

How Can Picture Books Help Preschool-Aged Children and Their Parents Talk About Science Together?

#2339516: CAREER: The role of picture books in promoting parent-child scientific conversation and learning

Children can learn to think like scientists through conversations with adults

Questioning

Predicting

Noticing patterns

Explaining ideas

Science Process Talk



Book Text



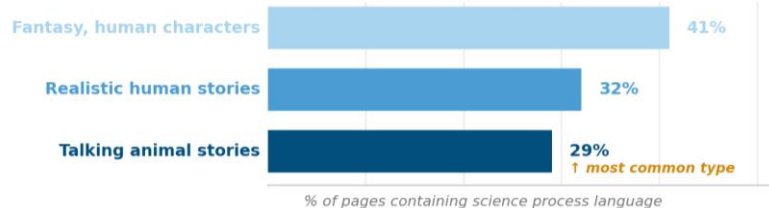
Science Process Talk



Child Learning

What we are learning

Which types of picture books model science as a process?



Do science-focused picture books spark more science talk while reading?



High Science Book

"I predict if we add more weight it might sink," said the donkey.

Parent: If you predict something, you're thinking about what might happen.

VS

Low Science Book

"I'll get in at the bow before it's too late," said the donkey.

Parent: Do you know what a bow is?

Methods

Early STEM

Parent-Child

- Text + content analysis of science picture books
- Video observations of parent-child shared reading
- Surveys and usability piloting with rural families
- Undergraduate research internship

Challenge Areas

Engagement

Recruiting rural families What strategies support participation without overburdening families?

Balancing text and talk: How much science content should be in the book vs. left for conversation?



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