Using Literature to Engage Students Mathematically

Ann Wheeler, Texas Woman's University
Joe Champion, Boise State University
Holly Dybvig, Pilot Point Independent School District

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Abstract
In this article, the authors share two lessons that incorporate children’s literature with the Pythagorean theorem and area to engage preservice teachers (PSTs) mathematically. Sample responses, example texts, and future work are discussed.

Publication Information

Learn how children's literature can help K–5 students see the real-life applications of mathematical concepts. This user-friendly book shows how to use stories to engage students in building critical reasoning, abstract thinking, and communication skills, all while helping students understand the relevance of math in their everyday lives. Each chapter is dedicated to one of the eight Standards for Mathematical Practice, and offers examples of children’s literature that can be used to help students develop that practice. You’ll find out how to:

- Encourage students to persevere in solving mathematical problems and use multiple approaches to find the answer;
- Help students reason abstractly with the aid of literature as a means to address certain difficulties, misunderstandings, and attitudes with rational numbers;
- Understand and apply the Pythagorean theorem and area to engage PSTs mathematically;
- Use stories to enhance their empathy for others and lead them to develop their own creativity;
- Give students the chance to learn about literary devices that occur in other genres e.g., advertising. Literature lessons can lead to public displays of student output through posters of student creations e.g., poems, stories or through performances of plays. So for a variety of reasons...