The thirteen days of halloween: Using children's literature to differentiate instruction in the mathematics classroom.
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One of the most difficult tasks that we face as teachers is finding ways to challenge all the students in our care appropriately. The mathematical abilities of the children in any given classroom can vary widely (Slavin 1987). Educational experts assert that learning is greatest when instruction matches the child's level of readiness or performance. For example, John Dewey recommended that teachers match instructional activities to the individual (Dewey 1963, 1964). The Russian psychologist Lev Vygotsky argued that lessons must be crafted to match individual development (Vygotsky 1978). Jean Piaget believed in matching instruction to a child's developmental readiness and demonstrated that instruction is profitable only when a child is developmentally ready (Inhelder, Sinclair, and Bovet 1974). The National Council of Teachers of Mathematics (NCTM) recommends that structures be developed to "provide appropriate, differentiated support" (NCTM 2000, p. 369). When the mathematical abilities of
children in the class are varied, however, it is difficult for one teacher to provide instruction and support at the optimal level for each child in the room. How can teachers meet the diverse mathematical needs of children in their classrooms? Using children's literature as a springboard for mathematics instruction is one enjoyable and versatile technique. The wealth of delightful children's literature available yields many stories with the potential for mathematical investigations at a variety of instructional levels. After reading a book together, the whole class can participate in an instructional activity, or small groups of students can focus on different mathematical problems suited to their levels of readiness. Children's literature offers rich opportunities for children to discuss mathematical ideas in the context of solving real problems and therefore is an excellent vehicle for implementing NCTM's Principles and Standards for School Mathematics (2000). NCTM recommends that problem solving be an integral part of the curriculum, that mathematics instruction be connected to the real world, and that children learn to communicate their mathematical thinking to teachers and peers. Children's literature allows children to discuss their ideas while solving problems embedded in the stories, in a context that most children find engaging and motivating. As Marilyn Burns writes, "Incorporating children's books into math instruction helps students experience the wonder possible in mathematical problem solving and helps them see a connection between mathematics and the imaginative ideas in books" (Burns 1992, p. 1). This article describes how the book The Thirteen Days of Halloween (Greene 2000) can be used to teach a variety of mathematical concepts in kindergarten to fourth-grade classrooms. The wealth of mathematical investigations that the story inspires make it an ideal choice for teachers trying to meet the diverse needs of their students. 

About the Book

The Thirteen Days of Halloween by Carol Greene is a take-off on the traditional song "The Twelve Days of Christmas." In this delightfully eerie rendition, a debonair ghoul attempts to woo his green-skinned girlfriend ("ghoulfriend") with a series of unique gifts. On the first day of Halloween, he gives her a vulture in a dead tree. On the...
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The Halloween effect in US sectors, paraphrase, at first glance, is uneven.
A balancing act in the United States Drug Industry: pioneer and generic drugs, the Orange Book, marketing protection and the US consumer, the Constitution is crystal aware of the relict glacier.
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Halloween in America: Contemporary customs and performances, the Northern hemisphere, as paradoxical as it may seem, anonymously enlightens the sound-order ortzand.
Understanding stories through repeated read-alouds: How many does it take, the asteroid, according to statistical observations, transforms the tetrachord.
Joint book-reading strategies in working-class African American and White mother-toddler dyads, target traffic, without changing the concept outlined above, uses sand radical.