

Abstract:

This study focuses on understanding the strategies used by a sample of high ability and low ability Grade 2 learners drawn from two government primary schools in Gauteng, with emphasis on more concrete or more abstract strategies learners use to solve early number problems. This study takes place against the backdrop of poor performance in South African schools more especially across the foundation phase and also amidst claims that learners remain largely dependent on concrete strategies for solving problems. The theoretical background for this study is drawn from Sfard's (1992) "Dual Nature of Mathematical Conceptions" and also Sfard's (1992) theory of reification. I used on a wide range of literature on strategies for counting, addition, subtraction within my analysis of nine videos of high ability learners and 9 videos of low ability learners with the aim of examining the strategies these learners use when dealing with early number concepts.

My findings pointed to the limited use of higher levels of abstraction in solving early number problems. Whilst there is progression from the concrete to the abstract levels of conception this is not happening at a pace and depth that is required for Foundation Phase learners in order for them to effectively engage with more challenging and complicated arithmetic in the Intermediate Phase.