

Origami and Learning Mathematics

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At 4OSME we presented strategies for developing mathematical problem solving and creativity using origami (Pope and Lam, 2009). In this paper we explore how origami can be used as convenient and accessible apparatus for learning and applying mathematics. We contrast our approach with that recommended by others, namely Golan and Jackson's *Origametria* (2009).

We discuss some common difficulties that learners encounter when working on mathematics through origami. As a result of our experiences we are able to recommend teaching strategies with origami that can challenge misconceptions and nurture conceptual understanding, leading to deep mathematical learning. Our examples are both geometric and numerical.

References

Pope and Lam (2009) 'Using Origami to Promote Problem Solving, Creativity, and Communication in Mathematics Education' in Lang (2009) ed. *Origami 4: Fourth International Meeting of Origami Science, Mathematics, and Education*, Wellesley, Mass: A.K. Peters. pp 517-524

Golan and Jackson (2009) 'Origametria: A Program to Teach Geometry and Develop Learning Skills Using the Art of Origami' in Lang (2009) ed. *Origami 4: Fourth International Meeting of Origami Science, Mathematics, and Education*, Wellesley, Mass: A.K. Peters. Pp 459-469