



Learners in Randburg Library playing a game called Little Alchemy, which teaches them about chemical elements. A study has found that children may gain a deeper understanding of scientific concepts if they are allowed to engage on a subject in their local language, rather than English only.
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MULTILINGUALISM IN CLASSROOMS: DRAWING FROM A DIVERSE LANGUAGE POOL FOR GREATER UNDERSTANDING

Research shows that bilingualism and multilingualism have beneficial impacts on the developing mind. In addition, when multilingual learners are allowed to draw freely from their repertoire of language to communicate – a practice called translinguaging – they achieve a better conceptual understanding. At an HSRC [seminar](#) earlier this year, Dr Robyn Tyler argued that the ideology of single language use in South Africa was blinding us to better ways of teaching. By *Andrea Teagle*

High-school students Thandile and Yonela sat opposite each other, animatedly discussing the chemistry of water, while language in education researcher Robyn Tyler, who was conducting research through the University of Cape Town, looked on. The two switched fluidly between isiXhosa and English, sometimes employing both languages within a single sentence. While Thandile stated that H_2O is water, Yonela countered that a molecule of water is conceptually distinct from water as a substance.

Had the teens been forced to use only English, this conceptual grappling would not have been possible, says Tyler. It may not have been possible in isiXhosa either, as both languages


informed the thinking of these multilingual children. Their “[mother tongue](#)” was translingual: a seamless, urban mesh of English and isiXhosa variously referred to as ‘isigingqi’ (language of the local area), ‘tsotsitaal’ (gangster’s language), ‘Capetonian Xhosa’, and ‘ekasi Xhosa’ (isiXhosa of the township).

Speaking at the HSRC’s [Context and language practices that work](#) seminar in April, Tyler said that the assumption of languages as silos that are not – and should not – be mixed is a Western ideology that does not reflect how people actually use language in thought and speech, and that may be limiting learning in South African schools.

A third space

To explore the possible learning benefits of multilingualism at a school in Khayelitsha, Cape Town, Tyler set up a “third space” outside the classroom where kids were encouraged to engage with schoolwork (taught in English) using whatever linguistic tools they had at their disposal – a practice known as translinguaging. The study by Tyler and her colleague, Associate Professor Carolyn McKinney of the University of Cape Town’s School of Education, was published in 2018 in the journal [Language and Education](#).

Pupils in Tyler’s intervention group were given learning materials in isiXhosa and asked to translate them into English. When they commented that the isiXhosa texts were written



in a formal version of the language, or “deep Xhosa”; that was foreign to them, she encouraged them to translate the concepts into their everyday speech. Through this process, the pupils arrived at more nuanced understandings and more confidently identified as knowledge holders when debating meanings in their own vernacular.

“That they cannot be said to be speaking ‘English’ nor ‘isiXhosa’; neither ‘pure Science’, nor ‘pure everyday language’ urges us to look beyond the debates around ‘mother tongue’ or English-only language policies in schools and to examine what it is that students of Science are doing with language,” McKinney and Tyler write.

Debating meanings of subject-specific English words in their everyday speech allowed Thandile, Yonela and their classmates to engage critically with the material, and also with both languages. Although the impact of the two approaches was not quantified, Tyler said that kids in the English-only classroom displayed surface-level understanding, whereas the meanings arrived at in the study group were more flexible, reflecting deeper conceptual understanding. The results reflected those of a similar study, published in 2017 in the [International Journal of Scientific Education](#), exploring the use of translanguaging in a science classroom in Sweden.

A mental juggle

Tyler’s case study challenges the common view of languages, and particularly South African indigenous languages, as bounded objects that exist separately in the minds of people who speak them. Indeed, recent studies suggest that even when bilinguals converse or read in one language, both languages [remain active](#), pointing to an impressive feat of mental juggling.

South Africa’s 1997 Language in Education Policy allows for any official language to be used as a medium of instruction throughout schooling. However, Tyler said, the underlying assumption is that from grade 4 onwards, children will be taught in English. This is despite only having

2-3 hours of English tuition a week for the first three years of school.

Because language was used as a barrier to quality education during Apartheid, for many, English-medium instruction today symbolises educational equality. In reality, however, English-only instruction serves to perpetuate inequality, disadvantaging the majority of South African children.

Teachers often prohibit children from switching between languages, or “code-switching”, to speed up English learning. While translanguaging is a relatively new field of study, a large body of research supports traditional bilingual education programmes, suggesting that enforcing second-language-only instruction in fact truncates conceptual and linguistic understanding.

Summarising 30 years’ worth of longitudinal studies (1985 to 2017) of bilingual education programmes in the United States, Dr Virginia Collier and Dr Wayne Thomas of George Mason University write, “English-only and transitional bilingual programmes of short duration only close about half of the achievement gap between English learners and native English speakers, while high quality long-term bilingual programmes close all of the gap after 5-6 years of schooling.”

Identity

In South Africa, the lower status afforded to home languages may undermine the child’s sense of cultural identity as well as their academic confidence. In some instances, teachers’ own limited English further constrains critical engagement. As part of a larger study on mother-tongue education, Prof Vuyokazi Nomlomo, dean of language education at the University of the Western Cape, found that children taught in isiXhosa, with English as a second language, [performed better](#) in science and expressed themselves more creatively. The children also showed greater self-esteem and expressed greater confidence in their use of English.

In the general schooling system, Nomlomo argues that the total switch

to English amounts to [subtractive bilingualism](#), where the net impact is often neither proficiency in English, nor development or even full retention of the child’s first language.

Unable to use their linguistic resources to grapple with new concepts, many pupils simply disengage – and are thereby deprived not only of academic markers of success but also the full stimulation of the classroom environment.

Speaking at a follow-on [seminar](#), HSRC CEO Crain Soudien argued that the forced switch to English during developmental years might comprise a distinct neurological event, with long-term consequences for learners’ development. “We hypothesise that the switch induces a moment of cognitive crisis.”

As the recent student protests highlight, inequality of language carries through to tertiary education. A [2017 study](#) evaluating a translanguaging module at the University of Cape Town found that the overall response was mostly positive. The authors write: “students found their languages valued and legitimised within the academic space; they were no longer silenced or considered inferior.” They note that those who benefited were the most disadvantaged.

Tyler conceded that a model that creatively embraces translanguaging, and allows for it in a testing environment, will require financial resources.

However, she said, the inability to challenge English as the lingua franca reflects Anglo-normativity, the deeply ingrained ideology that expects that people should be able to speak English, implying that those who cannot are somehow deficient. English-only learning and assessment conventions in South African schools are optimal for only a tiny fraction of students. In the long run, this is surely far more costly.

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