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Exploring the nature and coherence of mathematical work in South African mathematical literacy classrooms.

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Summary: In this paper the mathematical working in a series of ‘litter project’ lessons from a South African mathematical literacy class is analysed in terms of *J. Kilpatrick* et al. [Adding it up: helping children learn mathematics. Washington, DC: National Academy Press (2001; ME 2002a.00209)] five strands of mathematical proficiency. The analysis points to evidence of the life skills-oriented mathematical literacy frame opening up opportunities for engagement across aspects of all five strands, but shows that the emphases differ from the intra-mathematical emphases within the strands. I argue that this is due to the lack of centrality in the mathematical literacy frame of the ‘mathematical terrain’. The shifting of competence to the bridge between mathematics and everyday situations and problems retains mathematical coherence and connectedness. Both of these aspects are grounded in the mathematical tools and thinking that are needed to make sense of the everyday situation, rather than the more intra-mathematical connections and coherence that appear to be in focus within the strands of mathematical proficiency.

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