

The Missing Link: Using Engineering Design and Thinking Skills to Connect Literature, Science and Math

Collicot School, Milton
Grade Two

LESSON PLAN OUTLINE READING: THE TOWER TO THE MOON

Introduction

The Tower to the Moon is a class play that will be used for creating a small groups project: Building a three dimensional tower as background for the class play.

Story description

Once upon a time, there was a young King who loved to sit by the window to admire the moon. One day, he wanted to build a tower that could reach the moon. He ordered his soldiers to collect every box, table, furniture in his kingdom to build the Tower. Soon, his kingdom ran out of trees, tables and chairs. His soldiers told him the situation while he was on the top of the Tower trying to touch the moon. He ordered them to pull some tables and boxes at the bottom and to put them on the top, and the Tower tumbled down!

Learning Goals

The students will be able to:

- Work collaboratively in small groups of 4
- Use knowledge in Math: Measurement and Geometry (2D/3D shapes)
- Use design thinking to create a 2D/3D Tower.

Procedure:

Day 1:

1. Read aloud the play with the whole class.
2. Discuss story elements: characters, setting, problem, solution.
3. Present project: in small groups of 4, students will design a tower that will be used as a background for role play and class play.

4. Brainstorm list of materials that could be used: cardboard boxes, wooden stools, brown wrapping paper, construction paper, markers, staples, tape, scissors.
5. Explain Safety rules (example: stacking no more than 2 cardboard boxes ; “just pretend to pull down the base” of the tower during play).
6. Students work in small groups to design their tower (30 minutes).
7. Each group presents its product to whole class.

Day 2: Extension

8. Distribution of roles (story teller, the King, Soldier 1, Soldier 2) within the small groups.
9. Each group will have 20 minutes to practice their lines, using their tower as background.
10. Role play
11. Teacher evaluation and wrap up.

Framework Standards

Strand: Language

General Standard 2: Questioning, listening and contributing
Learning standard 2.1: contribute knowledge to class discussion in order to develop a topic for a class project.

Strand: Reading and Literature

General Standard 17: Dramatic Literature

Learning standard 17.1: Identify the elements of dialogue and use them in informal plays.

Learning standard 18.1: Rehearse and perform stories, plays... for an audience.

Strand: Technology/Engineering, grades PreK-2

Learning standard 1.3: Identify and describe the safe and proper use of tools and materials to construct simple structures.

Learning standard 2: Engineering Design

