Full STEAM Ahead

Exploring the Engineering Design Process Through Story Deconstruction & Reengineering .

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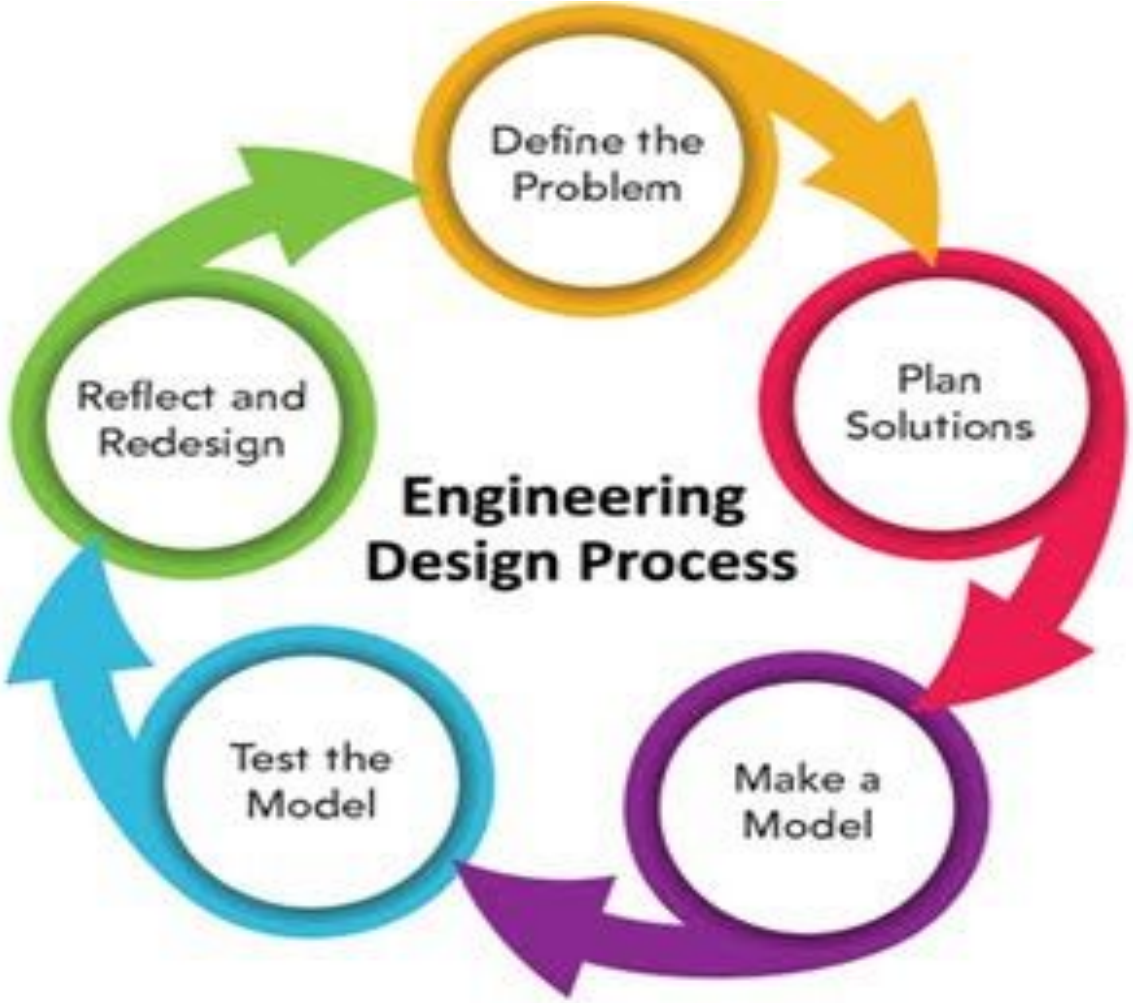

Define the Problem
Plan Solutions
Make a Model
Test the Model
Reflect and Redesign
Engineering Design Process

How do you get information from a story?

Form, Coding & Structure of a Story

The FORM of a story is words.

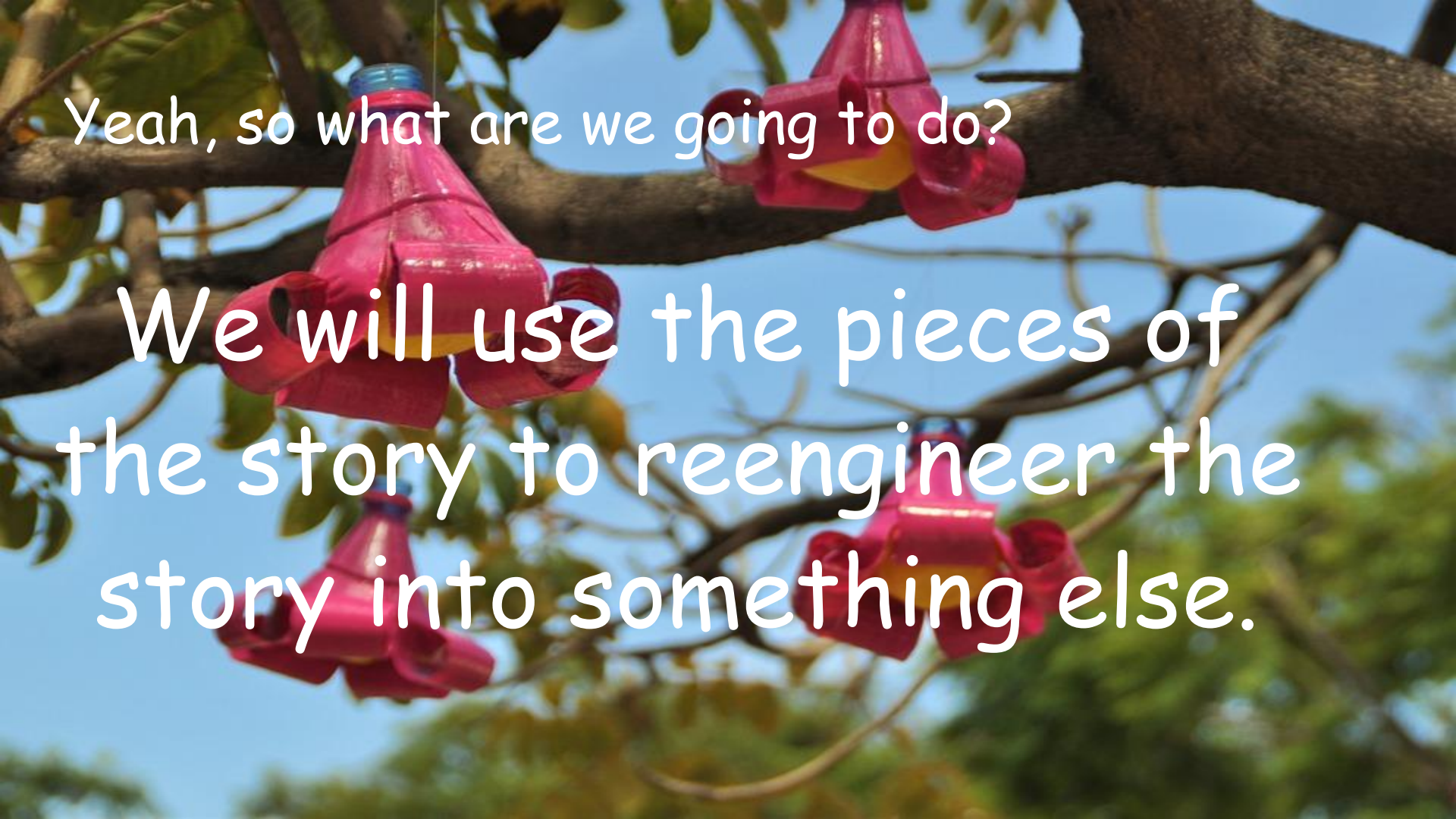
Beginning

Middle

End

Punctuation that tells us where to stop, start, get loud, soft, speak....CODE

STRUCTURE - How we structure a story impacts how we receive information.


Yeah, so what are we going to do?
We will use the pieces of the story to reengineer the story into something else.

VARIABLES:

- We could turn it into a play.
- We could use legos to turn it into a sculpture.
- Turn it into a poem
- We could use movement to turn it into a dance

We will use markers and paper to turn it into a stop motion animation.

Fairy Tales

- Familiar
- Variety
- Buy In

STOP MOTION VS THE STORY

Story - all words and sometimes pictures.

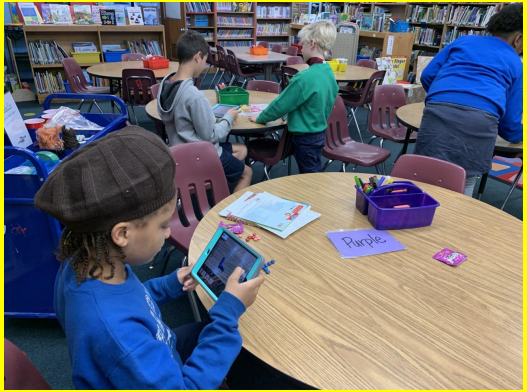
Stop Motion - images and movement.

Question: How will we tell the story without the words?

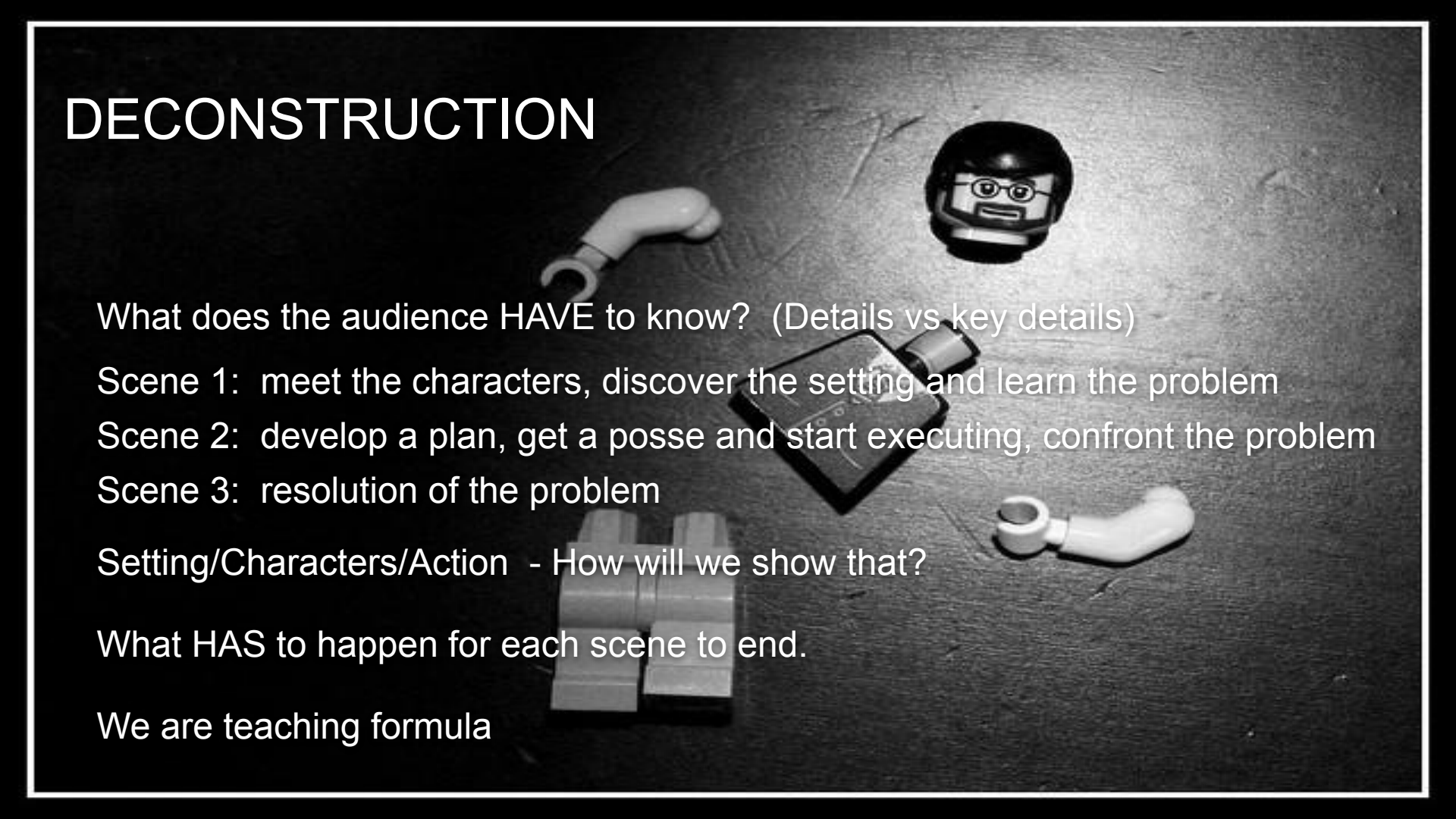
Presenting the same content in a different way. Changing the structure to receive the information in a different way.

Free Exploration

Stop Motion



DECONSTRUCTION



What does the audience HAVE to know? (Details vs key details)

Scene 1: meet the characters, discover the setting and learn the problem

Scene 2: develop a plan, get a posse and start executing, confront the problem

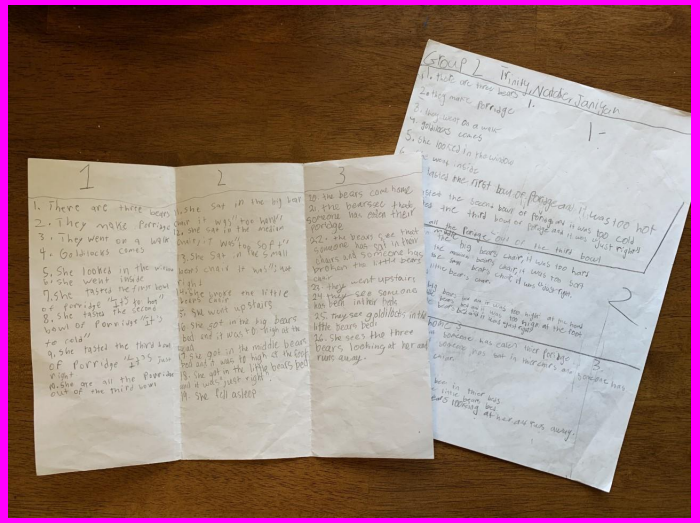
Scene 3: resolution of the problem

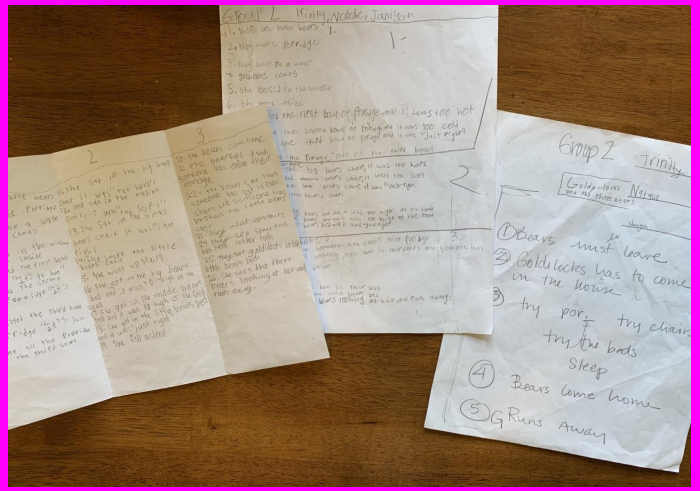
Setting/Characters/Action - How will we show that?

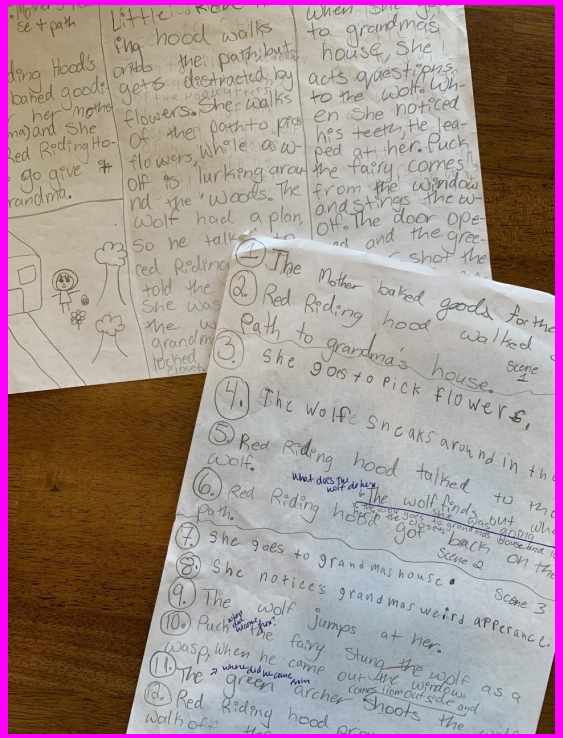
What HAS to happen for each scene to end.

We are teaching formula

STUDENT SAMPLES
Deconstruction







Group 1 steps:

Step 1: the first pig meats a man

Step 2: he asks for his straw

Step 3: he gets the straw

Step 4: he builds a house

Step 5: The second pig meats a man

Step 6: he asks for his sticks

Step 7: he gets the sticks

Step 8: he builds a house

Step 9: The third pig meats a man

Step 10: he asks for his bricks

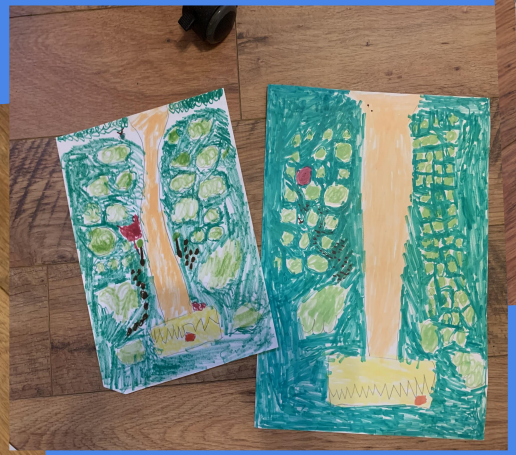
Step 11: he gets the bricks

Step 12: he builds a house

Step 13: The wolf asks if he wants to go flower picking

Step 14 the pig care and got the turnips.

Creating the Set...

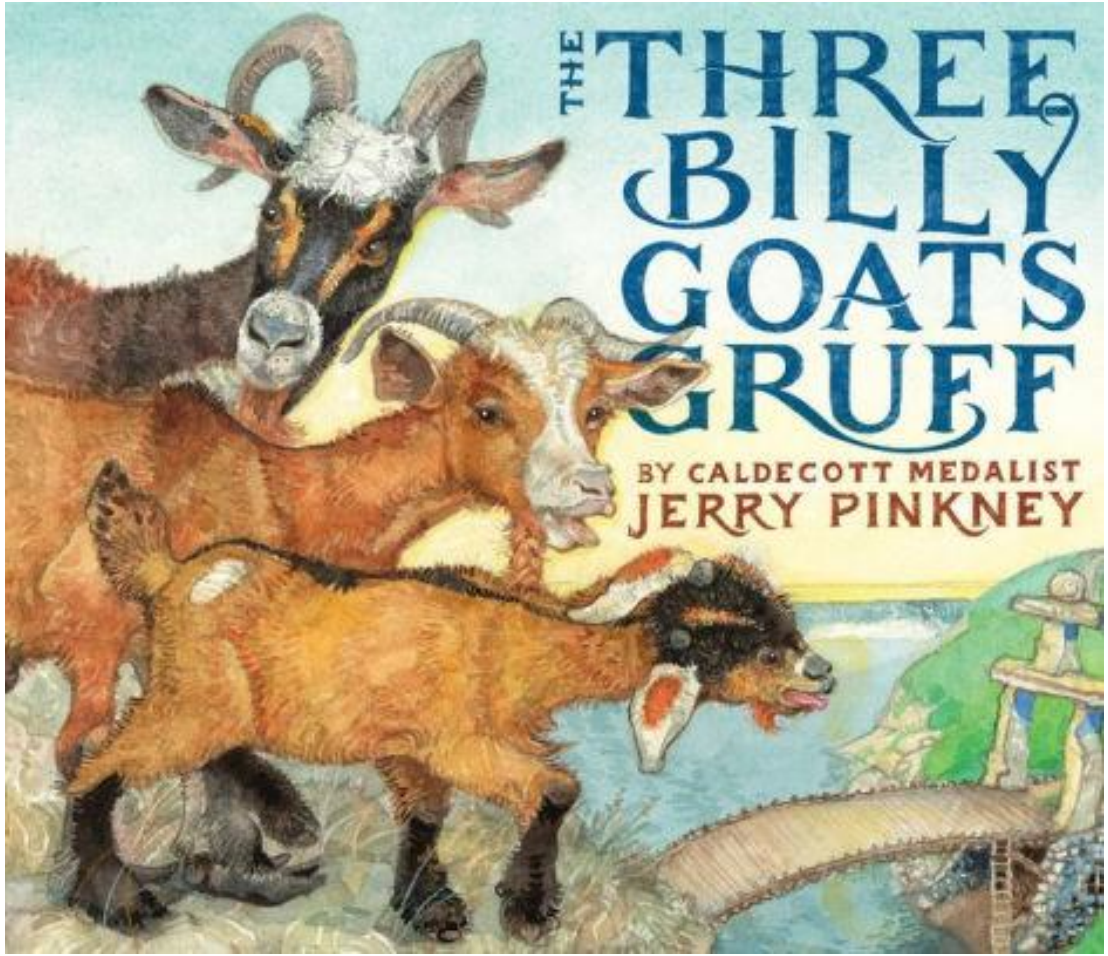


“Mrs Manning it is like we are using the Engineering Design Process…”

Creating solutions by repurposing what you already have.

THE FINAL PRODUCT

Let's apply what we have learned and make a movie.



But wait there's more!!!

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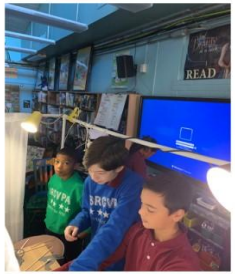
Home Shadow Puppets

Shadow Puppets

Research

Construction

Practice



Staging

The Popsicle Boy

Members of the Library Bookends enjoyed selecting and performing this funny take on *The Gingerbread Boy. We hope you enjoy their performance.*

LIBRARY

- HOME
- SHENANIGANS
- FIND A BOOK
- PRIMARY SOURCES
- FIND INFORMATION
- LYRC
- ACCELERATED READER
- BEANSTACK
- CLUBS
- MEET THE LIBRARIAN
- AUTHOR VISIT

SHENANIGANS IN THE LIBRARY

SO MANY THINGS ARE HAPPENING IN THE LIBRARY. WE ARE EXPLORING ALL ASPECTS OF THE LIBRARY AND HAVING BIG FUN. THE LIBRARY IS A PLACE OF EXPLORATION, CREATION AND RELAXATION WITH A GOOD BOOK. CHECK OUT JUST WHAT WE HAVE BEEN UP TO.

STOP MOTION IN THE LIBRARY

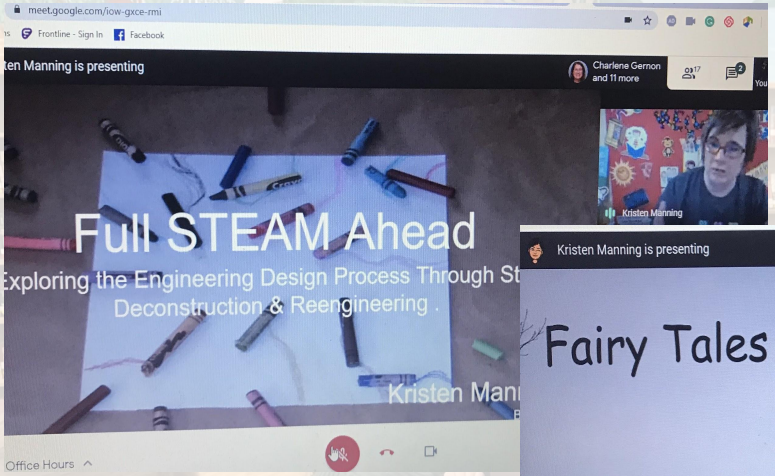
CHALLENGES, MAKER TIME AND MORE!

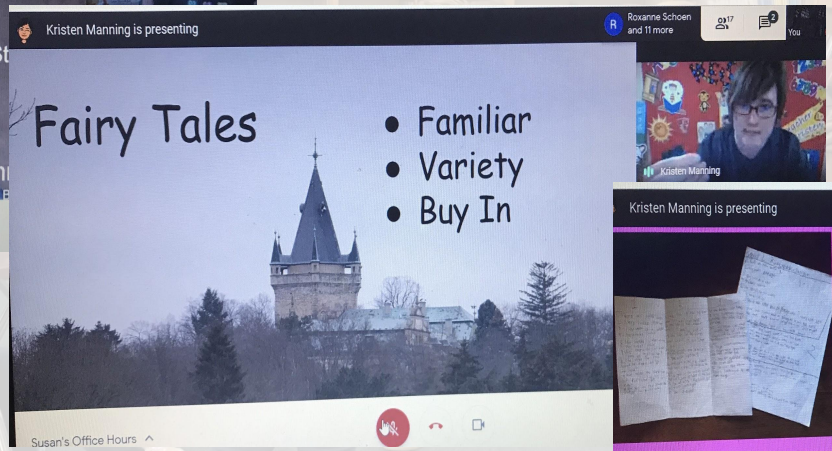
The best laid schemes...

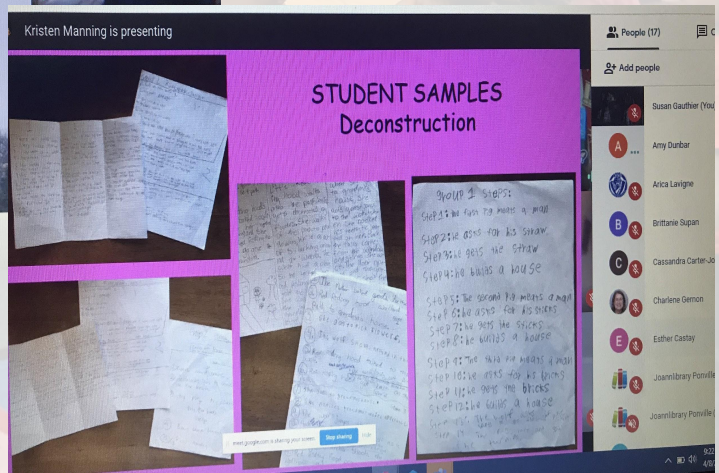
Second semester 5th grade project was a collaboration with the ELA teacher. ELA classes were reading Chinese Cinderella. In the library we were going to break into small groups with each group designing their own original retelling with a twist. These retellings would be reconstructed as a shadow puppet play. The 5th grade groups would then perform these plays for their kindergarten buddies.

Living Literature was starting to develop a podcast based on a, “what if,” platform. Students would discuss the question, “ What if_____?” as it applies to endings or situations in stories that they would like to change.

EBR Librarian's Meeting April 8, 2020







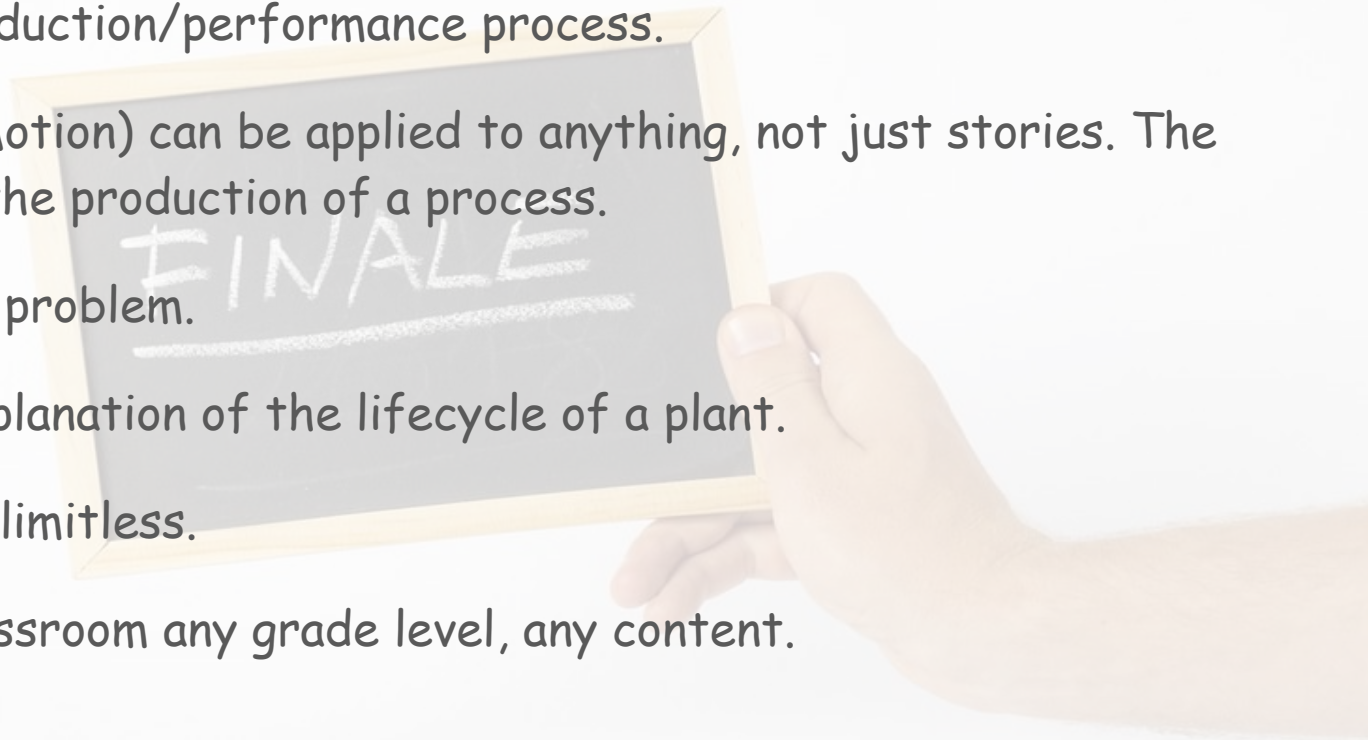
We have explored the EDP in two distinct ways.

1. Through the deconstruction and redesign of the story.
2. Through the production/performance process.

This project (Stop Motion) can be applied to anything, not just stories. The "production" can be the production of a process.

This could be a word problem.

This could be the explanation of the lifecycle of a plant.

The possibilities are limitless.

This works in any classroom any grade level, any content.