



*Kids Can! Innovation Camp:*  
Design-Thinking Activity Plan

## Design Thinking Activity: The Best Backpack Challenge

(From the Xavier School - Innovation Camp Team, December 2017)

### Goal:

Students will design a useful and meaningful ideal backpack based on their clients needs.

This exercise is a 20 minute deep dive into user interviews, developing empathy, and defining a user's feeling.

The five steps of the Design Thinking process are Empathize, Define, Ideate, Prototype, and Test. We'll be taking a look at the **"Empathize"** segment today, to help students understand the needs of their users through conversation and observation.

When students are designing or creating a product or solution with another user in mind, it's imperative that they have the skills of a good interviewee, so that they can grasp the underlying emotions and needs of their users. Without empathy, the content may not satisfy the user's real needs. One way to teach your students the skills of empathy is to lead them through a project.

The Backpack Interview is a short challenge that can help them gain these important design skills.

## Design Thinking Approach (Kids Can Version)

### 1. We Feel - “Empathy”

Students are given time to empathize or feel for someone who may have or facing some problems. They look at the needs and concerns of the person whom they are empathizing with, as well as, the social or personal situations they are in.

Activity Directions:

- Interview your client. (*\*club moderators/ camp facilitators may act as the client*)
- Guide questions are in the **empathy worksheet**.
- Take note of your client’s answers through writing on the worksheet.

*\*Facilitators will explain what empathy means and how they can show empathy to their clients. **We Feel Worksheet**/ empathy map will be done after this.*

### 2. We Investigate - “Digging Deeper about the problem”

Students dig deeper into the problem that they have identified. They clearly identify the problem and its root, the conditions, and consequences that go with it. They start to ask: “How can we...”

Activity Directions:

- Make the problem clear and research about it.
- Define your client's need by writing a **NEEDS STATEMENT**.  
(Students will follow the given statement format as seen in the worksheet.)

### 3. We Imagine and Plan

Students lay their plan on how to solve or provide a solution to the problem. They identify as many solutions as they can. In the end, they need to choose the “best” solution according to feasibility, effectivity, and efficiency.

Activity Directions:

- Do the **Ideate Worksheet**. (Come up with a lot of ideas)
- Then, meet as a group and compare solutions.
- Choose the “**best**” solution according to the following criteria:
  - **feasibility** - Is the solution “do-able” or capable of being accomplished?
  - **effectivity** - Is the solution effective enough to address and solve the problem?
  - **efficiency** - Is the solution something that can be done with less effort, money, or materials?

#### **4. We Build and Test**

Students build and create the prototype of the solution. They can be as resourceful and creative in building their prototype. Students can let others use and test their prototype. They further evaluate and work on improving their prototype based on the feedback from the first users or testers

#### **5. We Share and Listen**

Students are ready to bring their solution out in the public. They share their product and the story behind it. They listen to the feedback and comments of other people to further improve their solution.

### **II. Mindfulness Questions:**

1. Was your initial design the same or different than your final design?
2. Where did you get stuck?
3. When did you get your best idea? Describe the moment.
4. How well did you capture your partner's' needs?

Reference: A Taste of Design Thinking: Redesigning the Backpack