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Using lego construction to develop ratio understanding.

Putt, Ian et al., MERGA 27: Mathematics education for the third millennium: Towards 2010. Vol. 2. , (ISBN 1-920846-04-2). 414-421 (2004).

This paper examines Year 7 students use and learning of ratio concepts while engaged in the technology practice of designing, constructing and evaluating simple machines, that used cogs and pulleys. It was found that most students made considerable progress in accounting for ratio concepts in their constructions and some constructed sophisticated machines and provided explicit and quantitative descriptions involving ratio reasoning. The findings have implications for the study of mathematics in integrated and contextual settings.

Classification: F83 D43