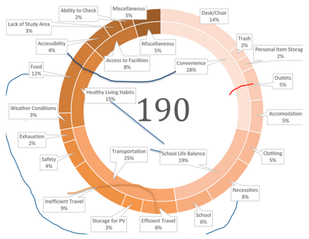
Locked-In CLIPPY

Empathy Fieldwork

How might we design a **product** that fuels **efficiency** for the **everyday small struggles** for **college students** that create **a lot of stress**?



Users emphasized with **the need for more desk space.** **Initial test runs** made it clear that users **desired Portability and Ease of Use.**

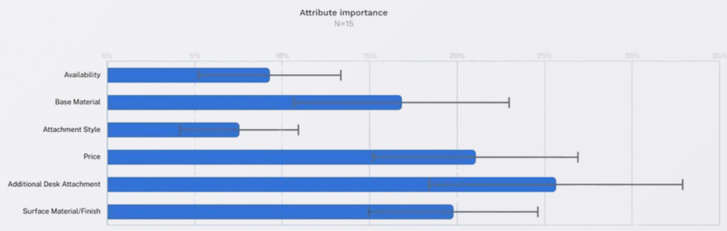
Design 0 & User Testing

Our **initial prototype** was built from **cardboard,** focusing on a **proof of concept** to our initial report.

Desk Details

Clip in desk
Large **clamp support**
Emphasis on **writing surface**

Conjoint Analysis



From our **Conjoint Analysis Survey,** it was clear that **Material**, **Price**, and **Attachment Style** were very important to our users

Our Solution

One of the **most popular complaints** heard at Cornell is that **lecture desks are too small,** especially since we are often **required to take our exams on them!**

Presenting **CLIPPY,** a **portable** and **easy to use** extension for traditional lecture desks

Key Design Features

Quick attachment piece
Sleek design focused on **portability**
Continuous **writing surface**
Dovetail joint for future attachments

Improving the Student Experience

Alleviating **space-related stress**
Transforming lecture desks
Expanding the boundaries of **learning facilities**
Support for **left-handed people**
Potential modularity for **additional attachments**

The Team

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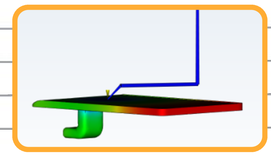
Manufacturing

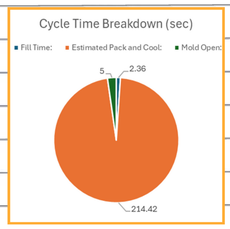
Molding Parameters:

- **Process:** Liquid Injection Molding
- **Material:** ABS
- **Mold Material:** Steel
- **Mold Lifecycle:** 20,000



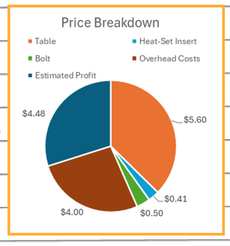
Preliminary Moldflow Simulations

- **Fill Time:** 2.355 s
- **Max Deflection:** 1.576 mm
- **Cycle Time:** 221.8 s

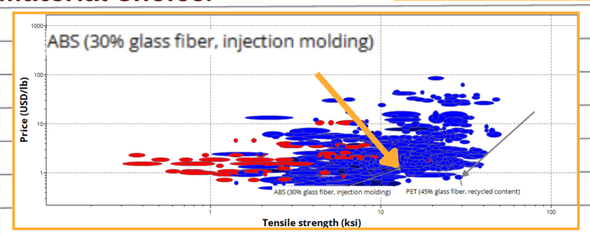


Initial Cost Calculations:

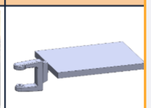
- **Batch Size:** 10,000 units
- **Cost to Produce:** $10.51/$14.20
- **Price:** $14.99/ $19.99



Material Choice:

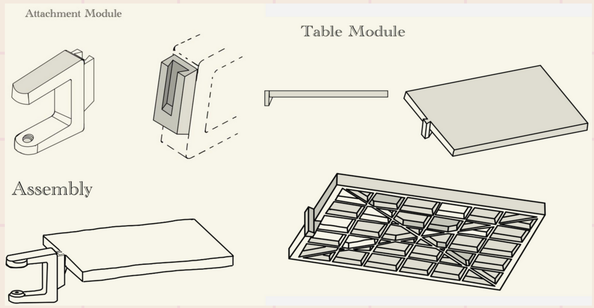


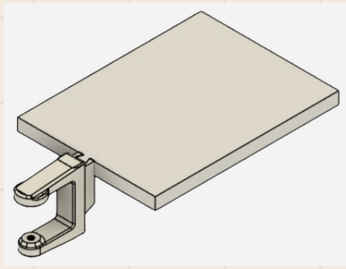
Market Analysis

Comparisons	Vivo Clamp on Desk Extension	In-Lecture Desk	Desk Buddy	Our Product
Pictures				
Advantages	Large desk area Sturdy Flushed with table	Free* Available in majority of classes	Simplistic/efficient Affordable Not disruptive Portable	Simplistic Lightweight Detachable Easy setup
Drawbacks	High price Undetachable Long setup	Limited left handed seats Small surface area	Not Modular Limited table space	Not flushed with surface
Price	$45.99	$0.00*	$25.00	$15.00

Competitors include Vivo, Lecture Desk, and Desk Buddy. We **aim to separate ourselves** through **affordability** and **modularity**

Design 1



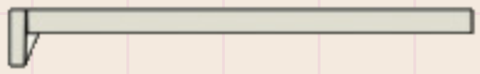


Cons:

- **Large clamp**
- **Bulky Design**
- **Heavy**

Pros:

- **Sturdy Material**
- **Smooth writing surface**



Original sketches showcased a Dovetail joint and weight-saving architecture for our table.