How do you teach engineering to kindergartners? This is a fair question, given the stereotype of STEM workers as lab scientists and number crunchers; however, when approached from a wider perspective, even the youngest of children can be engineers. A framework for K–grade 12 science education defines engineering “in a very broad sense to mean any engagement in a systematic practice of design to achieve solutions to particular human problems” (NRC 2012, pp. 11–12). This aligns closely with the first of the Common Core’s Standards for Mathematical Practice (SMP 1): Make sense of problems and persevere in solving them (CCSSI 2010, p. 6). Children as young as kindergarten are capable of identifying problems and designing solutions in science and mathematics, and it turns out that many fairy tales provide a rich problemsolution context.

Contributor Notes
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and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. This kindergarten engineering unit of study focuses on structural design using the fairy tale Goldilocks and the Three Bears. It outlines the research you need on ResearchGate. Goldilocks an Engineer? Article · February 2016 with 13 Reads.