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What does this look like in Pre-K?

- Using graphs
- Using visual representations
- Hands on experiences
- The process is less about creating the graph and more about the higher level thinking and the conversations students have about the concept

Benefits of using BOTGs

- Helps children notice change over time, instead of focusing on single events
- Helps children understand causes for change
- Helps children think more deeply about what is happening and why
- Allows students to express and communicate ideas visually
- Increases vocabulary
- Creates engaging activities and facilitates lively discussions
Tips for Teaching BOTGs

• Start off simple and concrete
• Only use one variable along the y-axis
• Remember the conversations that children have is what is most important
• Remember you can choose which events you want to graph
• Have fun with it!

Stocks and Flows in Pre-K

• Stock-Flow systems are much like a bathtub.

• So in our bathtub examples, what is inside the bathtub is our STOCK, the faucet is the INFLOW, and the drain is the OUTFLOW.

• For our age children, I like to say, “What adds to?” or “Takes away from?”
What does this look like in preschool?

- Social Emotional Skills
- Feelings of characters in stories
- Science (the garden, taking care of class pets, cooking)

Circular cause and effect: “Circle stories”

Story Archetypes (Fixes that Fail)

A systems-thinking tool that helps students look at problems and solutions.
Engages students in identifying cause and effect and making connections between events in a story.
What does this look like in Pre-K?

- Problem-Solution story structure occurs often in children's literature.
- Fixes that fail occur in many children's stories – and can be simple or complex in nature.
- Students begin to look at the big picture rather than single events in the story.

Other Examples for Story Structure Archetype

Ladder of Inference