

# MULTILINGUAL CONTEXTS AND THE TEACHING AND LEARNING OF MATHEMATICS: A DIALOGUE

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Multilingualism is increasingly widespread in mathematics classrooms around the world. A number of researchers have conducted research in this area (e.g. Adler, 2001). Each, however, has focused on a specific multilingual context. This raises the question: how does the nature of a particular multilingual context shape the teaching and learning of mathematics and the mathematics being learned?

To consider this question, we draw on two recently completed studies (Barwell, 2002; Setati, 2002), which investigated different aspects of discursive practice (Edwards, 1997; Gee, 1999) in multilingual mathematics classrooms and sought to relate these practices to the teaching and learning of mathematics. Data from each study included recordings of mathematics lessons and of students working together, as well as interviews with teachers and learners. One study (Setati, 2002) was conducted in South Africa, where more than one language was used during the mathematics lessons observed. The other study (Barwell, 2002) was completed in the UK, where, although the participating students were multilingual, only English was used during mathematics lessons. During the presentation we will set up a dialogue between the two studies and the different multilingual contexts in which they are situated. In particular we focus on the following questions:

- What is the relationship between the language(s) used and the mathematics discourses available in the classroom?
- How is language used to relate classroom mathematics to learners' experiences?

Through our dialogue we will illuminate some of the complexities of teaching and learning mathematics in multilingual contexts.

## References

- Adler, J. (2001) *Teaching Mathematics in Multilingual Classrooms*. Dordrecht: Kluwer.
- Barwell, R. (2002) Developing a discursive psychology approach to investigate the participation of students with English as an additional language (EAL) in writing and solving arithmetic word-problems with peers. University of Bristol: Unpublished doctoral dissertation.