

Abstract

This study wanted to critically explore and understand grade 3 rural teachers' mathematics content knowledge and coherent teaching in classrooms in Acornhoek, Mpumalanga province; to gain insight into grade 3 teachers' mathematics content knowledge, the manner in which they teach mathematics and to identify and categorize factors that shape teachers' coherent mathematics teaching. The scarcity of research regarding Foundation Phase 'rural' teacher's mathematics content knowledge and coherent teaching in particular motivated the conceptualisation of the current study (Balfour, Mitchell and Moletsane, 2009).

This study used Mathematics Discourse in Instruction (MDI) by Adler and Ronda (2014), Adler and Ronda (2015), and Venkat and Adler (2012) as the main lens to make sense of the data while concepts from Sfard's (2008) Commognitive theory was used to complement MDI. The theories also allowed me to critically explore grade 3 rural teachers' content knowledge and coherent or incoherent teaching.

The findings pertaining to this study illustrate that when it comes to coherent teaching, huge social injustice is the reality of many rural teachers and learners. Grade 3 rural teachers are given a voice to express their in- and pre-service training in order to help us understand their experiences regarding mathematics Foundation Phase training. Mathematics discourse plays a significant role in the teaching of mathematics; visual representations and teacher talk also play a vital role in identifying whether or not lessons are coherent. A serious injustice is done to learners when teachers do not teach in such a way that enables the correct sequencing and progression of topics from one grade to another.

