

Mathematics + Literature to Empower All Learners



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Interactive Agenda

September 28, 2022 10:45 - 11:45 pm

Essential Question: How do we as bold leaders connect Mathematics + Literature to empower all learners?

	AGENDA	ACTIVITIES AND RESOURCES
10:45 AM - 10:50 AM	Welcome and Introductions	
10:50 AM - 11:10 AM	<p>Why teach math through a story context?</p> <p>How do we help teachers envision meaningful activities that are connected to stories (e.g., acting out, modeling, connecting story events to equations, games, discussion prompts...)?</p>	<p>Consider lessons and math tasks in which teachers:</p> <ul style="list-style-type: none"> ● Step back and let students do the thinking ● Get students talking about big ideas ● Encourage models to visualize and make sense of concepts ● Explore math through a context <p>Literature examples: <i>Ten Gulab Jamuns: Counting with an Indian Sweet Treat</i> by Sandhya Acharya <i>A Gift for Amma</i> by Meera Sriram <i>Born and Bred in the Great Depression</i> by Jonah Winter <i>One More Dino on the Floor</i> by Kelly Starling Lyons <i>The Raft</i> by Jim LaMarche</p>
11:10 AM - 11:25 AM	As coaches and leaders, how do we select titles that align with our math goals and honor our students and communities?	<p>"Books can be mirrors in which children see and savor images and representations similar to their own lives and experiences. They can also be windows that enable young readers to gain new cultural perspectives by peering into others' worlds." (Bishop, 1990)</p> <p>"Understanding the source of student knowledge and placing students' culture and experience at the center of mathematics learning is critical to engaging children in mathematics." (NCTM, 2000)</p>

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		<p>Does the story include data, illustrations, or events that offer a good jumping-off point to explore mathematics?</p> <p>Does the book have value beyond mathematics?</p> <ul style="list-style-type: none"> • Themes of social justice, environment, community • Might link to science, social studies, or health themes • Offer windows and mirrors <p>Literature examples: <i>Miss Nelson Has a Field Day</i> by James Marshall <i>The Crayon Man: The True Story of the Invention of Crayola Crayons</i> by Natascha Biebow <i>Wangari's Trees of Peace</i> by Jeanette Winter <i>Too Many Mangos</i> by Tammy Paikai <i>Harlem Grown</i> by Tony Hillery <i>Grandma's Purse</i> by Vanessa Brantley-Newton <i>Mango, Abuela, and Me</i> by Meg Medina <i>Saffron Ice Cream</i> by Rashin <i>Thanking the Moon: Celebrating the Mid-Autumn Moon Festival</i> by Grace Lin</p>
<p>11:25AM - 11:40 AM</p>	<p>As bold math leaders, how might we empower our teachers to bring literature into their classrooms to ensure learning and joy for all?</p>	<p>What can we do?</p> <ul style="list-style-type: none"> • Do book talks at a faculty meeting or grade-level meeting and brainstorm ideas for math connections. • Volunteer to read and lead an activity with students. • Have teachers share their math + literature lessons with colleagues. • Discuss literature connections during collaborative planning meetings. • Co-teach lessons with interested teachers. • Add some literature links to your curriculum to point teachers to possible books. • Work with your media specialist to see what books are in your building or to order additional books. • Share our padlets or lists of math-related books. • Display some books that might jumpstart math lessons. <p>Literature example: <i>Around Our Way on Neighbors' Day</i> by Tameka Fryer Brown</p>
<p>11:40 AM - 11:45 AM</p>	<p>Closure and Commitments</p>	<p>How can math + literature support coaching?</p> <ul style="list-style-type: none"> •Helps teachers recognize the power of context, that students need to know <i>how</i> to do math and <i>what</i> math to do •Empowers many K-5 teachers to access their strengths in literacy instruction to enhance their math instruction •Perfect for a plan - teach - reflect cycle •Promotes ongoing discussions of critical components of K-5 teaching •Teachers love the lessons while coaches focus on the process

Research, Books and Articles to support this work

- [Math by the Book List](#)
- [K-2 Book List](#)
- [3-5 Book List](#)
- [Padlet of culturally relevant math literature](#)
- [BLOG: Igniting Students Curiosity](#) Maybe other blogs here too?
- [Finding an independent bookstore](#)
- [Math By the Book Series](#)