IMAGINATION TO INNOVATION: DESIGN THINKING FOR YOUNG LEARNERS

Presentation by Cassandra Armstrong and Lindsey Herlehy
SESSION PRESENTERS

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Session Objectives

- Experience an authentic problem and use design thinking to work toward possible solutions

- Analyze design thinking processes and create a model to be used in the early childhood/Elementary Classroom

- Compose a lesson or activity based on a storybook that will engage young learners in the design thinking process
THERE IS TOO MUCH STUFF!

YOUR ADMINISTRATION HAS JUST ANNOUNCED THAT THE SCHOOLS IN YOUR DISTRICT ARE STRIVING TO BECOME RECOGNIZED AS U.S. DEPARTMENT OF EDUCATION GREEN RIBBON SCHOOLS (ED-GRS) FOR ENVIRONMENTAL AWARENESS DISTINCTION.
The ED-GRS distinction is based on three pillars:

**REDUCING**
environmental impact and costs, including waste, water, energy use, and alternative transportation

**IMPROVING**
the health and wellness of students and staff, including environmental health, nutrition, and fitness

**PROVIDING**
effective sustainability education, including robust environmental education that engages STEM, civic skills, and green career pathways
Design Thinking Activity

Select one item from the front and use this item to solve a problem within your school.

On chart paper, answer the questions:

- What is the item?
- What are your initial ideas for how to repurpose this item?
- How does your plan improve your community/serve a need?
Outlining the Process

What steps did you take to arrive at a solution to the problem?
Record each step on a sentence strip.
Arrange your sentence strips to illustrate your process.
What is Design Thinking?

A problem-solving approach that involves empathy, experimentation, and iteration to arrive at innovative and purposeful solutions.
DESIGN THINKING VS. ENGINEERING DESIGN

What’s the difference?
Problem vs. User

- Wheelchair
- Governmental Websites
- Electrical supplies for electronic equipment
- Boarding aircrafts
- Crossing streets safely for the blind
- Ticket systems for public transport
- Supply of stores
- Microwaves and other devices that you cannot operate without studying the manual

Source: Thinkability
How Do You Teach Design Thinking?

- Introduce the concept and process
- Encourage hands-on learning
- Model the process
- Provide guidance
- Encourage reflection
- Make it collaborative
- Provide resources and materials
- Make it fun and engaging
Using the picture book on your table, create a design thinking activity or lesson sequence to use with your learners.

Post your ideas on the Jamboard.
QUESTIONS?

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Thank you for attending our session