Making STEM Concepts Approachable For Children

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"Brain and skills-building experiences early in life are critical for child development, and high-quality early STEM experiences can support children’s growth across areas as diverse as executive function and literacy development."

Read the Full Report Here:
https://joanganzcooneycenter.org/publication/stem-starts-early/
Children’s picture books today are often a child’s first introduction to science.*

Science texts can be daunting for many children, particularly those who have reading problems.*

Children’s picture books are fun to read, are more interesting and relevant to students’ lives, and less intimidating.*

Children’s picture books have story lines that help children understand and remember concepts better than textbooks that tend to present science as lists of facts to be memorized.*

*A device that condenses water

Science anxiety

A device that condenses water

Science investigation

*Stiffler, 1992

*Tyson and Woodward, 1989

*Butzow & Butzow, 1992

*Butzow & Butzow, 2000
Present Landscape of Children’s books on STEM

These stories are only inspirational!
How does one teach “real-world” STEM concepts to pre-K and Elementary School children in a fun and creative way?
Making STEM Concepts Approachable For Children through Storytelling

Teach STEM through characters that are relatable and ties to the real-world concepts.

Enhance “Hands-on Learning”

Teach STEM concepts through technology:
- Interactive eBooks
- Game apps
- Augmented Reality
- Virtual Reality

Our Partners and Collaborators:
- NSTA (National Science Teaching Association)
- LEXILE (Certified Partner)
- Next Generation Science Standards
Boon-Dah STEM Series

Pumpus Has a Glowing Idea!
by Praba
Illustrated by Jack Spellman

Pumpus Has a Flowing Idea!
by Praba
Illustrated by Jack Spellman

Pumpus Has a Growing Idea!
It all starts with a **STORY**

It then grows into a PDF document full of links to interactive versions of the story, Educational STEM And ELA games, Print worksheets, and assessment quizzes.
The Story

Pumpus loved to read about great ideas and inventions. His favorite inventors were Thomas Edison, Albert Einstein, and Nikola Tesla.

Pumpus had two best friends, Flibbs and Flibberts, and they loved to hang out with him, especially when they went on outdoor adventures.

That night, the three friends laid out their sleeping bags and pillows, ate homemade cookies, and shared stories of their adventures in the glowing light from the flashlight bulb.

And it was the best bedtime ever!
Flowing Idea Reading Comprehension Quiz!

1) Who are Pumps' favorite inventors? Nikola Tesla, Albert Einstein and ________
- Thomas Edison
- John Wayne
- Stephen Hawking

2) What are the names of Pumps' friends?
- Tommy and Sally
- Filbin and Filberta
- Phillip and Roberta
- Flint and Spark

6) What small machine did Pumps use to help make electricity?
- pencil sharpener
- dynamo
- cell phone
- compass
Flowing Kit
Hands on Learning that will teach children three ways to make electricity. They will enjoy experimenting and be excited to see their success. The Boon-dah BOX comes with everything they need and includes beautifully illustrated instructions that they will enjoy reading.

Growing Kit
Hands on Learning that will teach children to build a "trickier-sprinkler" prototype model. They will enjoy experimenting and be excited to see their success. The Boon-dah BOX comes with everything they need and includes beautifully illustrated instructions that they will enjoy reading.
THANK YOU

You can purchase our products at the following choices:

[WEB Shop] [amazon] [Etsy] [Teachers Pay Teachers]