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On the use of spreadsheet algebra programs in the professional development of teachers from selected township high schools.

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Summary: This paper reports on the initial stages of a small-scale project involving the use of ‘spreadsheet algebra programs’ in the professional development of eight teachers from three township high schools. In terms of the education context, the paper draws on social practice theory. It then details what is meant by spreadsheet algebra. An analysis of teacher conversations and artefacts generated during an in-service workshop is conducted which takes into account the education context and two practices – the teachers’ pencil-paper algebra and the mathematics teacher-educator’s spreadsheet algebra. Implications for professional development are considered, especially the teachers’ strategies with respect to the ‘top-down’ imposition of the curriculum in terms of patterns and functions.

Classification: U79 I29 H29

Keywords: professional development; mathematics teacher education; spreadsheet algebra; function concept; linear inequalities

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