The workshop will be limited to 15 participants.

Insights from working with assessment instruments in primary mathematics Grades 1-4

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In this workshop, the focus is on gaining insights from presentations from 4-5 research groups across South Africa that have developed, adapted and used assessment instruments for use across Grades 1-4. We focus on the early grades specifically because evidence points to difficulties of gaining reliable information from traditional written assignments (Department for Basic Education, 2011) in these settings. Across our respective SA Numeracy Chair projects, we have both drawn on the diagnostic oral interview Learning Framework in Number assessments developed by Wright et al (2006), supplemented by the use of some orally administered written answer tests using the same format as the Annual National Assessments. Other research/ development projects in the South African context have used a range of other assessment instruments and formats. The research workshop aims to provide a forum that allows for the sharing of insights and findings drawn from the administration and results from a range of assessments. The research workshop is set in the context of the increasing prominence of the Annual National Assessments as policy tools with multiple goals: documenting learner performance, highlighting stronger and weaker performance at school and district levels, providing information for formative feedback into teaching, assessing the impact of curriculum reform (DBE, 2011). The validity of such assessments needs to be interrogated against the possibility of alternative forms and means of assessment for young learners. In particular we will bring to this workshop our experiences of drawing on orally administered instruments available from Wright; Martland & Stafford (2006); Askew, Brown, Rhodes, Stafford and Wiliams (1997), instruments adapted from USAID made available by Brombacher and Associates, and those being used by Henning's team, drawn from -----.

Our **aim** in the session is to focus on some central issues driven both by our own findings, and research in the broader context pointing to problems with progression to more abstract number concepts (Ensor, et al., 2009; Schollar, 2008). The key issues we focus on are:

- Children's responses to oral interview based instruments (mathematical and extramathematical considerations) (Graven's research team; Venkat's research team)
- Children's performance on number insights from responses from a range of assessment instruments (Venkat/Graven/Brombacher/Henning/Chetty)
- Language issues within early grade mathematics assessment (Henning's research team)
- Comparing the scope and level of different assessment instruments (all teams, in discussion)

Key outcomes of the session are to support the development of improved understandings of the range of instruments and formats available for assessing primary mathematics, with awareness of the scope of items and the issues arising within administration. Going forward, an important further outcome is to build research-based development of assessments for

primary mathematics that can contribute to the broader project of improving mathematics teaching and learning across the early grades.

| 5 x 10 minute | Venkat's team |
|---------------|--|
| presentations | Graven's team |
| | Henning's team |
| | Brombacher's team |
| | Chetty – National Department – ANA focused input |
| 40 minutes | Discussion focused on the key issues raised above across the |
| | teams (25 minutes) |
| | |
| | Time for questions and answers (15 minutes) |

Outline of the research workshop, including time allocations

We anticipate that a group of 9-10 participants will be involved in the presentations within this session. Given the growing interest in primary mathematics at the level of policy, research and development, we expect to attract a group of about 25 academics and post graduate students as observers who may wish to contribute the Question/Answer section that we have incorporated.

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