:**
  - E.g. create an affective climate conducive to learning; negotiate flexible identities

Facilitation strategies

• **Multilingual concept maps**
• **Multilingual subtitled slides or podcasts**
• **Translated course outlines and key readings**
• **Tutors speaking students' L1s (available online)**
• **Multilingual technical glossaries (online; apps)**
• **Multilingual writing centres**
• **Interpreting services, where functional and economically justifiable**
Dankie, Enkosi, Inkomu, Ke a leboga, Ke a leboha, Ndo livhuwa, Ngiyabonga, Ngiyathokoza, Siyabonga, Thank you
The VC, Prof. De la Rey
DVCs, Profs Burton and
Duncan
Dean of Humanities,
Prof Reddy
Deans of other faculties

Colleagues from other universities
HODs and other UP staff
UAL colleagues
Friends
Students
Family: Husband Cassie, daughter
Anrie, son Gideon