

Connecting calculation strategies through grounding metaphors

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Fluency is regarded as a key proficiency in learning mathematics (Sullivan, 2011). Such fluency requires strategic flexibility (Threfall, 2009) underpinned by rich connections and adaptive expertise (Baroody & Dowker, 2003). Whilst Australia has recently introduced numeracy learning progressions (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2000), there is little evidence of guidance for teachers to help students make rich connections. I draw on Lakoff and Núñez's (2000) theory of grounding metaphors to explore how the two source domains (an object collection domain and motion domain) may be used to underpin connections in calculation strategies in additive and multiplicative thinking.

References

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