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**Aesthetics in school mathematics: a potential model and a possible lesson.**

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Summary: Earlier studies on improving classroom practice in mathematics have suggested a closer attention to nurturing an aesthetic appreciation for mathematics in students' learning experiences. Recent evidence nonetheless reveals little indication of its presence. This article offers a potential model of the case for aesthetics in school mathematics. Central to this model is the harmonious hierarchy of necessity, existence, and uniqueness without any of which the case for aesthetics in student learning might be suboptimal, if not untenable. This article offers an example of the proposed model using a possible lesson designed to engage students aesthetically in the learning of mathematics. Pedagogical implications are discussed to reflect and revisit an interpretation of learning mathematics through problem solving.

*Classification:* D32 D52

*Keywords:* teaching; learning; mathematical aesthetics; problem solving; beautiful solution methods; one-digit addition; two-digit addition; decomposition

<http://scholarworks.umt.edu/tme/vol13/iss3/7>