ZMATH 06655597

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Curriculum coherence: an analysis of the national curriculum statement for mathematics (NCSM) and the exemplar papers at further education and training (FET) level in South Africa.

Afr. J. Res. Math. Sci. Technol. Educ. 13, No. 1, 33-49 (2009).

Summary: Initiatives in many countries to transform teachers' instructional practices have been described as largely unsuccessful. One of the reasons put forward to explain this has been lack of alignment or coherence in the policy documents. The view that researchers hold is that curriculum coherence marks the beginning of quality in any educational system. In South Africa beyond 1994, much has been done to understand the dilemmas faced by educators and learners, especially in the implementation of outcomes based education (OBE). However, little has been done to understand the different forms of curriculum coherence and their impact on curriculum implementation in the context of the National Curriculum Statement for Mathematics (NCSM). This textual analysis is aimed at identifying the espoused orientation to mathematics in the NCSM and to explore whether it is being articulated in a coherent manner. Wilson and Bertenthal's (2005) model of dimensions of curriculum coherence provides the theoretical framework for this study while Webb's (2002) categorical coherence criterion together with Porter's (2002, 2004) and Porter, Smithson, Blank and Zeidner's (2007) Cognitive Demand tools were used to analyse the documents. This paper argues that the higher order cognitive skills (HOCS) of problem solving (PS) and critical thinking (CT) are espoused and articulated consistently in the new curriculum. However, the paper also argues that there is a very weak alignment between the curriculum objectives and the 2008 exemplar papers in that the HOCS seem not to be tested. Given the widespread evidence of high stakes assessments impacting on the enacted curriculum, this analysis suggests that the lack of alignment on HOCS endanger the teaching and learning of such skills in the FET mathematics classrooms.

Classification: B70 D30
Keywords: curriculum coherence; high-stakes assessment; alignment index; cognitive demand tool
doi:10.1080/10288457.2009.10740649