



co-designing
the classroom

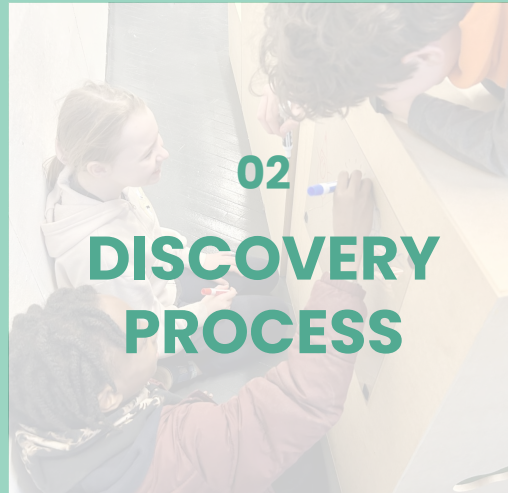


Danielle Begnaud

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Agenda

Co-Designing the Classroom: Design research with student partners to improve belonging and engagement



Danielle Begnaud

benyo studio | Pratt Institute

*Industrial Designer,
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Vagus Workshop | Pratt Institute



*Architect, Educator,
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Question of the Day

Which school spaces foster the most belonging? Which foster the least?

Spaces of Belonging

according to the kids

Most belonging:

1. Library
2. Gym
3. Art Room

Least belonging:

1. Bathroom
2. Cafeteria
3. Classroom

Project Context

Children spend a majority of their time in school, yet **rarely have any influence** on how the space is designed. **Do children not deserve to influence their own development?**

In light of post-pandemic, high levels of **absenteeism** in U.S. schools, Co-Designing the Classroom worked with a group of 9, 10 and 11 year olds to study students' **feelings of connection and belonging to their physical school space** in hopes of increasing **engagement and attendance** in New York City public schools.

Project Goals

Propose possible **design improvements** for the NYC public school environment that encourage **student engagement, belonging, and attendance**. By working with students as experts in their own education, with **their points of view at the forefront**.

Initiate more co-design projects within the design community and demonstrate that **co-design is viable, productive, and important**. Likewise, we aim to provide more insight into how **cooperative inquiry can be modified** and applied to physical design projects.

Team



Timeline

Build Team

Listen + Learn

**Analyze +
Prototype**

Test + Iterate

Fabrication

Share

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

JANUARY

FEBRUARY

MARCH

APRIL

MAY

Grad assistants

Co-design session 01

Debrief

Co-design session 04

Finalize design

A4LE

Recruit students

Co-design session 02

Ideate

Prototype

Test materials

NYCxDESIGN

Create branding

Co-design session 03

Prototype

Co-design session 05

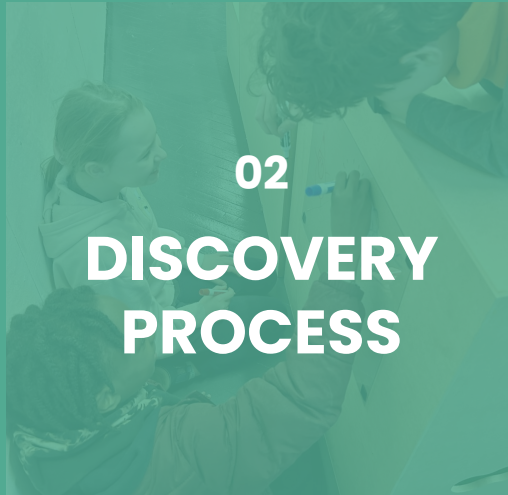
Build

Next steps



01

PROJECT CONTEXT



02

DISCOVERY PROCESS



03

DESIGN SOLUTIONS

Session 01

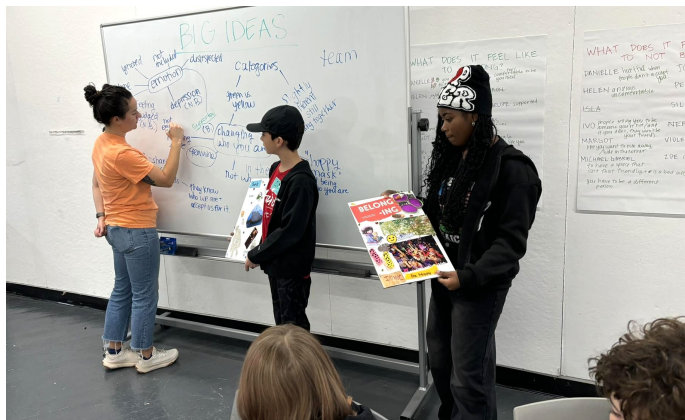
Defining Belonging



Questions of the Day

What does it feel like to belong?

What does it feel like to not belong?



Design Activity

Groups created two collages -- one that represented belonging and one that represented NOT belonging.



Expression of Self

Belonging meant acceptance of the students' genuine selves, "they know who we are and accept us for it." There is room for people to be "slightly different but still belong together".



"Together but different."

- **Penelope, 11**

Sharing

Sharing can lead to connection and support. Whether sharing art or sharing a meal, there is a vulnerability and trust in sharing that possibly leads to a feeling of acceptance and belonging.

"Unbelonging feels like you're unsafe, disliked, alone, and sad"

- **Violet, 11**



KLEINMAN + BEGNAUD

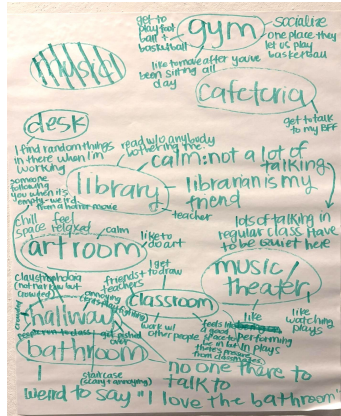
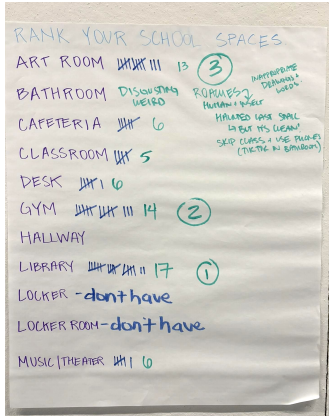
Session 02

Belonging at school



Question of the Day

What are the 3 spaces you feel you belong most in and why?



Design Activity

Groups chose one of the high ranking spaces and built a model showing why they feel a sense of belonging there.



Movement

Students noted that spaces dedicated to movement were a much needed break in their day. Large spaces like the art room, library, and gym provide safety from crowds and enough room to subdivide the area for different activities.



"I like to move after you've been sitting all day."

- **Isla, 10**

Freedom, Flexibility, and Expression

Many spaces were ranked highly on the belonging scale because they offered students the freedom to partake in activities that interested them and the flexibility to change those activities.

"Library is calm...there's not a lot of talking...I like it when it's quiet."

- **Ivo, 10**



Multisensory Experiences

Groups designed interventions that added texture, mitigated unwanted sounds and smells, and addressed a sense of visual privacy.



It's important to be able to customize your school because, *"it's your school."*

- **Ivo, 10**

Opportunities to be Social + Alone

While many of the designs included ways to socialize with friends, all designs also provided the time and space for individuals to "relax" and "chill out" by themselves.

No computer screens, *"so you can interact with people."*

- **Amanda, 10**



What **stood out** to you so far?



Belonging in school means:

- 01 Feeling like you don't have to wear a mask.**
- 02 Feeling supported and included by the people around you.**
- 03 Feeling like you can trust another person and that they also trust you.**
- 04 Feeling safe to share parts of your life with other people, like your stuff, your culture, your thoughts and feelings, and your identity.**
- 05 Being together but different.**

Key Insights

**“Together
but different”**

Multisensory

**Sharing
+ Mutual Trust**

**Movement, Flexibility
+ Choice**

“It’s your school!”

**Hallway, Classroom
+ Lobby**

“Chill Out Zone”

**Calm,
Active,
Social,
Alone**

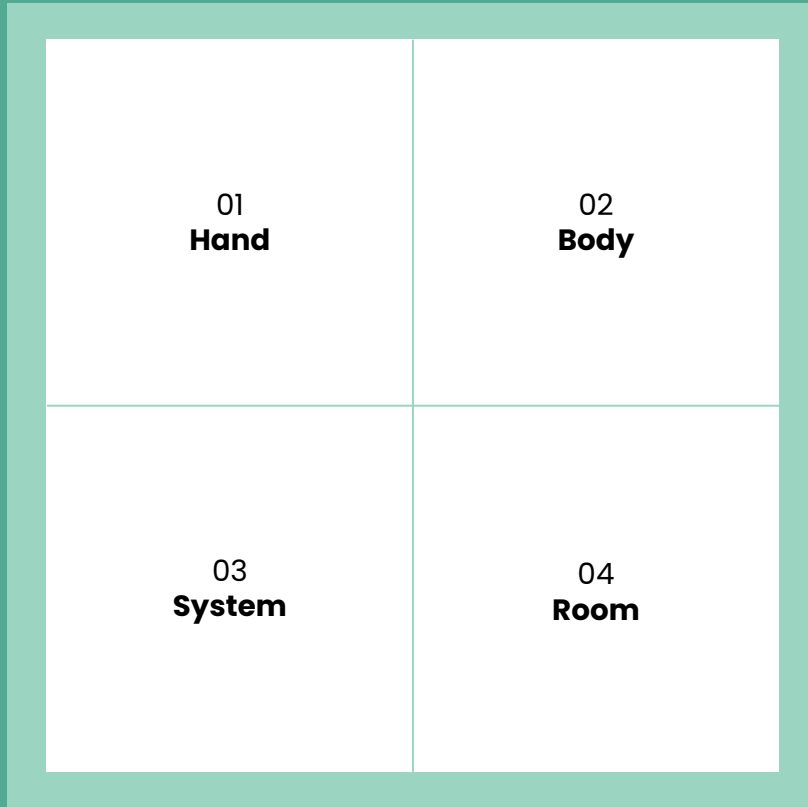
social

calm

active

alone

Design Scope



Design Parameters



Design Directions



A **modular system** that creates opportunities to be alone, sit with friends, have modules that can aggregate.



Redesign the desk chair.
Ownership over the chair.
Its your school.

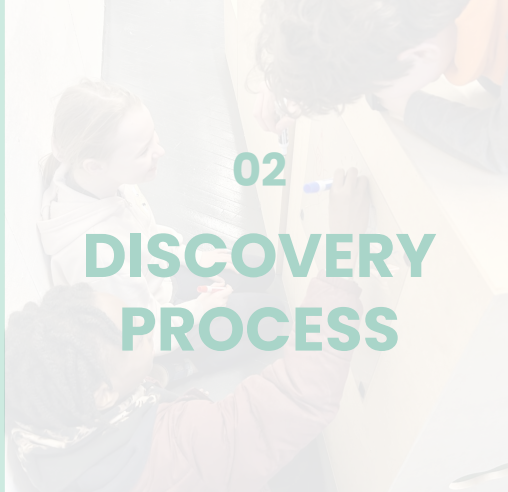


Communal yet individual,
positive sensory engagement
and safe visual privacy.
Socialize with limits.



01

PROJECT CONTEXT



02

DISCOVERY PROCESS



03

DESIGN SOLUTIONS

Design Concepts



COZ



CHAIR



SCREEN

Session 04

Testing + Feedback



"I think it's cool because it can be distracting to have all the other things around in the room."

- **Penelope, 11**



"It makes me feel like there's a safe space."

- **Penelope, 11**



KLEINMAN + BEGNAUD

Session 05

Testing + Feedback



"The timer in the COZ is good to pace sharing"

- Isla, 10



"I like the dry erase board better than paper because you can erase it"

- Neron, 10



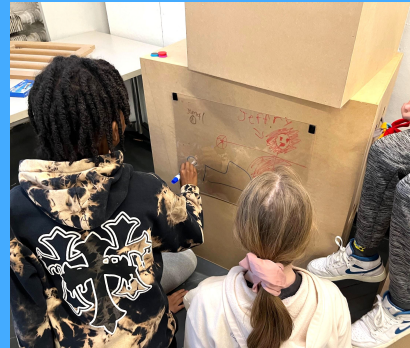
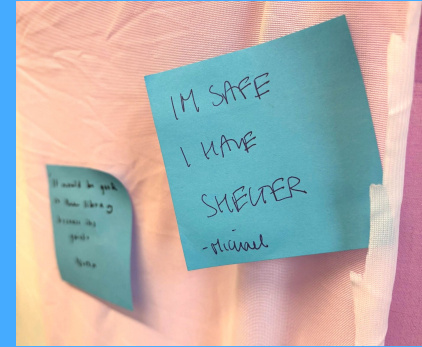
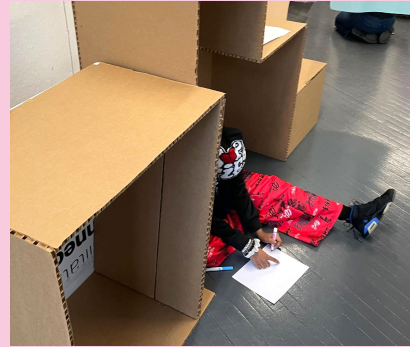
Design Concepts



COZ

COZ Progress

The COZ, also known as the "Chill Out Zone" is a modular system that creates opportunities to be alone, sit with friends, exercise, stretch, and create or display artwork.



COZ



Flexible + Modular



Alone but Together



Calm + Active

Design Concepts



CHAIR

Chair Progress

The Desk Chair is a redesign of a typical classroom student chair, designed for customization with incorporated fidgets.



Chair



**Customization
+ Assembly**



**Covert
fidgets**



**Classroom
Functionality**

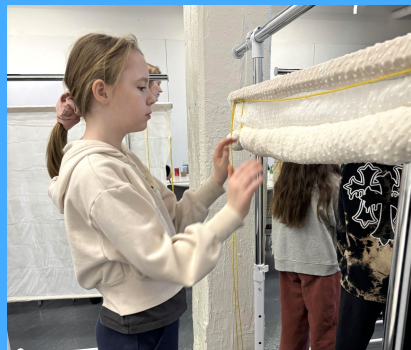
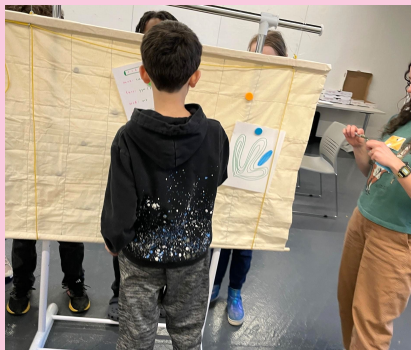
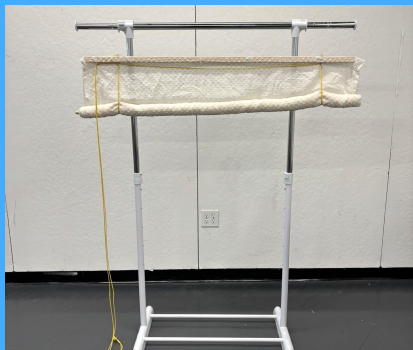
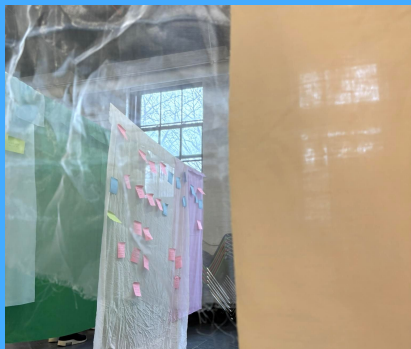
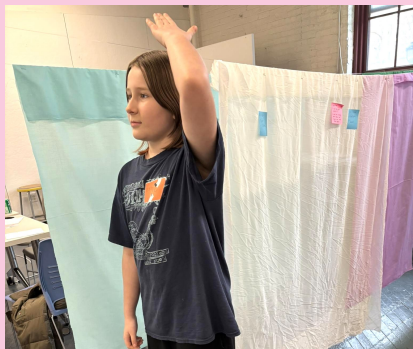
Design Concepts



SCREEN

Screen Progress

The screens are a dynamic system for the classroom that allow division of space for engagement or privacy, while adding softness, transparency, and more vertical working space for collaboration.



Screen



**Balance between
privacy and
supervision**



**Vertical space for
collaboration**



**Retractable soft,
textured material**

Design Concepts



COZ



CHAIR



SCREEN

Next Steps

**NEW YORK CITY
DESIGN WEEK**

**TEST DESIGNS
IN SCHOOLS**

**CONTINUE
CO-DESIGNING**

Project Reflection

"I learned how much collaboration is put into designing."

- **Ivo, 10**

"It's important to include all ideas to create the best thing possible."

- **Isla, 10**

"I learned that we shouldn't be hurting to belong somewhere."

- **Violet, 11**

"[I learned] how to feel good about being in school."

- **Michael, 10**

thank you



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