The mathematics-children's literature connection

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Main content

Abstract:

The interdisciplinary connection in learning mathematics is explored, and emphasis is given on the mathematics-children's literature connection. Children's books enhance the learning of mathematical concepts, and they give children the opportunity to talk about mathematics. Children's books that are appropriate for supplementing mathematics instruction come in four categories, namely, counting books, number books, story books and concept books.

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Includes a list of books that focus on mathematics for use in the elementary classroom. Guidelines for teachers to reflect on or to use in evaluating their use of children's literature in teaching mathematics. Includes a list of books that focus on mathematics for use in the elementary classroom. This article is available to members of NCTM who subscribe to Teaching Children Mathematics. Don't miss out—join now or upgrade your membership. You may also purchase this article now for online access. Oftentimes, literature connects math to real life. This gives meaning to "why" math is important. Books build connections to math for linguistic learners who tend to think in words. Books connect math to other subject areas, which helps children innately learn that all subjects are intertwined. Some books offer sneaky ways to review math facts. Gifted mathematicians can benefit from literature connections, especially when books present concepts in new ways or dive deeper than the student has been before. Some books are excellent at presenting math as critical thinking. These are especially use Teaching mathematics using children's literature is not a new practice in elementary school classrooms; recently, however, it has been gaining more popularity among teachers in all areas of education. There is not much research on this topic, but the few studies that have been conducted clearly show this teaching strategy improves standardized test scores, as well as students' motivation and attitudes toward mathematics and school in general. Reasons for making the literature/math connection with students are explored. Additional pieces of children's literature, both those with and without specific math content, are
presented and examples of possible mathematics learning experiences are described. The state of children's mathematical development as they begin school both determines what they must learn to achieve mathematical proficiency and points toward how that proficiency can be acquired. Chapter 4 laid out a framework for describing mathematical proficiency in terms of a set of interwoven strands. That framework is useful in thinking about the skills and knowledge that children bring to school, as well as the limitations of preschoolers' mathematical competence. Applying the framework to research on preschoolers' mathematical thinking also provides a good example of the way in which using children's literature in order to teach mathematics can be very effective when moving through different methods and instructions. For teachers, integration of literature in mathematics provide context or storyline that can launch or develop mathematical concepts (Reys et al., 2012). The ideas behind using elements such as objects and theories within the pages of a children's literature allows children to connect more closely to the teaching focuses. Shih, JC, Giorgis, C, 2004, Building Mathematics and Literature Connection through Children's responses, Teaching Children Mathematics, Vol. 10 No. 6, Published by National Council of Teacher of Mathematics, pp. 328-333.