

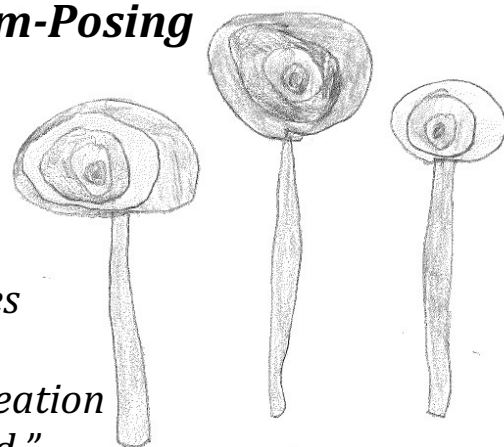
# ***Children's Pictures Books to Inspire Problem-Posing***

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Janice Novakowski



*“Supporting children to pose problems for themselves as they engage in play or other activities is mathematically productive and often leads to the creation of problems that children care about and understand.”*

Young Children's Mathematics: Cognitively Guided Instruction in Early Childhood Education (2017), p. 110

***Using children's picture books is one pedagogical structure that provides contexts and inspiration for children to pose problems.***

## **Picture Book Inspiration**

Read a mathematical picture book to provide inspiration for problem structure and context. Invite students to solve the problem embedded in the story and orally discuss and share strategies for solving the problem/s. Invite students to develop their own mathematical stories with a problem included, inspired by the context of the picture book.

## ***After students pose problems...***

- invite students to solve their problems and be problem mentors to their peers
- curate problems for students to choose from
- intentionally choose students' problems to be taken up by the whole class

### **Picture books to inspire problems involving change in quantities:**

Splash! by Ann Jonas

One Duck Stuck by Phyllis Root

Quack and Count by Keith Baker

Counting on Fall by Lizann Flatt

### **Picture books to inspire sharing problems:**

The Cookie Fiasco by Dan Santat

The Doorbell Rang by Pat Hutchins

Bean Thirteen by Matthew McElligott

### **Picture books to inspire problems involving decomposing & composing quantities:**

Ten Black Dots by Donald Crews

12 Ways to Get to 11 by Eve Merriam

### **Picture books to connect to counting collections:**

Hannah's Collections by Marthe Jocelyn

Two Ways to Count to Ten by Ruby Dee

What in the World? Numbers in Nature by Nancy Raines Day

Great Estimation by Bruce Goldstone

Greater Estimations by Bruce Goldstone

Amanda Bean's Amazing Dream by Cindy Neuschwander



**Janice Novakowski**

Richmond School District

Richmond, BC, Canada

[jnovakowski@sd38.bc.ca](mailto:jnovakowski@sd38.bc.ca)

<http://blogs.sd38.bc.ca/sd38mathandscience/>



[@jnovakowski38](https://twitter.com/jnovakowski38)