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# Rubric supported journal writing in mathematics.

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## Abstract

Using an Action Research model, this project followed the implementation of a journal writing programme in mathematics, in a grade three (year 4) class. The effect of journal writing, as a formative assessment tool upon a single teacher's approach to the teaching and assessment of mathematics in her textbook-based, whole class mathematics programme, is the focus of the study.

The teacher who participated in this project looked towards the journal writing programme to assist her in making changes to her teaching and assessment practises in mathematics, in an effort to bring them in line with her performance based approach to other areas of the curriculum. Using Greenwood's (1993) criteria for mathematical thinking, rubrics were designed to make mathematical thinking a focus of her teaching and assessment in mathematics.

Several changes in the teacher's approach to the teaching and assessment of mathematics were observed within the study period and continued sustained changes were realised in the longer term. In addition, aspects of her teaching and assessment practices that were *not* observed to change are discussed. The suggestion is made that the potential of journal writing to be used to extend and challenge the mathematical thinking of students may be partly dependent upon the depth and breadth of the mathematical knowledge of the teacher.



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