Building upon the Language Model of Mathematics

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The language model of mathematics is a useful framework to conceptualise the teaching and learning of mathematics from a constructivist perspective. The model currently proposes that students move along two dimensions (visual and verbal) towards increasing levels of mathematical abstraction. We present the case for theorising the existence of a third dimension, the gestural, by drawing upon established theories of learning within mathematics and also from brain based learning. Examples will be provided on how the addition of the gestural dimension can enhance mathematics education at all levels.