

**CAPACITY BUILDING WHILE SCALING UP: A MODEL FOR ROLLOUT
OF MENTAL MATHEMATICS TEACHING IN SOUTH AFRICA**

Hamsa Venkat

University of the Witwatersrand, South Africa

In this ICME Invited Lecture, I share details of the collaborative development of in-class assessment and teaching materials aimed at supporting the development of mental mathematics at Grade 3 level in South Africa. In a system with capacity concerns at all levels of mathematics education, the scaling up towards national rollout of these assessments and teaching materials has required the simultaneous building of capacity for supporting rollout in the primary education support system. The model of simultaneous capacity building and data gathering in progressively larger trials is also described in this paper. Drawing from published work on the outcomes of initial trials (Graven & Venkat, 2021) and growing understandings of the possibilities for working with district Subject Advisers in the system (Venkat & Askew, 2021), I share an analysis of our experiences of working for development of mental mathematics teaching and learning in a system marked by low attainment and limited resources. This analysis includes commentary on how the model for scale-up developed here overlaps and contrasts with those offered in earlier writing – for example, Borko’s (2004) writing on scaling up professional development, and Cobb et al’s (2020) book on improving instruction at systemic levels.