



Applying Design Thinking

Training to Go



Session Objectives



- Describe the components of the design thinking process.
- Model the process of design thinking.
- Plan methods for tracking progress during the design thinking process.



What Is Design Thinking?

Design thinking is a nonlinear process with these components:

- Empathize
- Define
- Ideate
- Prototype
- Test

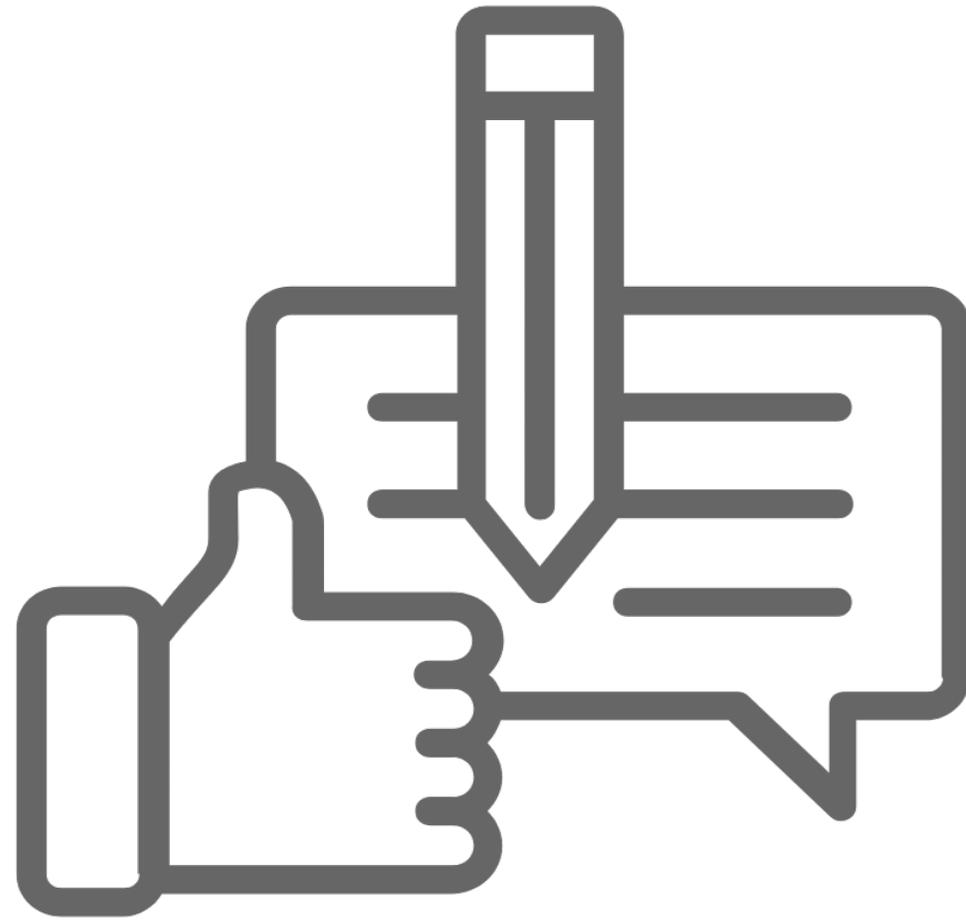




Why Design Thinking?

- It supports executive functioning skills.
- It's hands-on and engaging.
- It's learner centered.
- It helps to solve real-world problems.

Practice





Design Thinking: Empathize

Facilitator Actions	Student Actions
Introduce students to the general topic.	Complete introduction tasks.
Support students as they connect the introduction tasks to their personal experiences.	Gather information from online/library research.
Provide students with access to real-world tools.	Conduct field research. Experiment with tools.



Feeding Birds

Initial problem:

Squirrels are stealing the bird food.



Design Thinking: Define

Facilitator Actions	Student Actions
Help students understand the design thinking process.	Clearly define the problem using the 5 Whys and connect it to their experience, or the community's experience.
Provide students with the total allotted time.	Estimate amount of time needed to complete each component.

Design Thinking: Define



Topic: Squirrels are emptying bird feeders

1. Have groups go through 5 Whys to define the problem.
2. Refine and clarify the potential problem until you're sure they're at the root cause.



Design Thinking: Ideate

Facilitator Actions	Student Actions
Ask open-ended questions.	Brainstorm possible solutions.
	Identify information needed to answer questions.

Design Thinking: Ideate



Activity

1. Count off to go into group A or group B.
2. In your group, ask open-ended questions about potential solutions for root problem.
3. Record potential solutions on chart paper.
4. List the information you'd need to answer lingering questions, or to learn how to create your solution, on chart paper.





Design Thinking: Prototype

Facilitator Actions	Student Actions
Provide materials.	Draw and design the prototype.
Provide initial feedback on prototype feasibility.	Determine needed materials.
Monitor progress and support navigating conflict.	Build prototypes.



Design Thinking: Test

- Determine desired results.
- Test the success of the prototype.
- Provide peer feedback on prototypes.
- Refine solutions, prototypes and testing conditions if necessary.





Test

Facilitator Actions	Student Actions
Help set testing parameters.	Describe the testing parameters.
Monitor tests.	Outline the steps for testing.
	Decide what they are looking for (measures of success).
	Determine data to be collected.
	Run tests and repeat if necessary.

Next Steps



- What additional questions do you have about implementing the design thinking process?
- How do you anticipate students will respond to the process?