

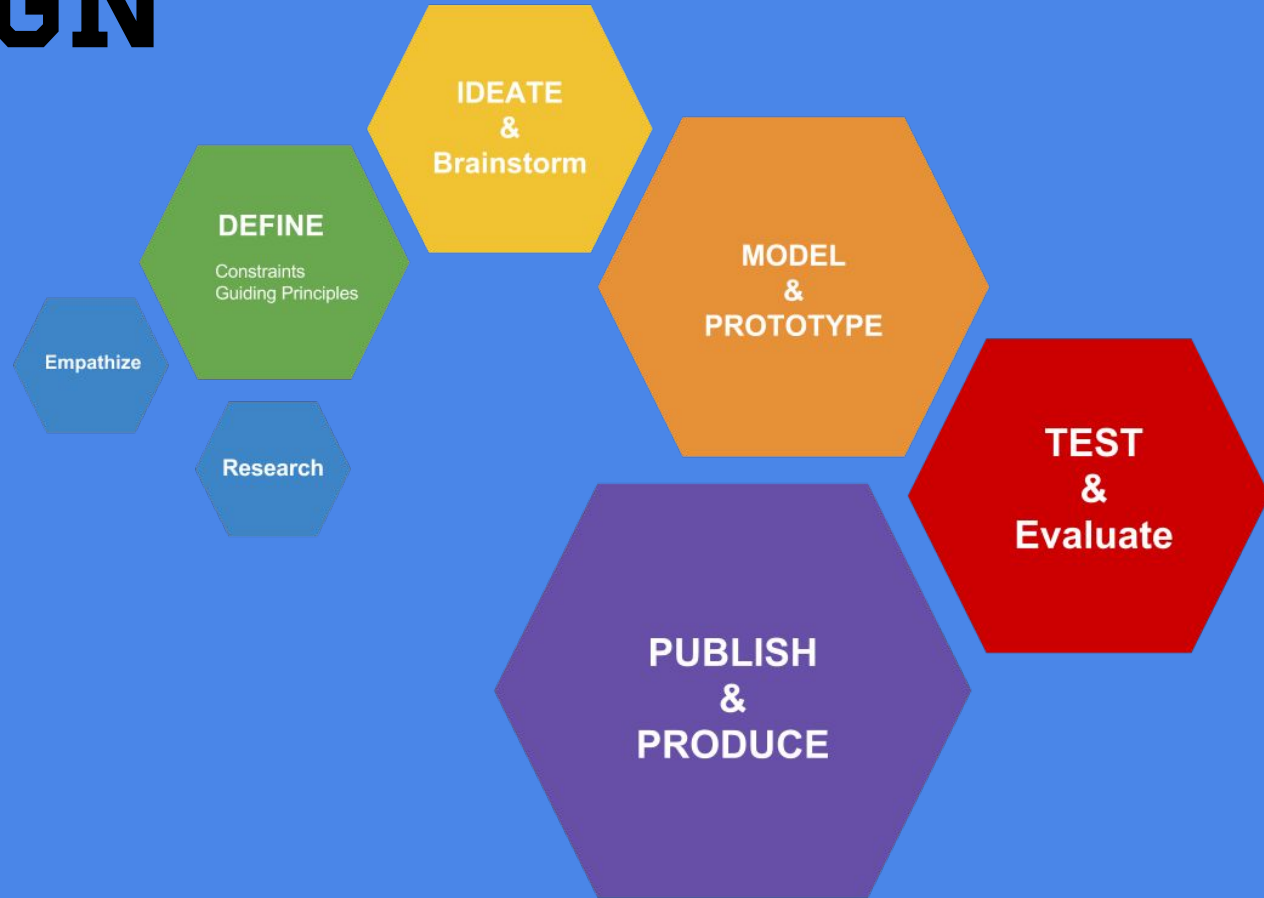


OFFICER BUCKLE

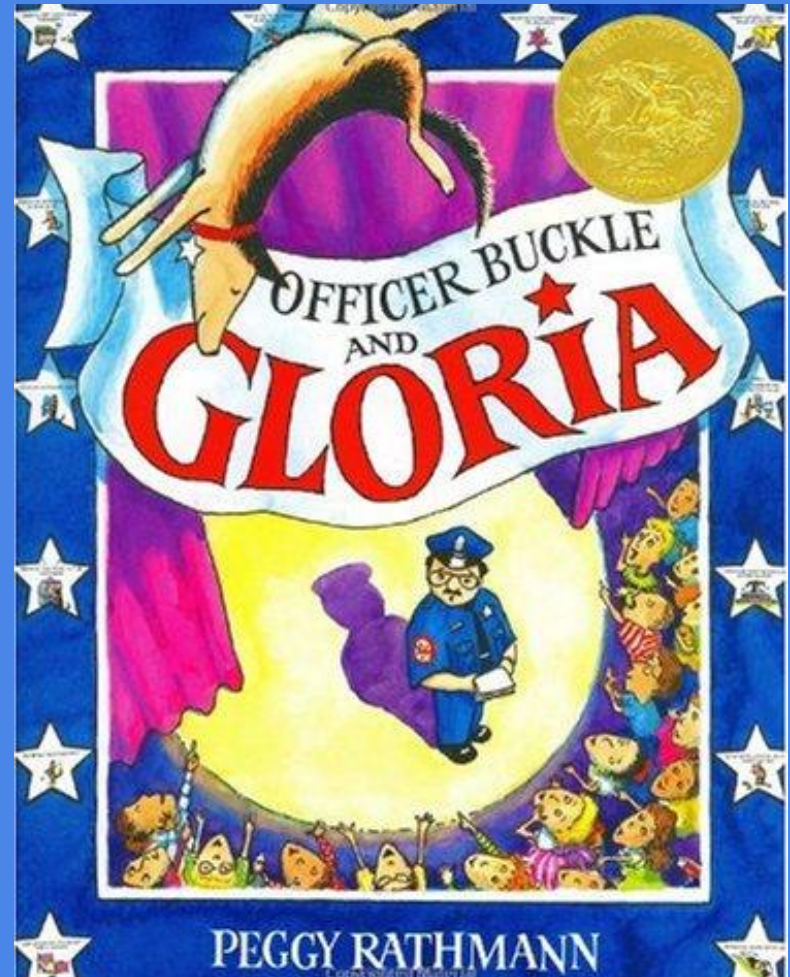
AND GLORIA

DESIGN CHALLENGE

THE DESIGN PROCESS



AN ENGINEERING, LITERACY, AND DESIGN THINKING EXPERIENCE



STEP 1: READ AND EMPATHIZE

1) Read the book.

As you are reading/listening, think about the problems that are happening in the story.

2) Empathize with the characters in the book.

Think about the feelings, emotions, actions, and behaviors of the characters.

STEP 2: DEFINE THE PROBLEMS

- 1) Discuss the problem(s) from the story.
- 2) Create a Problem Statement:

_____ needs a way to _____
because_____.

**Officer Buckle and Gloria need a way to see that you
know how to use teamwork in order design safety
tips for our classroom.**

STEP 3: IDEATE POSSIBLE SOLUTIONS

As a group, brainstorm ideas that would solve the problem you identified. What rules might you design to help our classroom work as team? Design a way to display your rule in the classroom.



The more ideas, the better!
Don't judge ideas!
Sketch or write... you choose!

STEP 4: PROTOTYPE

Decide on one idea to prototype and begin building!

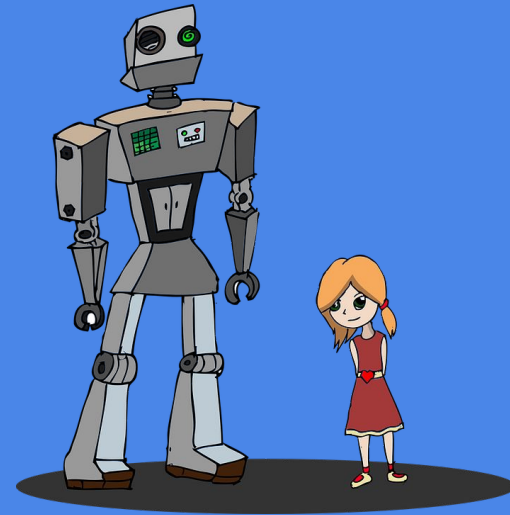


Prototype Parameters:

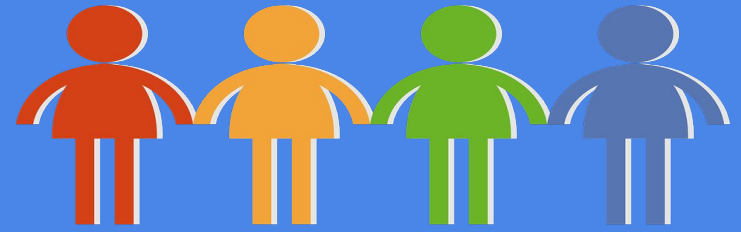
- We made this rule because it is important to_____.
- You will have a limited amount of time to build.
- You will only be allowed the materials that are provided on the table.
- Your prototype must be something that every member of your group can speak to.
- Collaborate, use teamwork, and have fun!

STEP 5: TEST AND FEEDBACK

- Partner up with another group to share your design.
- Test your design by accepting feedback.
- Make changes.
- Repeat.



STEP 6: GROUP PRESENT



Be prepared to present to the group. Decide who will speak about each number. Practice presenting to each other before speaking to the whole class.

- 1) Tell us about your prototype.
- 2) What was the most challenging part of the process?
- 3) How well did your group work together?
- 4) What would your group do differently next time?

STEP 7: TIME TO REFLECT PERSONALLY



Let's think about the thinking we used in this process.
Have a discussion around the following questions:

- 1) What went well during the process?
- 2) What did you learn along the way?
- 3) What surprised you about this experience?
- 4) How would you alter your learning experience for next time?

IDEAS FOR FEEDBACK



I really like the way your prototype _____

The most successful part of your design was _____

I noticed _____

Your design made me think of _____

Have you thought about adding _____

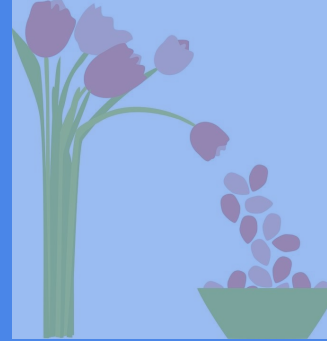
because

Have you thought about taking away _____

because

NEXT STEPS

- Go back with your group and make changes
- Finalize your finished product
- Submit



EXTEND YOUR LEARNING

How can we use what we've learned about creating safety tips in our classroom as a way to create safety tips on our campus?

- 1) What safety tips do we need on our campus?
- 2) Where should we put them?
- 3) How might we display them?
- 4) How can we share the importance of our safety tips with other students on campus?