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van Laren, Linda; Moore-Russo, Deborah

The most important aspects of algebra: responses from practising South African teachers.

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Summary: Curricular policy documents generally communicate guidelines regarding the teaching of algebra. Those policy documents may not represent what teachers, currently teaching mathematics, consider significant. Teachers' views are more likely to provide information about what they emphasise in their mathematics classrooms. This paper reports on practising Teachers' beliefs about what is important in the teaching of algebra. Data were collected from 306 practising mathematics teachers, who were registered in an Algebra module in an Advanced Certificate in Education (ACE) programme. The teachers were asked to discuss and list aspects in school algebra that they considered to be important. Qualitative analysis methods were used to code the Teachers' responses according to categories that were subsequently grouped into larger themes. The emergent themes were considered in light of curriculum documents to better understand the Teachers' negotiated views about important aspects in the teaching and learning of algebra. While many of their responses reflected aspects of algebra that have been identified both internationally and historically, a number of responses included aspects that are not part of the algebra curriculum. In general, the Teachers' comments emphasized the basic procedures in algebra (i.e., symbolic manipulations) rather than the key concepts in algebra or the general processes associated with doing algebra (e.g., reasoning or representing ideas algebraically).

Classification: H20 H30 C29

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