

## Best Practices for Mathematizing Read-Alouds

"Mathematizing Read-Alouds in Three Easy Steps"

**Summary**: Children's literature provides rich opportunities for students to connect math concepts to their lives. Teaching students to notice math concepts within a text enhances the connection to math and offers opportunities to learn new concepts in context.

**Practical Applications**: This article offers practical steps to "mathematize" books, or incorporate math concepts into read-alouds. When teachers read aloud, they are able to model how they make sense of text. When mathematizing a read-aloud, teachers can model how they make sense of the math concepts in the book. This helps provide engaging literacy experiences for children and increases reading motivation.

Step 1: <u>Selecting a Text</u> – There are 3 types of books you can mathematize. Check out the options below and identify the type of book you are reading aloud.

- a. <u>Text-dependent</u> books are so dependent on the math concepts in the book that you could not understand the plot of the book without also understanding the math within the book. *Two of Everything* (Hong, 1993) would be an example of this type of book.
- b. <u>Idea-enhancing</u> books provide opportunities to bring awareness to math concepts within a book, but the plot is not dependent on the math. The *Rainbow Fish* (Pfister, 1995) is an example of this type of book. Primary students could track how many scales Rainbow Fish gives away, but that subtraction concept is not essential to understanding the book.
- c. <u>Illustration-exploring</u> books contain graphics that provide great opportunities to investigate math concepts that the story may not even mention. *The Snowy Day* (Keats, 1962) is an example of this type of text in which the reader could count the sets of footprints in the snow to practice counting by 2s.

Step 2: Exploring the Text – Discussions before, during and after reading are essential to bring focus to the math concepts in a read-aloud. Make sure you share the purpose for reading with your students and make the reading lively and fun, stopping to discuss key elements. Identify key concepts and central ideas early in the reading and encourage discussion. This scaffolds the content students who need it.

Step 3: Extending the Text – Exploring the math ideas and key concepts after the read-aloud is essential to mathematizing. Options to extent the text are wide open and can range from discussions, connections to personal experiences, writing and/or drawing in response to a prompt. This step encourages students to think deeply and make sense of the math concept.

**Conclusion and Citation:** Using these steps can help teachers integrate math concepts into read-alouds and help students make real world math connections. Hintz, A., Smith, A., "*Mathematizing Read-Alouds in Three Easy Steps*" *The Reading Teacher 67.2* October 2013) pp. 103-108 - <a href="http://bit.ly/leMTpil">http://bit.ly/leMTpil</a> (subscription only).