#### Abstract

This report presents a qualitative case study, which explored how a Grade 11 mathematics teacher in a multilingual classroom used the learners' home languages in order to support their understanding of concepts in Linear Programming. The study involved one teacher together with his Grade 11 learners and was carried out in a township school located in the Eastrand, Johannesburg. Data was collected through lesson observations of five consecutive lessons and a reflective interview with the teacher. The situated-sociocultural perspectives guided the study. The analysis shows that the teacher used learners' home languages deliberately; in mathematics tasks, for asking questions, to re-voice learners' contributions, for encouraging learners' participation in mathematical discourses and practices, and for probing learners' thinking. In general, the use of learners' home languages enhanced learners' understanding of Linear Programming concepts. The study also highlights the complexities of translating mathematics tasks from English to learners' home languages.

### Declaration

I declare that this research report is my own unaided work. It is being submitted for the degree of Master of Science Education by coursework and research in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Nkosinathi Mpalami

2<sup>nd</sup> day of October 2007

# This work is dedicated to my son, Mkhaliphi Mpalami

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