

## IMPROVING WRITTEN TESTS: WHAT DO STUDENT TEACHERS THINK ABOUT IT?

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Current calls for diversifying assessment instruments in school mathematics have paid little attention to written tests. Yet, written tests do play an important role in the overall assessment process (van den Heuvel-Panhuizen & Gravemeijer, 1993). Thus, teachers must learn how to improve the design of those tests in order to meet school mathematics reform recommendations. As part of a larger project (Tomás Ferreira, 2003), the research reported in this communication was designed to investigate the impact, if any, of the reading and reflective discussion of selected research studies and reform texts on nine Portuguese student teachers' conceptions about classroom assessment in general, and about the role and value of written tests in particular. The participants were enrolled in a 5-year teacher education program characterized by an emphasis on mathematics content courses, and by the absence of mathematics education courses and lack of systematization of the student teaching experience.

This study provided an opportunity for all participants to clarify, broaden, and reflect upon their perspectives about school mathematics assessment and the role and value of written tests. The activities in which they engaged during the study impacted the participants' conceptions differently: their dispositions towards reform-based teaching, and passion and excitement for the teaching profession seemed crucial for embracing a reform-oriented practice of classroom assessment, including the improvement of written tests. School learners' lack of motivation and misbehavior caused some participants to have a sense of helplessness preventing them from even considering alternative written (e.g., de Lange, 1987) tests as practicable. The role of cooperating teachers regarding the improvement of written tests was questioned, and several issues for future research were raised.

De Lange, J. (1987). *Mathematics, insight, and meaning*. Utrecht, The Netherlands: OW & OC.

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Van den Heuvel-Panhuizen, M. & Gravemeijer, K. (1993). Tests aren't all bad: An attempt to change the face of written tests in Primary school mathematics instruction. In N. Webb & A. Coxford (Eds.), *Assessment in the mathematics classroom*. 1993 NCTM Yearbook (pp. 54 – 64). Reston, VA: NCTM.

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