

# How Prototyping Emboldens Design Thinking

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## 01 INTRODUCTION & PURPOSE

### What is Design Thinking?

**Design Thinking** is a multi-stage, iterative design process that focuses on finding innovative, user-centered solutions to design problems.

### Prototyping in Design Thinking

In Design Thinking, **prototypes** are used to create tangible versions of solutions and ideas. They help designers view their ideas from new perspectives and test how users may interact with them.

As a **GID Lab Intern**, I got to experience prototypes being used in Design Thinking processes first hand, and observe how they directly benefit design projects.

## 02 USER RESEARCH PROJECT - ELLY BELLY DIAPERS

### Event Summary

On October 18th, 2024, **Elly Belly**, an organization dedicated to creating comfortable, safe, and sustainable baby products, **conducted a user research study** on their line of reusable diapers in the local Tacoma community.

Parents with young children were invited to participate in this research.

### Prototyping in Action

- Parents were presented with an overview of the diapers and how to use them.
- Parents were given opportunities to provide initial feedback on the prototype.
- Parents received free packages of Elly Belly's washable diapers to use and provide feedback on at a later date.

## 03 SET CAPSTONE DESIGN THINKING WORKSHOP

### Event Summary

On October 17th and November 7th, 2024, the *Global Innovation & Design Lab* facilitated ideation and prototyping for **Senior Capstone Projects** in the **School of Engineering and Technology**.

The November 7th session focused on creating low-fidelity prototypes of ideas students had for their projects.

### Prototyping in Action

- Students were provided with materials such as foam, wood, pipe cleaners, and modeling clay to create prototypes of their ideas as a team.
- To conclude the workshop, teams took turns presenting their prototypes and the thought behind their design.



## 04 RESULTS/ DISCUSSION

### How was prototyping helpful in these projects?

#### Elly Belly

- By showing parents a physical, tangible prototype of the diapers, it made it easier for them to envision what the idea behind design is and what it will do.
- By letting parents try using prototypes of the diapers, they can share feedback on what it is like to actually experience the prototype, what it does well, and what can be improved. The feedback provides valuable information on how the diapers can be improved even more.

#### SET Capstone Workshop

- Prototyping gave SET Students the opportunity to visualize what their ideas may look like in practice. Seeing a tangible version of their ideas gave students more opportunities to view their solutions from a new perspective.
- Having prototypes allowed students to present a tangible version of their ideas to a wider audience, and help visually communicate their designs

## 05 CONCLUSIONS

These events showed that the **prototyping stage** of the design thinking process can serve multiple purposes in the design thinking process.

1. Prototypes provide opportunities for designers to create usable versions of their ideas that can be tested. This can give them a fresh perspective on a design and ways it can be improved.
2. Prototypes can be put into practice, and allow users to test design ideas. This can generate valuable feedback on what it is like to actually experience the design.
3. Prototypes can be effective tools and vehicles in communicating design ideas to an audience.

## 06 REFLECTIONS

My experience as a GID intern observing these events has taught me the versatility that prototyping can have as a part of the design thinking life-cycle.

It acts as a means to view design ideas in practice from a fresh perspective, and is a valuable opportunity to generate new ideas on how a design could be improved, but it can simultaneously act as an important communication tool in helping an audience better understand the design.

