**Codeswitching online: a case study of a bilingual online mathematics program for grade 7 learners in Diepsloot, Johannesburg, South Africa**

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There is an education crisis in South Africa. Mathematics and literacy are at the forefront of the problem, as evidenced by Annual National Assessment results (Department of Basic Education, 2014; Spaull, 2014). The vast majority of South African learners learn through their second language, English, from grade 4 onwards. This research aimed to find a way to simultaneously equip learners both with English proficiency and mathematical understanding. This was done by implementing and evaluating an experimental bilingual course in an existing mathematics program in the township of Diepsloot in Johannesburg, South Africa.

The research used design-based research methodology, using both qualitative and quantitative research methods, chosen as it allows theory and practice to intersect in a real-life setting, and for the successes and shortcomings of this intersection to be evaluated.

Both the evaluation and creation of the bilingual online mathematics course are encompassed in the study. The course was made bilingual through the creation of bilingual videos with the use of translanguaging and the creation of a bilingual glossary of terms. The videos were created using a translanguaging “model” informed by theories of basic interpersonal communication skills, and cognitive academic language proficiency and common underlying proficiency (Cummins, 1979); codeswitching (Setati, 2002; Ncoko et al., 2000); and translanguaging (Makalela 2015; Creese and Blackledge, 2010).

The aim of this research was to create a successful translanguaging model which facilitates learners’ ability to conceptualise in their first language and then discuss and understand the concept in their second language.