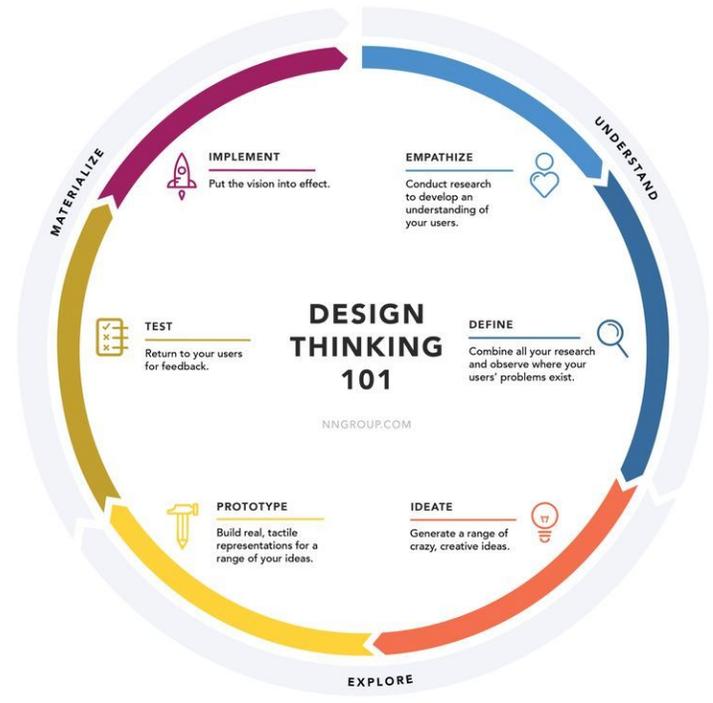


Design Thinking in the Makerspace

Lesson Outline

Purpose Statement: Students will create a model to represent the life cycle of a flowering plant using various materials.



Step 1: Understand

- Empathize- What have you already learned about the life cycle of a flowering plant? What are the important stages to remember? How could you represent each phase within the Maker Space?
- Define-
 - Problem Statement: You will need to design a model which represents the life cycle of a flowering plant. The possible ways to represent this are endless! After you and your team have found a way to represent the life cycle of a flowering plant, please be prepared to record a video of your project!

Step 2: Explore

- Ideate- Have students gather in teams of 2-3. Give students plenty of time to collaborate, brainstorm, and design/create their representations. Remind students to include all of the key components of the life cycle in their creations (seed, baby plant/sprout, adult plant, flower, fruit).
- Prototype- Build/ Create your solution
 - Supplies needed: Green Screen, Consumables, Spheros (if they wish to code them to show the path), Computers for Google Slides/etc., any other tools students choose to use.

Step 3: Materialize

- Test- Give students plenty of time to work and explore their options. Remind students of the task and encourage students to make sure that each phase of the life cycle of a plant is clearly represented in their models.
 - Reflection- As you go around the room checking in, ask students how they feel they are representing the life cycle of a flowering plant with their materials. Ask them to explain how each phase is represented.
- Implement- Have students create videos with the Green Screen or on Flip Grid using their materials and creations. They should be able to present and explain how their model represents the entire life cycle of a flowering plant. After they are created (back in your classroom) watch the student videos as a class and discuss the similarities and differences between student videos.
 - Find a way to share this with the masses- authentic audience