

A young woman with dark hair is wrapped in a thick, grey, textured blanket. She is looking down and to the left with a somber, thoughtful expression. The background is dark and out of focus, suggesting an indoor setting. The overall mood is one of isolation and melancholy.

THE NEW PLAGUE ON CAMPUS: LONELINESS

Process Book

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Course Overview

In this course, we learned how to turn big design ideas into clear proposals, like design briefs, marketing plans, and forecasting models. We focused on gathering and organizing data to help plan and track projects effectively, and explored different methods for presenting ideas to various audiences.

It wasn't just about planning—we also worked on pitching new ideas, leading projects, and managing them in fast-paced environments. We honed our storytelling and presentation skills to communicate our ideas clearly, and by the end, we were able to confidently bring a design concept to life from start to finish.



Executive Summary

This course in Design Management guided students through the independent development of a personal project, fostering critical thinking and research skills. From identifying a meaningful topic to conducting both secondary and primary research, students were challenged to uncover real user pain points and develop design strategies that not only address these challenges but also align with business opportunities.

Drawing from my personal experience, I focused my project on the loneliness and anxiety I felt during my first year at an art and design school. Through further research, I discovered that loneliness is not only prevalent among international students, but is a widespread issue affecting the broader population of young students across the United States—particularly those aged 18 to 25. This growing trend has been linked to high college dropout rates, which in turn result in significant tuition losses for universities. For example, Savannah College of Art and Design (SCAD) currently has a dropout rate of 37%, potentially leading to an estimated \$88.8 million USD in annual tuition revenue loss.

Through market research, I found that existing solutions fail to meaningfully address the emotional needs of students. In fact, the problem of loneliness continues to grow. Interviews and surveys further revealed key pain points:

- Both international and domestic students often feel lost and overwhelmed when adapting to a new environment.
- Without a social circle, students struggle to meet new people or join campus clubs and events.
- A lack of psychological safety prevents students from expressing themselves, for fear of being judged.

To address these issues, I developed the concept of Echo Corner—a physical space on campus designed to feel as safe and comfortable as home, where students can begin to build connections in a low-pressure, student-centered way. The space promotes emotional security and gives students the freedom to participate at their own pace.

Echo Corner is divided into three interactive zones, each with a unique theme:

- Look: Encourages students to initiate conversations based on shared interests.
- Listen: Leverages the art and design context by using collaborative drawing to promote understanding and teamwork.
- Lend Your Hands: Builds on the connections formed in the first two spaces, encouraging students to support one another and form meaningful relationships.

Additionally, all three zones feature an Emotional Expression Wall for daily mood check-ins. Before connecting with others, students are invited to reflect on and acknowledge their own emotions—a crucial step in fostering authentic social interaction.

By implementing Echo Corner, I aim to reduce feelings of isolation and improve student retention. Even a small impact can make a difference: at SCAD, lowering the dropout rate by just 5% could save the school approximately \$1.5 million USD in annual tuition losses.

01

Introduction



(The University for Creative Careers | SCAD, n.d.)

Project Goal

To reduce students' feeling of loneliness
By minimizing the dropout rates
With increased social connections
For first-year/ international students at art and design colleges.

Project Vision

I am committed to helping students build their own social circles on campus, so they can enjoy learning and support one another even when away from home. By creating an open and welcoming environment, students are encouraged to share their lives and academic experiences freely, fostering a stronger sense of belonging and motivation to learn. This also helps cultivate a lasting and positive relationship between students and the university, contributing to a more supportive and engaged campus community.

INTRODUCTION

Definition

Loneliness

Loneliness is an uncomfortable, personal feeling that comes from feeling isolated or lacking meaningful relationships. It happens when there's a gap between the connections a person wants and the ones they actually have.

Social Isolation

Social isolation means objectively having very few social relationships, roles, or group connections, and rarely interacting with others.

Social Connection

Social connection refers to the range and variety of a person's social network and roles, what these relationships provide, and whether they have a positive or negative impact.

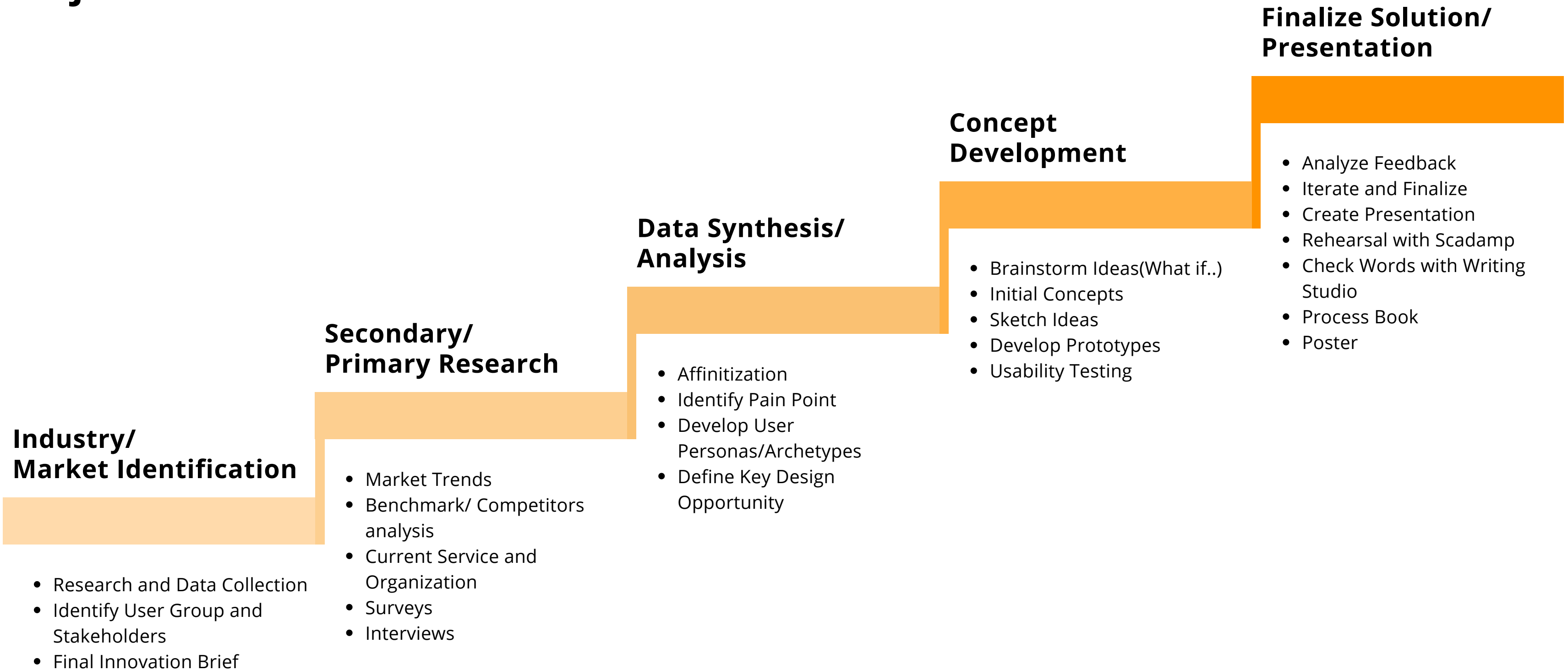
(Office of the Surgeon General, 2023)



(Flaherty, 2023b)

INTRODUCTION

Project Timeline



INTRODUCTION

About Me

Yen Jen Lee

A design facilitator with a background in product design and design management, I am passionate about crafting user-centered solutions that are not only functional but also warm and meaningful. I believe that truly impactful design begins with empathy—understanding users' real needs and the deeper stories behind them.

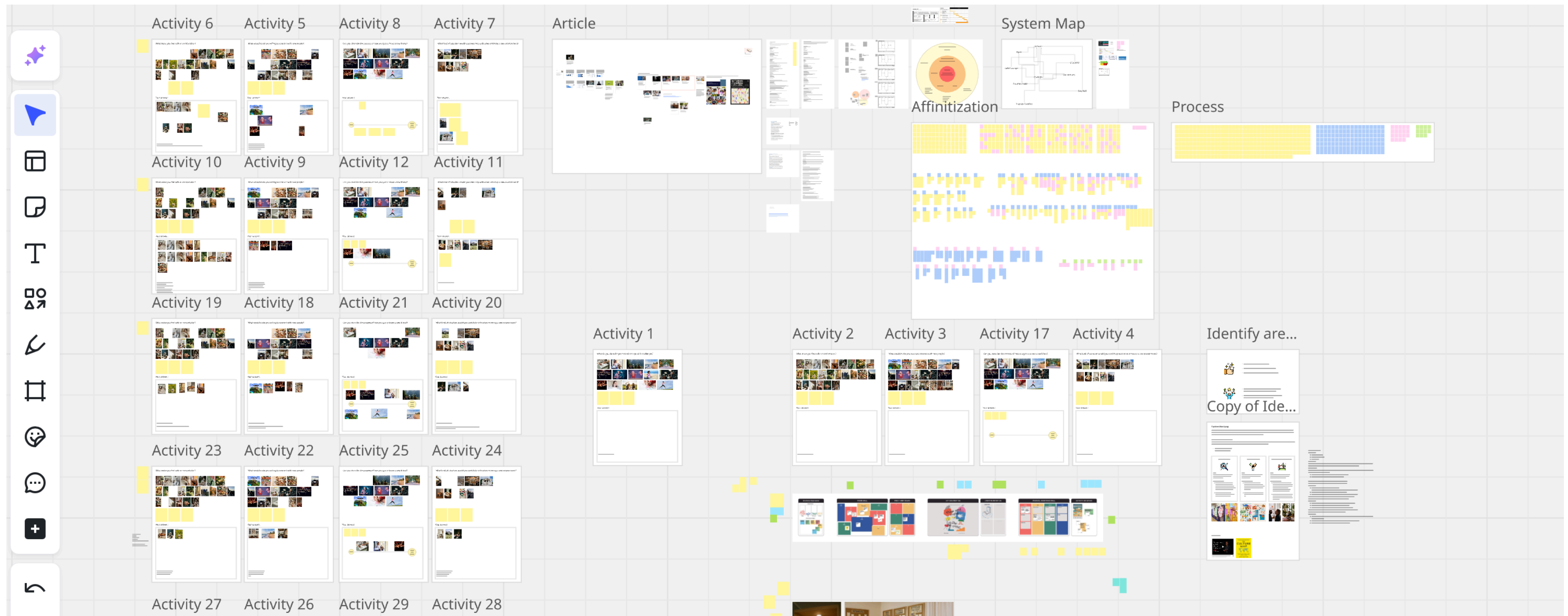
By exploring market potential and uncovering unmet opportunities, I aim to inspire designers to create solutions that genuinely improve people's lives and foster lasting connections between users and the world around them. At the same time, I strive to streamline the design process, helping design teams work more efficiently, stay aligned with project goals, and transform insights into clear, actionable outcomes. Through thoughtful facilitation and collaboration, I hope to build an environment where creativity flows smoothly and every design decision moves us closer to meaningful impact.



INTRODUCTION

Working Wall

I chose to use Miro Board as my digital whiteboard workspace, as it allows me to easily keep track of tasks, organize insights, and freely map out brainstorming ideas in a clear and flexible way. Below are some glimpses of my working space.



02

Industry Inditification

INDUSTRY INDITIFICATION

Project Inspiration

As an international student, my first year in the U.S. was filled with challenges—navigating transportation, managing coursework, making friends, and adjusting to a new environment. Through these experiences, I realized that many students, both international and local, face similar struggles when adapting to college life.



INDUSTRY INDITIFICATION

Loneliness in the U.S.

36% of American adults report serious loneliness. The numbers are even higher among **61% of young adults (18-25)** and 51% of mothers with young children.

43% of young adults say their loneliness has worsened since the pandemic. Nearly half felt no one had genuinely checked in on them recently.

According to the CDC, **63% of young adults experience significant symptoms of anxiety or depression, often linked to loneliness.**



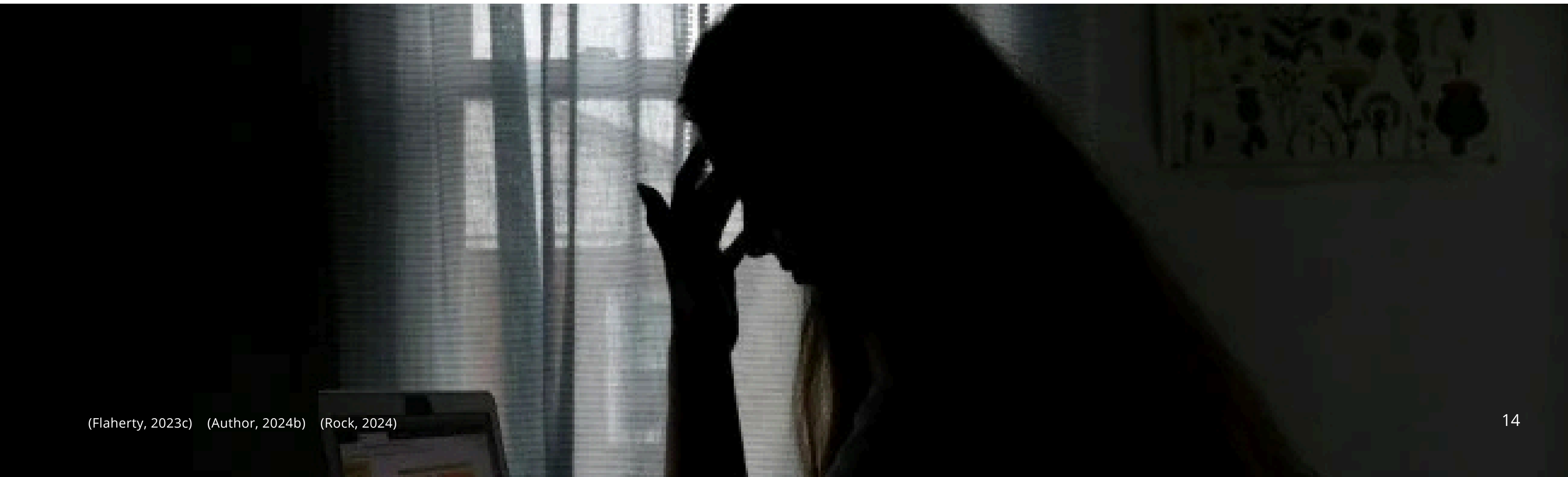
INDUSTRY INDITIFICATION

Loneliness in the U.S.

Nearly **two-thirds (64.7%) of college students report feeling lonely** and more than half (51.7%) are concerned about their friends' mental health

Nearly **25% of first-year students drop out during or after their first year**, which significantly impacts the stability and sustainability of higher education institutions

Only 61% of students at four-year institutions return for their second year. Among **the reasons for dropping out, social isolation and loneliness are frequently cited.**



INDUSTRY INDITIFICATION

Business Impact

Colleges spend up to **a third of their costs on students who don't graduate**, leading to both mission failure and lost revenue that could support others.

Overestimating enrollment to meet recruitment targets often backfires. Universities may admit 25% more students to compensate for low retention, yet they frequently underestimate the true impact of student dropouts.

Student dropouts cost colleges and universities **over \$16 billion in lost revenue every year**, highlighting the financial toll of low graduation rates.





“

I'm surrounded by hundreds of other kids here, but I don't know; **I feel like nobody really knows me for who I am.** I feel like I can't be myself.

INDUSTRY INDITIFICATION

Pestel Analysis

By implementing the PESTEL framework, I analyzed the key external factors influencing student loneliness on campus. This approach helped me uncover how broader market trends and societal shifts impact students' ability to build meaningful connections.



Political

Low to Medium
Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.



Economic

Low to Medium
Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.



Social

Low to Medium
Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.



Technological

Low to Medium
Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.



Environmental

Low to Medium
Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.



Legal

Low to Medium
Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.

03

Market Insight

MARKET INSIGHT

Porter's Five Forces Analysis

Porter's Five Forces, developed by Michael E. Porter, is a strategic tool used to analyze industry competitiveness and market dynamics.

1 Threat of New Entrants

Medium

Many universities offer counseling centers, student groups, and mentorship programs, but engagement is often low. Meanwhile, tech platforms like social media, friend-making apps, and online therapy services provide strong alternative solutions.

2 Bargaining Power of Suppliers

Low to Medium

Solutions centered on social or mental health support face low entry barriers, but slow university decision-making can make institutional backing difficult.



3 Bargaining Power of Buyers

Medium to High

University control over funding and space can limit resource access, while solutions involving digital tools or psychological support may require costly collaboration with experts.

4 Threat of Substitutes

Medium to High

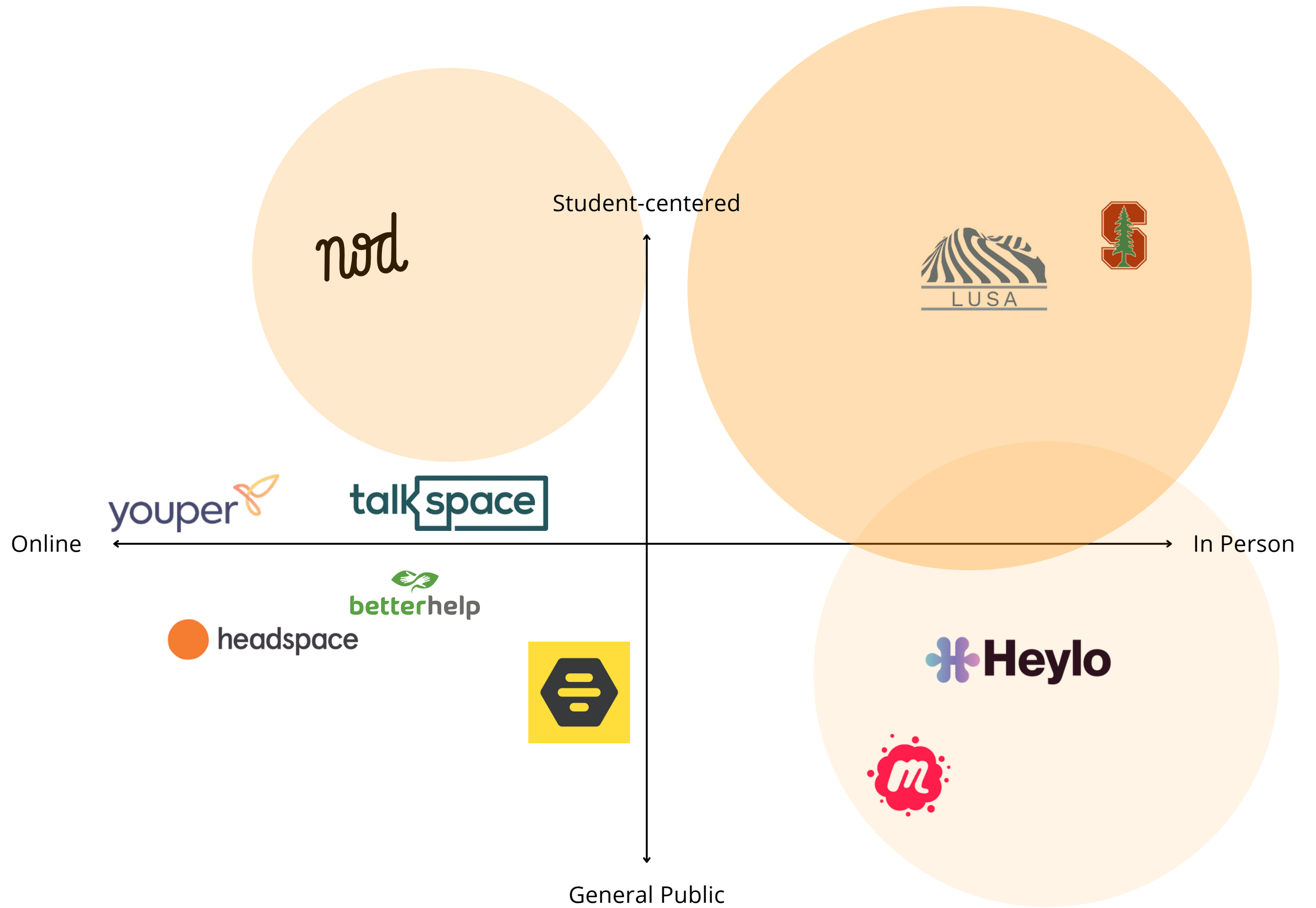
Diverse student backgrounds and varying needs make it hard to design a universal solution, and even effective programs may struggle with student engagement.

5 Industry Rivalry

Medium

Although many options like counseling, student groups, and digital communities are available, students often prefer personal coping strategies such as gaming or creative activities instead of structured programs.

MARKET INSIGHT
Benchmark



MARKET INSIGHT Benchmark



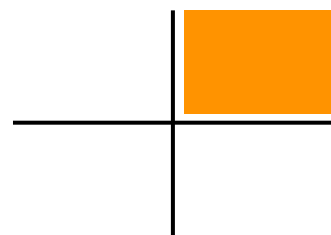
Stanford's Resilience Project

Founded Year: 2011

Location: Stanford University, Stanford, California

Type: University-led student support initiative

- **Focus:** Promoting student resilience by normalizing failure and encouraging growth through reflection
- **Key Activities:** Storytelling videos, dorm workshops, academic coaching, and events like "Stanford, I Screwed Up"
- **Purpose:** To help students learn from setbacks, reduce isolation, and foster a culture of authenticity and perseverance



(Information for Transfer Students, 2018)

MARKET INSIGHT Benchmark



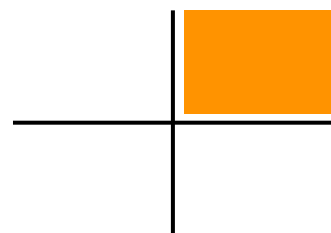
Luskin Undergraduate Student Association

Founded Year: 2019

Location: University of California, Los Angeles (UCLA)

Type: Student-run organization

- **Focus:** Professional development, mentorship and community building, volunteerism and civic engagement, and academic support
- **Key Activities:** Networking, mentorship, events, workshops, social gatherings
- **Purpose:** Community building, academic and professional development, student support



(Luskin Undergraduate Student Association, 2023)

MARKET INSIGHT Benchmark

nod

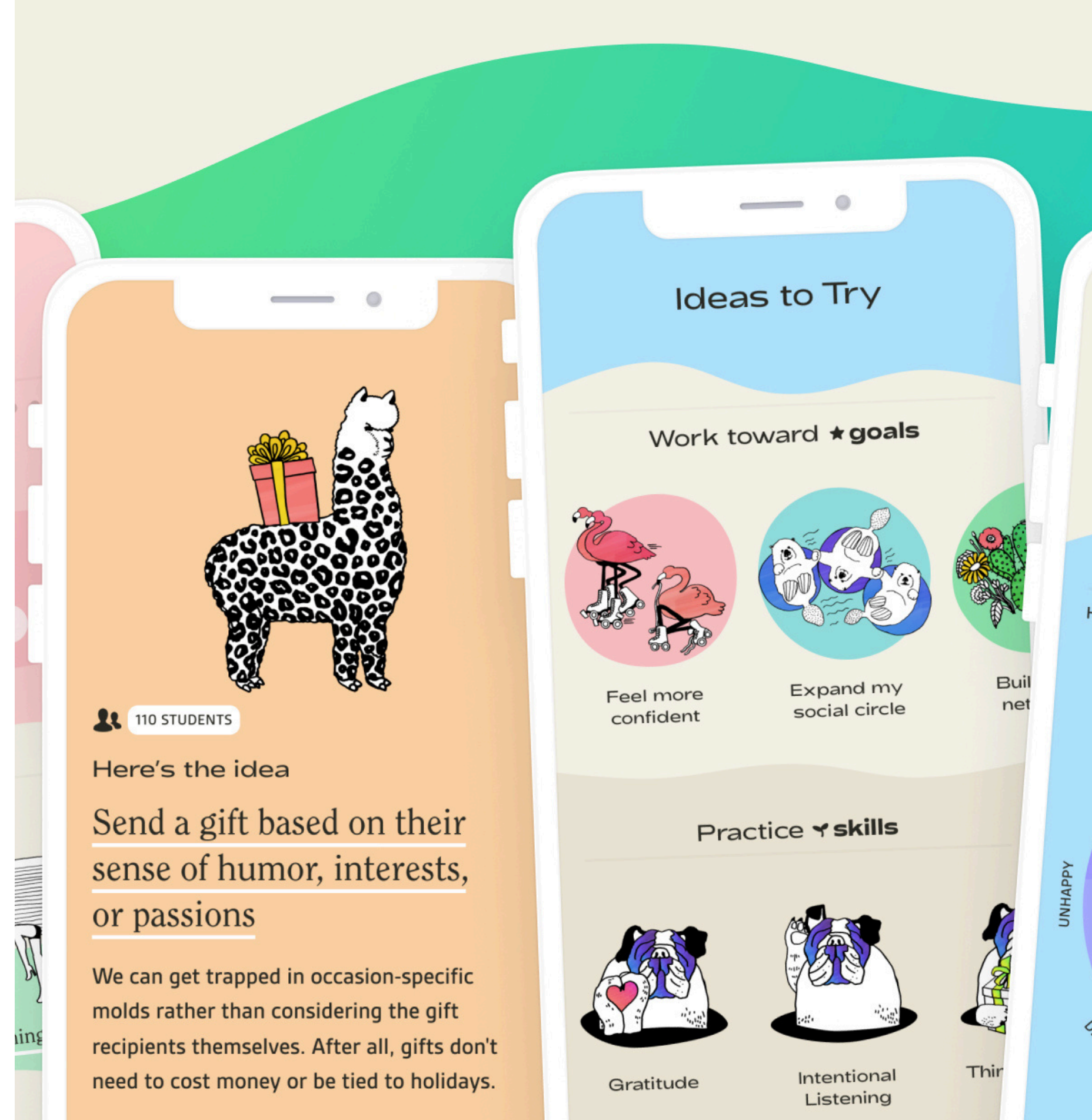
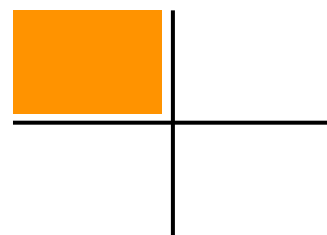
Nod

Founded Year: 2018

Location: San Francisco, California

Type: Mobile app for social support and well-being

- **Focus:** Reducing loneliness and building social connections for college students
- **Key Features:** Research-based activities, positive psychology prompts, emotional well-being support
- **Purpose:** To help students build intentional social habits, increase confidence, and foster resilience and belonging in campus life



MARKET INSIGHT
Benchmark



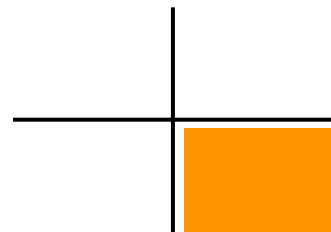
Heylo

Founded Year: 2019

Location: San Francisco, California

Type: Community management platform for in-person groups

- **Focus:** Organizing events, managing memberships, and facilitating communication within groups
- **Key Features:** Event coordination, chat management, payment processing
- **Purpose:** Streamlining the management of community groups like running clubs, book clubs, and parent organizations



MARKET INSIGHT

Benchmark



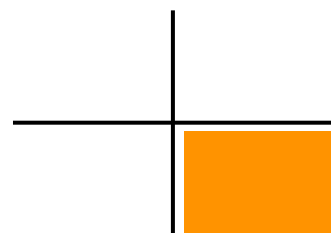
Meetup

Founded Year: 2002

Location: New York City, New York

Type: Social networking platform for organizing in-person and virtual events

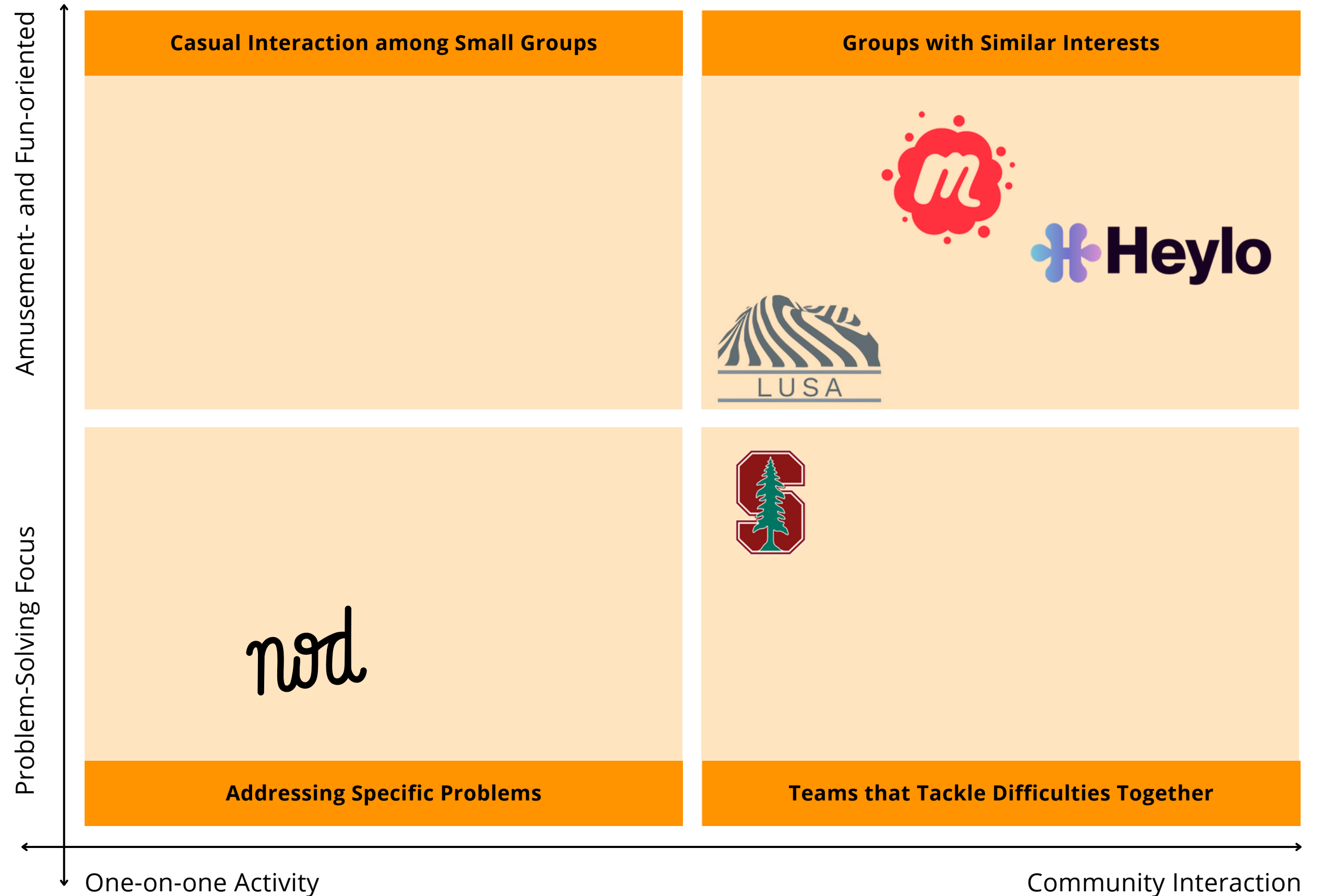
- **Focus:** Connecting people through shared interests, hobbies, and professional goals
- **Key Features:** Event creation and management, group messaging, RSVP tracking, member profiles
- **Purpose:** To foster community engagement and reduce social isolation by facilitating real-world connections



(Meetup, n.d.)

MARKET INSIGHT Benchmark

I organized the five key benchmarks that align with our theme into a 2x2 matrix, identifying white spaces that reveal potential market opportunities for development.



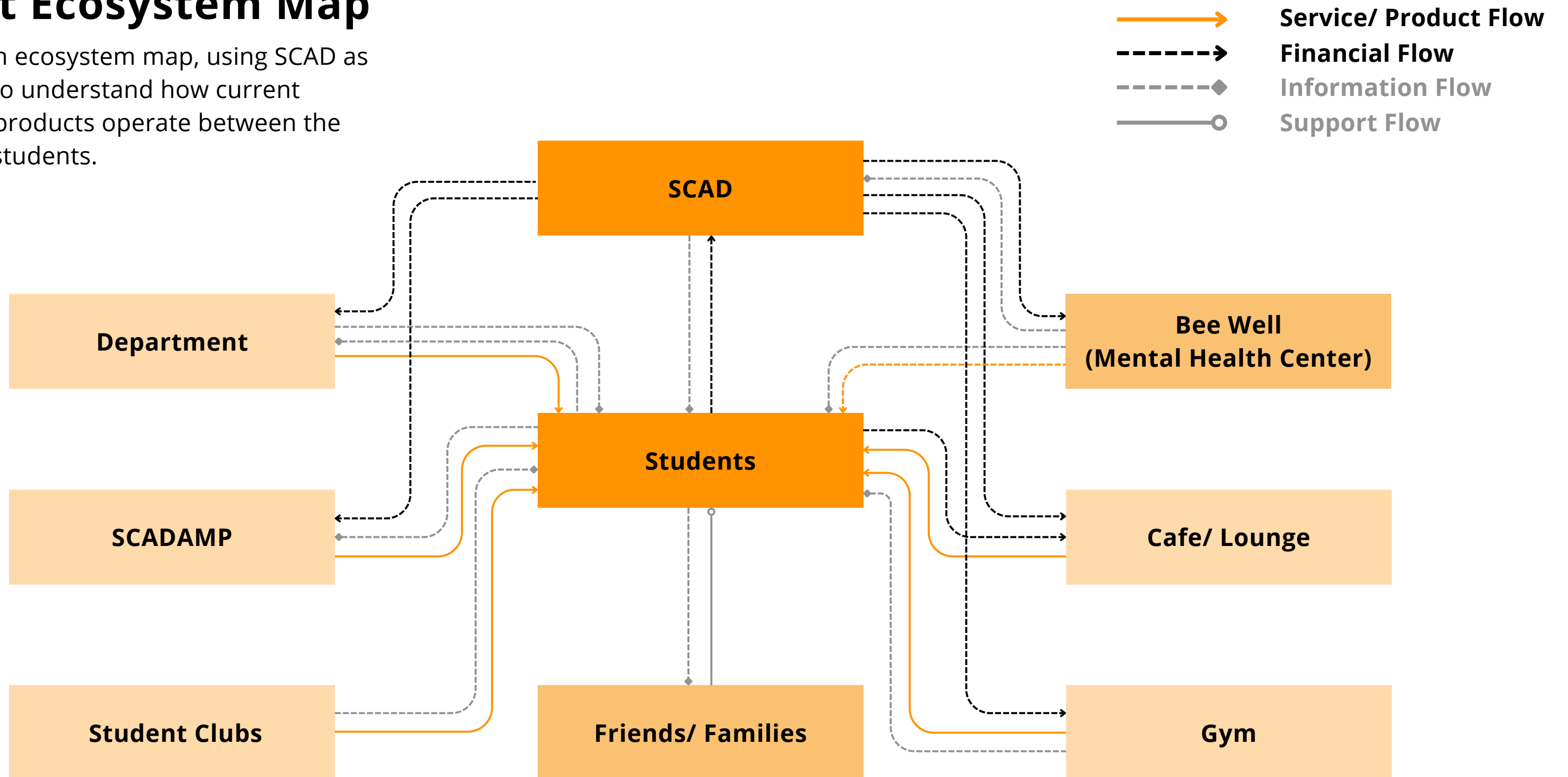
04

Understanding User Groups

UNDERSTANDING USER GROUPS

Current Ecosystem Map

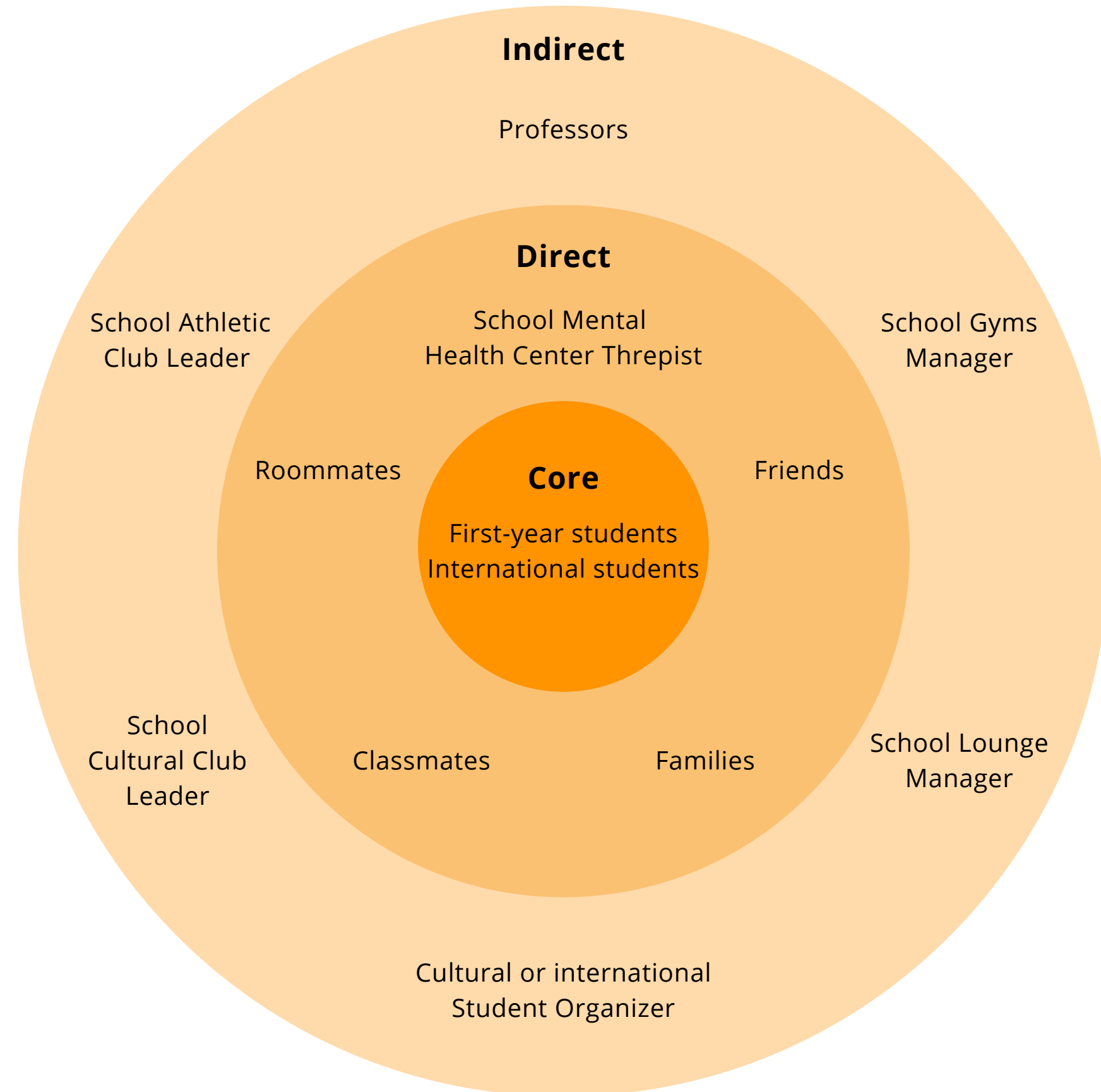
I then used an ecosystem map, using SCAD as an example, to understand how current services and products operate between the campus and students.



UNDERSTANDING USER GROUPS

Current Stakeholder Map

I used a stakeholder map to understand relationships with the user group and efficiently identify potential interaction opportunities.



UNDERSTANDING USER GROUPS

Collecting Data

I gathered quantitative survey responses and conducted qualitative interviews, analyzing insights from both to gain a deeper understanding of users' emotions, pain points, and needs.

Online Survey

I created an online survey using Google Forms and distributed it through QR codes posted around campus. Additionally, I proactively approached students at the campus cafeteria to fill out the survey, which allowed me to collect a large number of responses more effectively.

Interview

My interview candidates were selected from respondents who indicated a willingness to be interviewed in the survey. I further filtered them based on the defined user audience. The interview questions were designed based on the survey results, allowing me to gain deeper insights into users' genuine thoughts and pain points.

Affinitization and Narrow the User

I translated the insights and observations from the interviews into individual statements using both physical and digital post-it notes. This process helped me identify users' emotions, motivations, goals, pain points, and the tasks they aim to accomplish.



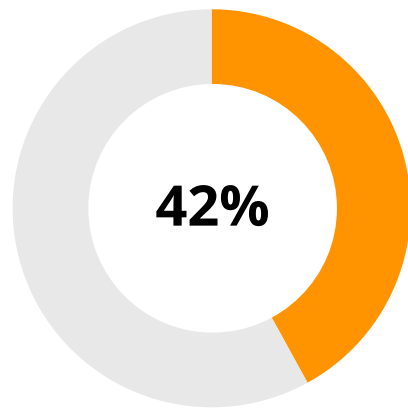
UNDERSTANDING USER GROUPS

Survey Insights

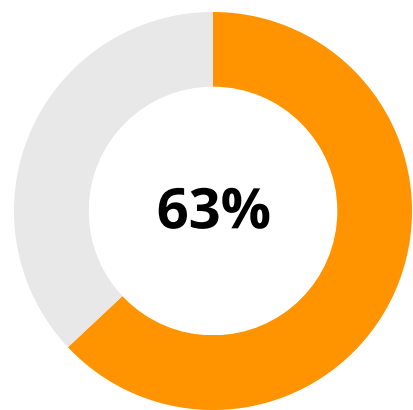
To better understand the users, I surveyed 106 individuals, including undergraduate and graduate students from all year levels, as well as recent graduates.



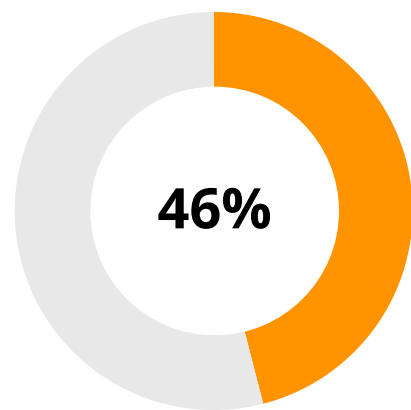
106 Responses



Students often or always feel lonely during their first year on campus.



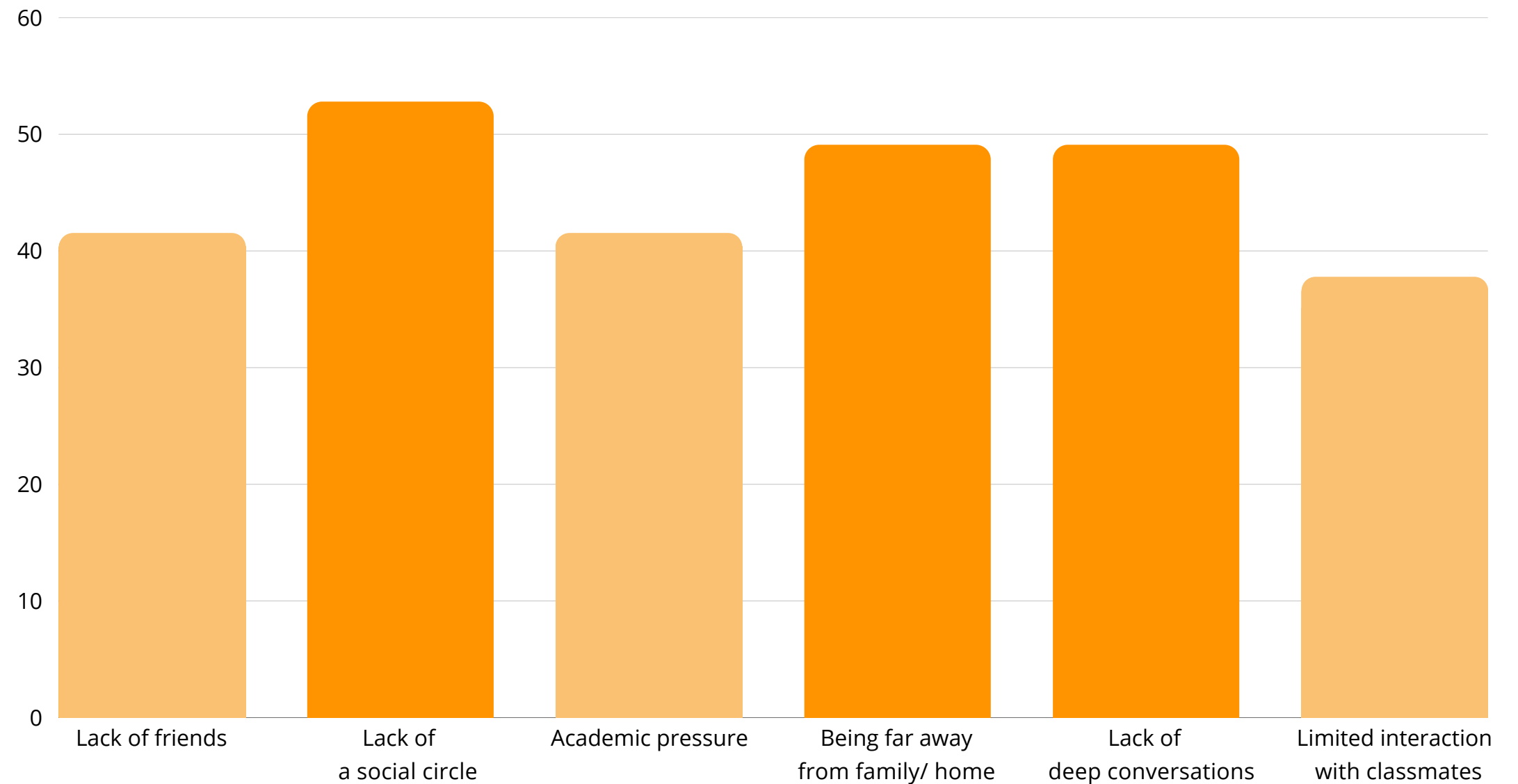
Students usually talk to their friends and family to cope with loneliness.



Students find cafés and lounge areas to be the easiest places on campus to cope with loneliness.

The reasons that cause students to feel lonely

● The percentage of people



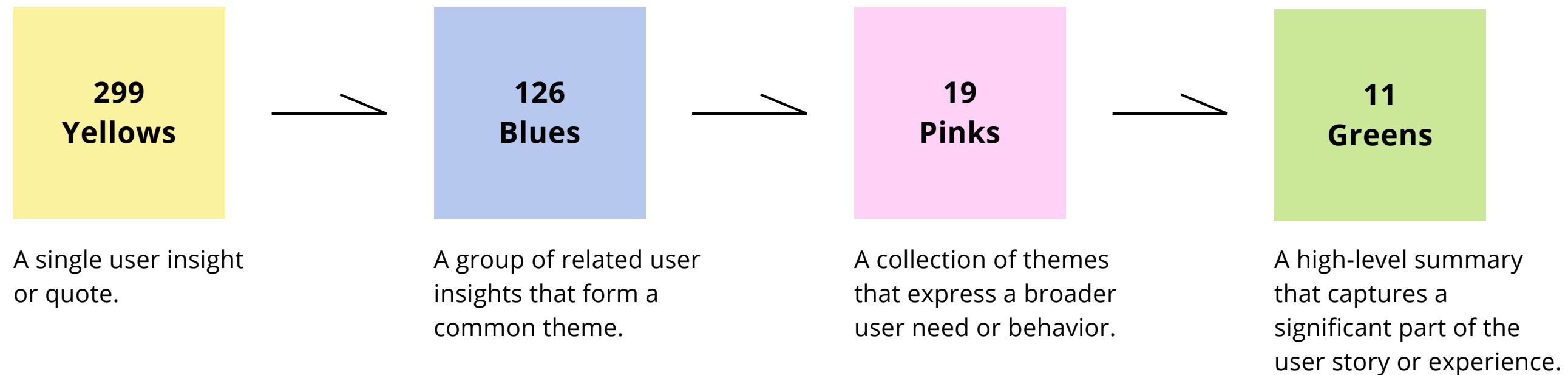
UNDERSTANDING USER GROUPS

Interview Process

After the survey, I held in-depth interviews to better understand students' loneliness on campus. Using digital sticky notes, I used digital sticky notes to organize all interview responses, clustering similar themes and potential insights to distill the final key findings.



7 Interviews



UNDERSTANDING USER GROUPS

Interview Insights

I enjoy connecting with people who share a similar cultural background, interests, and lifestyle. It gives us more to talk about.

I prefer close, face-to-face interactions over technology. Tech feels cold and lacks the warmth needed to build deeper connections.

I sometimes question my self-worth and social behavior based on how others perceive me and whether the environment feels inclusive.

Meeting new people requires time, energy, and courage—it's not always easy to take the first step.

I need someone to guide and accompany me as I adjust to a new school system and environment.

I treat others the same way I want to be treated. If someone listens and respects me, I feel more comfortable and accepted.

I keep myself busy to forget feelings of depression and loneliness, and I only ask for help when things feel out of control.

I feel more comfortable and less stressed when getting to know a few people at a time rather than many all at once.

School plays a major role in students' loneliness, especially when they constantly need to adapt to change and struggle to find a sense of belonging.

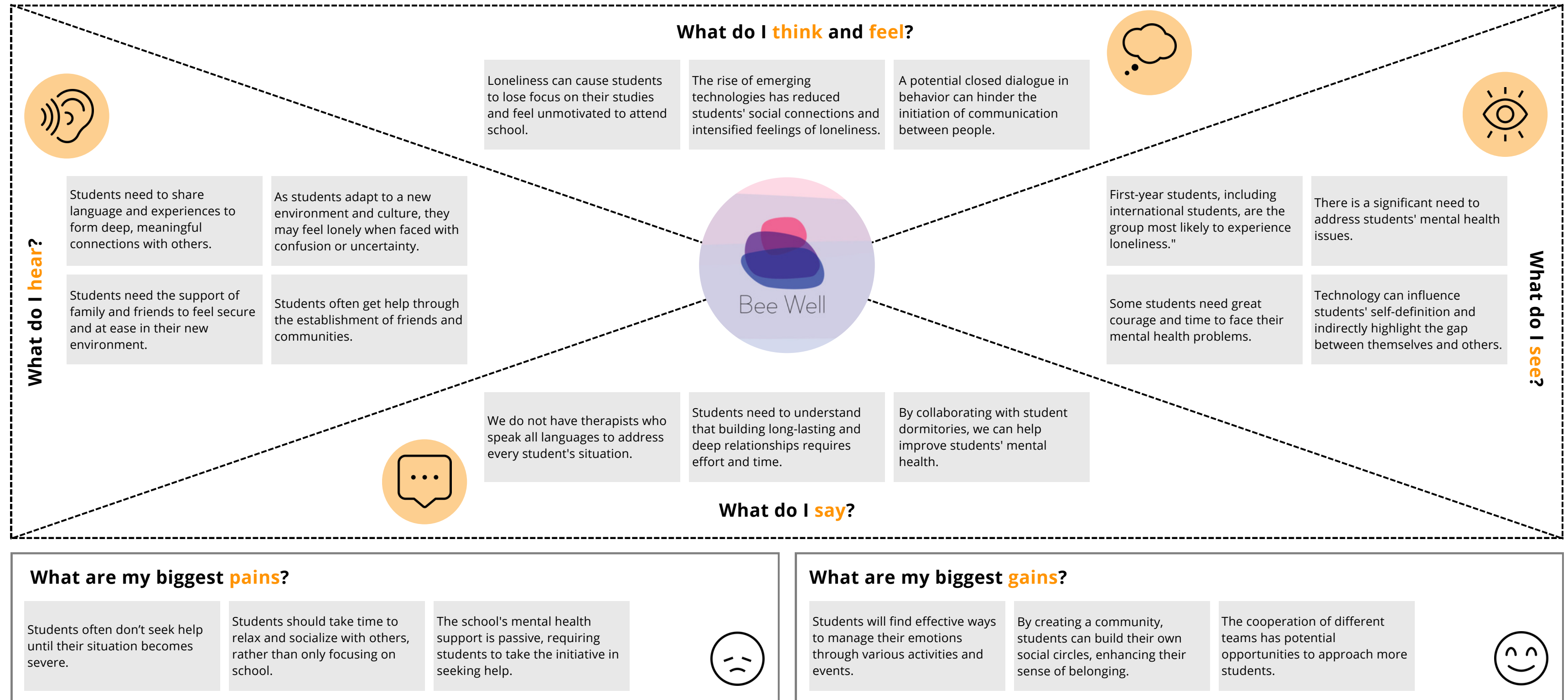
The emotional support I get from family and friends influences how I see and handle things.

A sense of belonging can grow through inclusive and welcoming communities.

UNDERSTANDING USER GROUPS

Interview Insights

SCAD Bee Well Therapist
School Mental Health Center

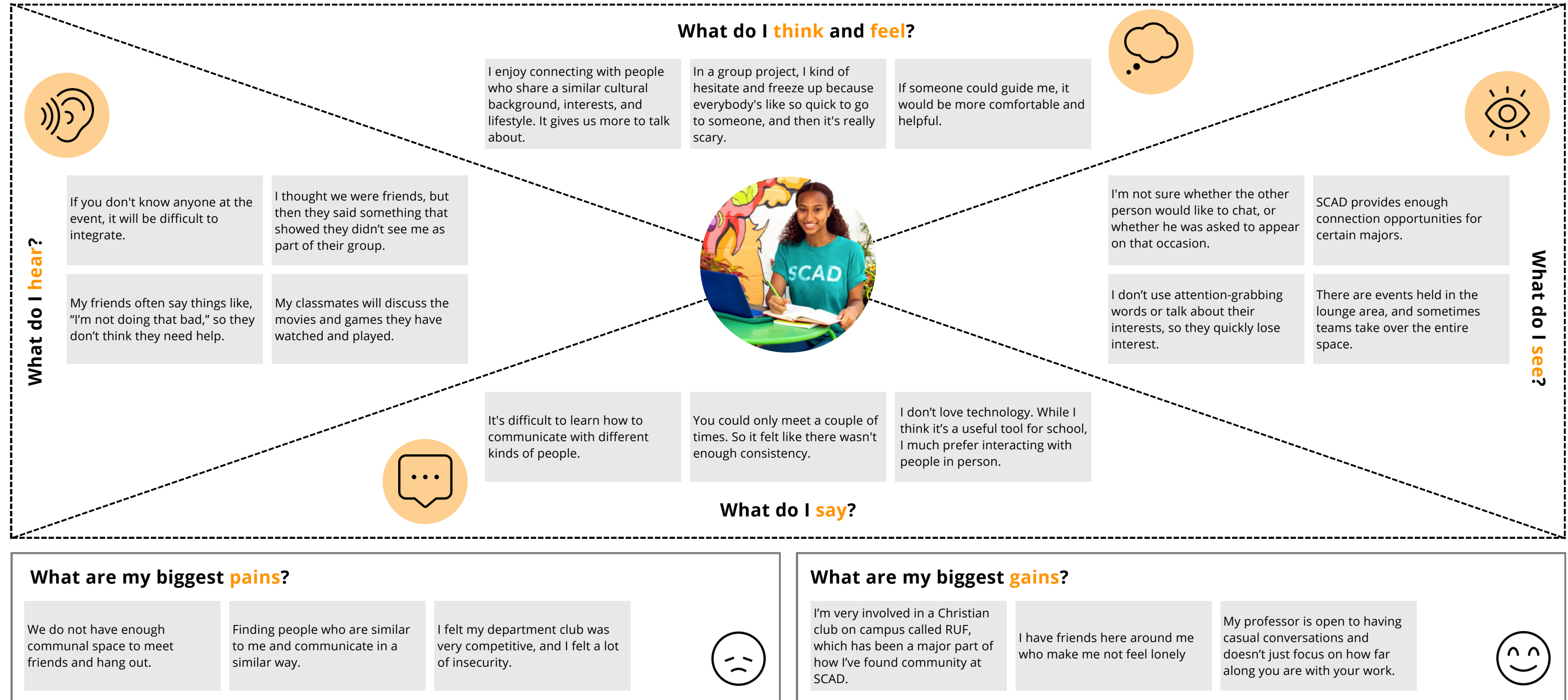


UNDERSTANDING USER GROUPS

Interview Insights

U.S. College Students

Freshman Year Experience

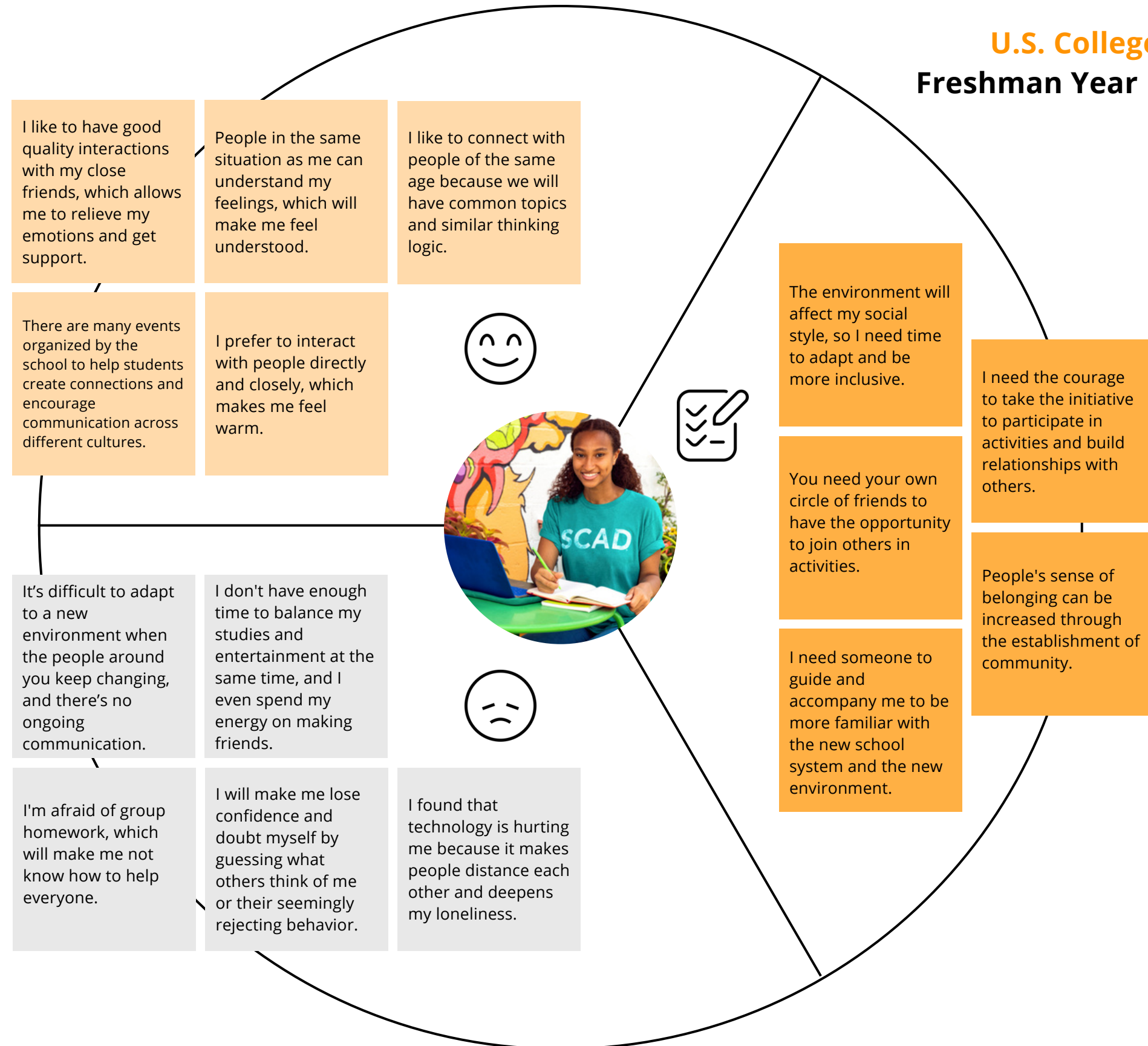


UNDERSTANDING USER GROUPS

Interview Insights

Customer Profile

U.S. College Students Freshman Year Experience



Jobs, Gains and Pains

As I moved closer to the user group, I used the Value Proposition Canvas's customer segment to create a customer profile and identify the gains, pains, and jobs to be done for U.S. college students during their freshman year experience.

UNDERSTANDING USER GROUPS

Interview Insights

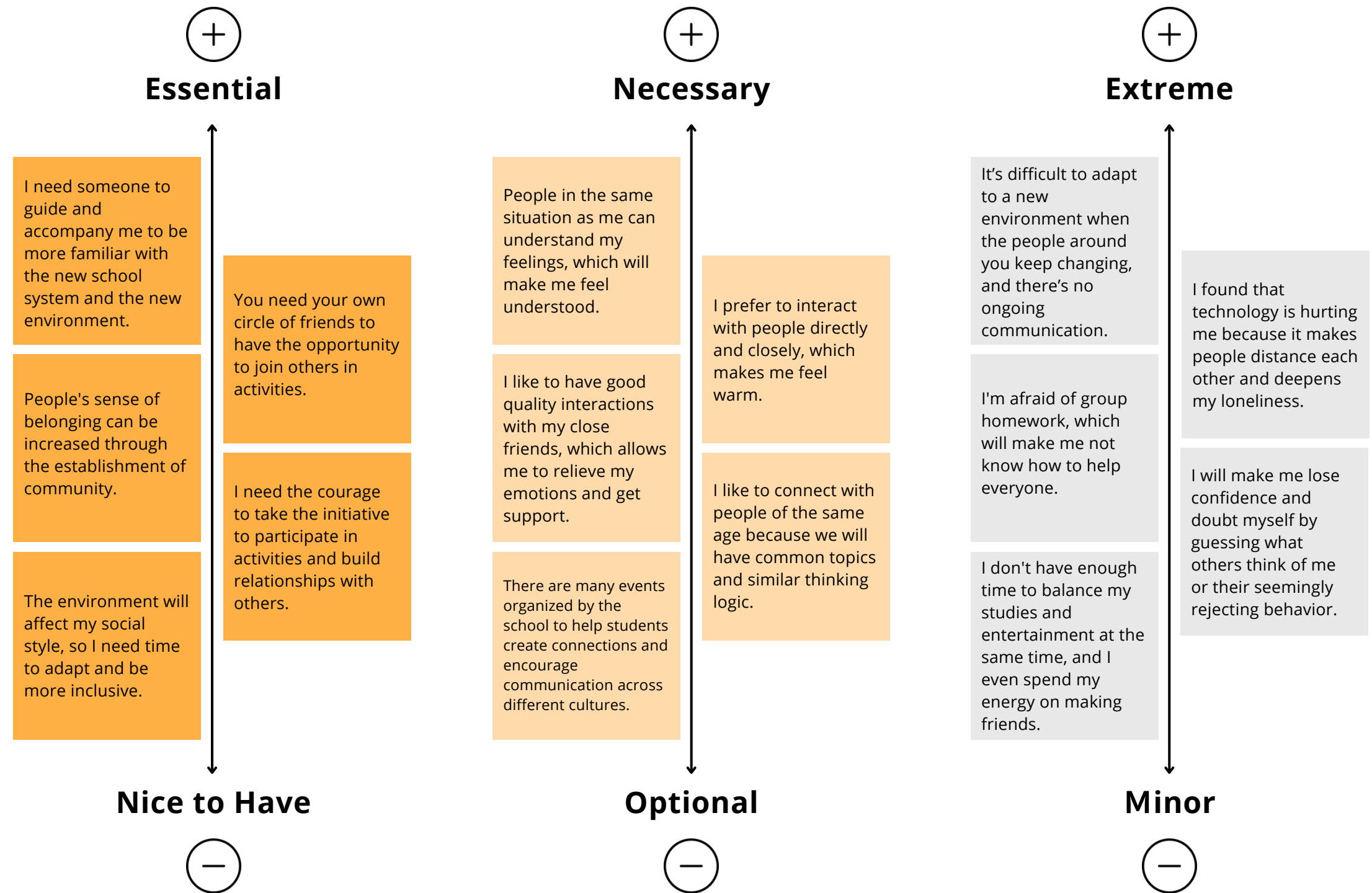


U.S. College Students

Freshman Year Experience

Ranking

In order to prioritize the gains, pains, and jobs for U.S. college students during their freshman year experience, I ranked them to better understand which are most significant and essential.

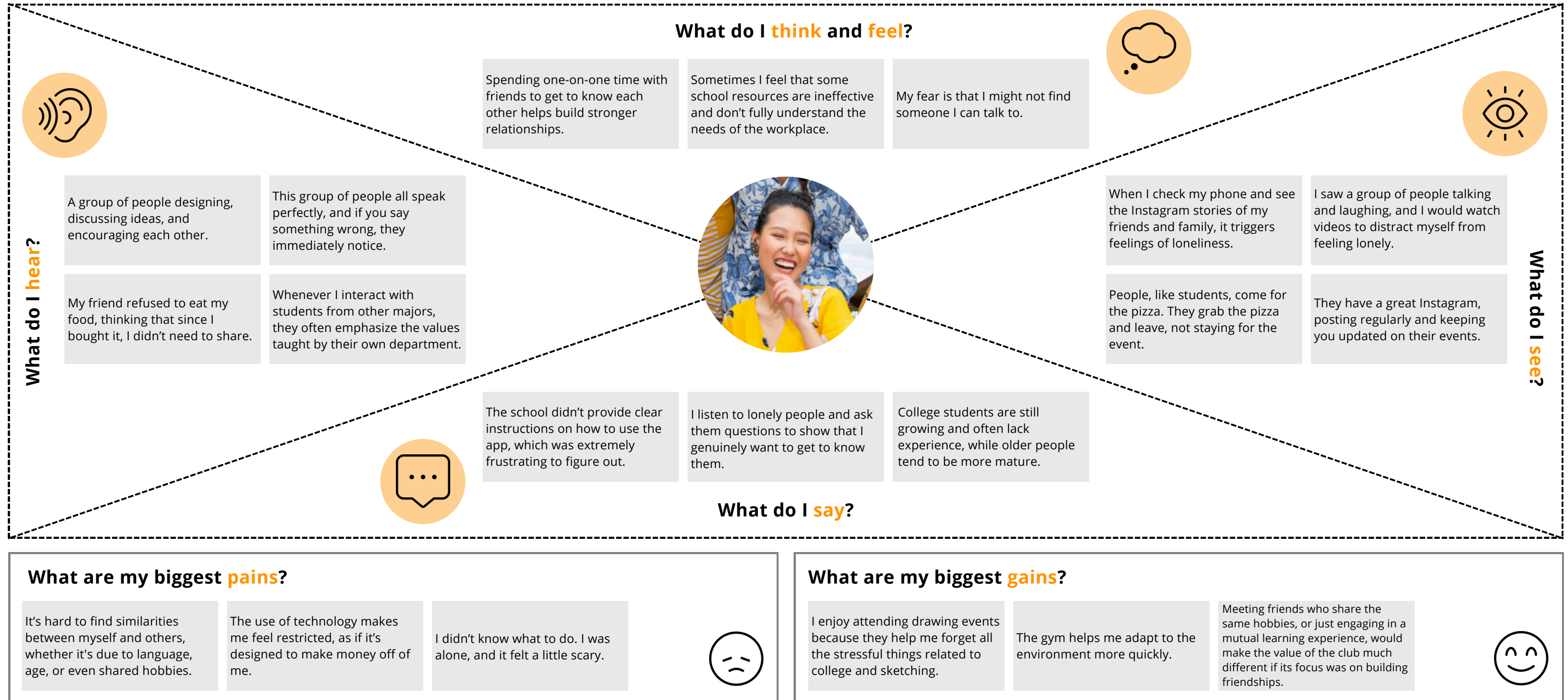


UNDERSTANDING USER GROUPS

Interview Insights

International Students

First-Year Experience

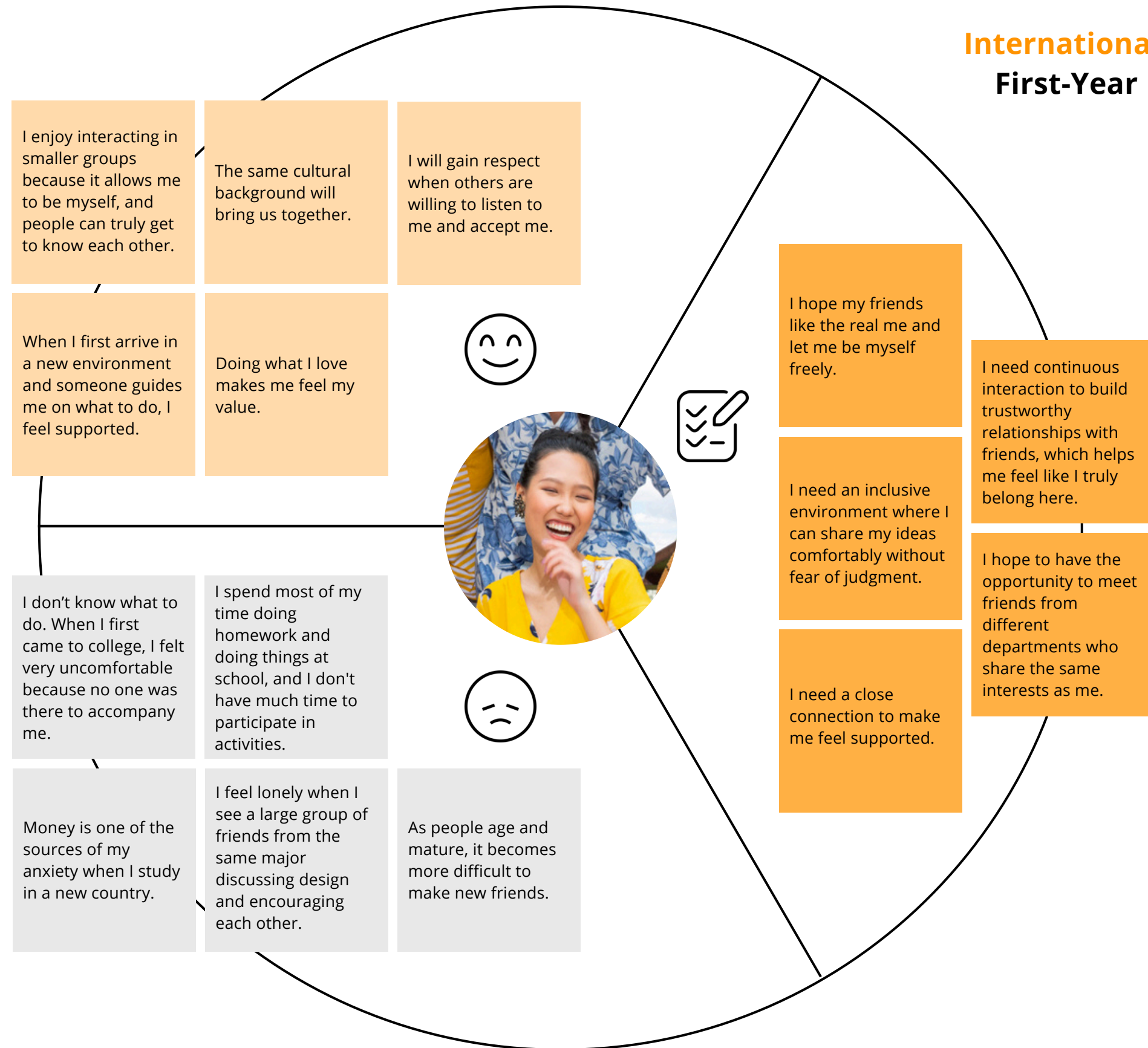


UNDERSTANDING USER GROUPS

Interview Insights

Customer Profile

International Students First-Year Experience



Jobs, Gains and Pains

As I moved closer to the user group, I used the customer segment of the Value Proposition Canvas to build a customer profile and identify the gains, pains, and jobs to be done for international students during their first-year experience.

UNDERSTANDING USER GROUPS

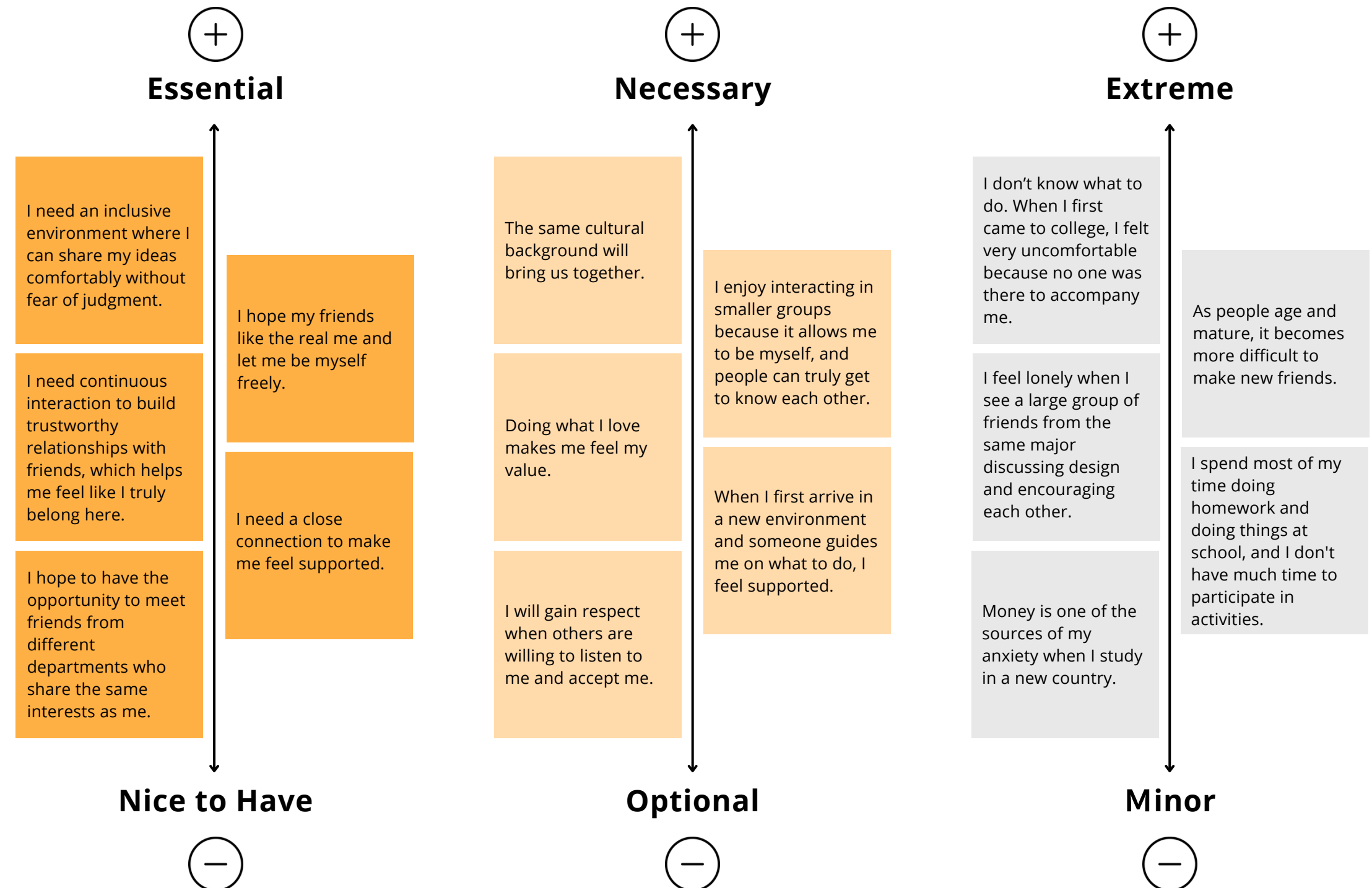
Interview Insights



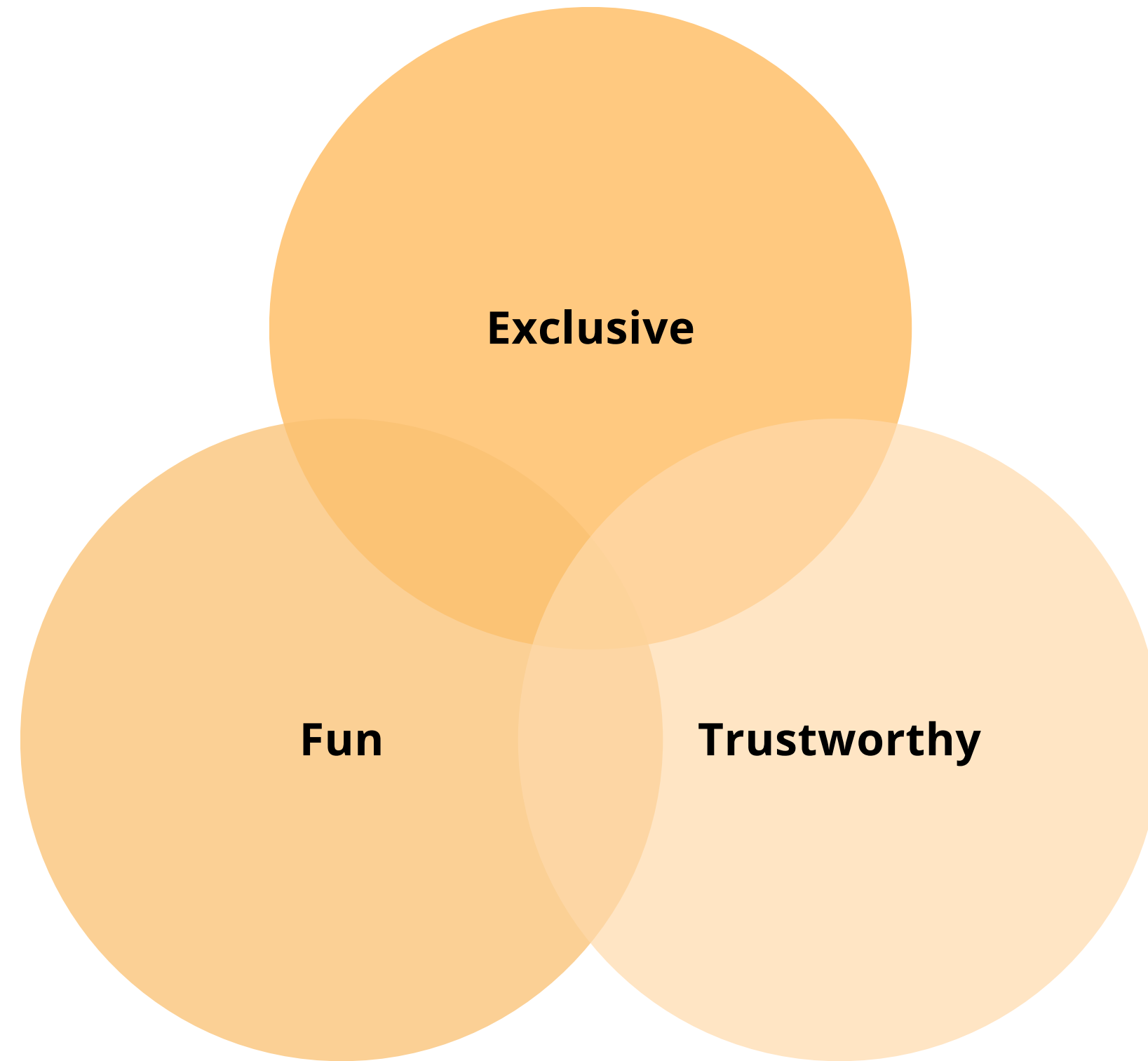
International Students First-Year Experience

Ranking

In order to prioritize the gains, pains, and jobs for international students during their first-year experience, I ranked them to better understand which were the most significant and essential.



UNDERSTANDING USER GROUPS
Initial Value Pillars



05

Generating Insights from User Data

GENERATING INSIGHTS FROM USER DATA

Actionable Insights

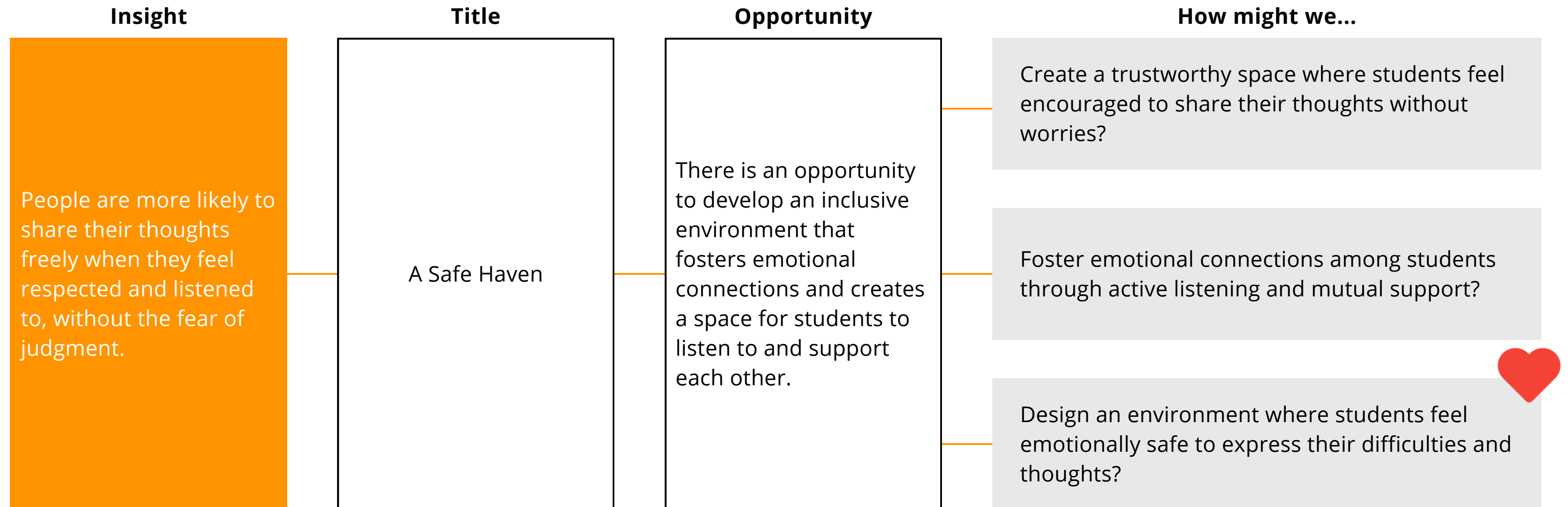
I organized all the data points and categorized them by themes to uncover actionable insights. I identified five key insights that will be used to expand my "How might we" questions.

<p>People are more likely to share their thoughts freely when they feel respected and listened to, without the fear of judgment.</p>		<p>Connecting with people who share similar cultural backgrounds, interests, and lifestyles fosters self-discovery and helps build lasting relationships.</p>		<p>Direct interaction with people and the warmth of conversation help bridge the distance, making communication more meaningful than relying on technology as a medium for exchanging ideas.</p>		<p>I need someone to accompany me as I adapt to the new environment and guide me in familiarizing myself with the school and daily life needs</p>		<p>I hope to have the opportunity to meet people from different departments who share similar interests, and I would be willing to invest time and effort to connect and interact with them.</p>	
<p>I need an inclusive environment where I can share my ideas comfortably without fear of judgment.</p>	<p>I'm afraid of group homework, which will make me not know how to help everyone.</p>	<p>I need continuous interaction to build trustworthy relationships with friends, which helps me feel like I truly belong here.</p>	<p>I need a close connection to make me feel supported.</p>	<p>As people age and mature, it becomes more difficult to make new friends.</p>	<p>I prefer to interact with people directly and closely, which makes me feel warm.</p>	<p>I need someone to guide and accompany me to be more familiar with the new school system and the new environment.</p>	<p>I don't know what to do. When I first came to college, I felt very uncomfortable because no one was there to accompany me.</p>	<p>I hope to have the opportunity to meet friends from different departments who share the same interests as me.</p>	<p>There are many events organized by the school to help students create connections and encourage communication across different cultures.</p>
<p>People in the same situation as me can understand my feelings, which will make me feel understood.</p>	<p>I feel lonely when I see a large group of friends from the same major discussing design and encouraging each other.</p>	<p>I enjoy interacting in smaller groups because it allows me to be myself, and people can truly get to know each other.</p>	<p>You need your own circle of friends to have the opportunity to join others in activities.</p>	<p>I found that technology is hurting me because it makes people distance each other and deepens my loneliness.</p>	<p>I like to have good quality interactions with my close friends, which allows me to relieve my emotions and get support.</p>	<p>When I first arrive in a new environment and someone guides me on what to do, I feel supported.</p>	<p>I spend most of my time doing homework and doing things at school, and I don't have much time to participate in activities.</p>	<p>I need the courage to take the initiative to participate in activities and build relationships with others.</p>	<p>Students need to understand that building long-lasting and deep relationships requires effort and time.</p>
<p>It's difficult to adapt to a new environment when the people around you keep changing, and there's no ongoing communication.</p>	<p>I will make me lose confidence and doubt myself by guessing what others think of me or their seemingly rejecting behavior.</p>	<p>I hope my friends like the real me and let me be myself freely.</p>	<p>I like to connect with people of the same age because we will have common topics and similar thinking logic.</p>	<p>Technology can influence students' self-definition and indirectly highlight the gap between themselves and others.</p>		<p>As students adapt to a new environment and culture, they may feel lonely when faced with confusion or uncertainty.</p>			
<p>The same cultural background will bring us together.</p>	<p>I will gain respect when others are willing to listen to me and accept me.</p>	<p>People's sense of belonging can be increased through the establishment of community.</p>	<p>Doing what I love makes me feel my value.</p>						

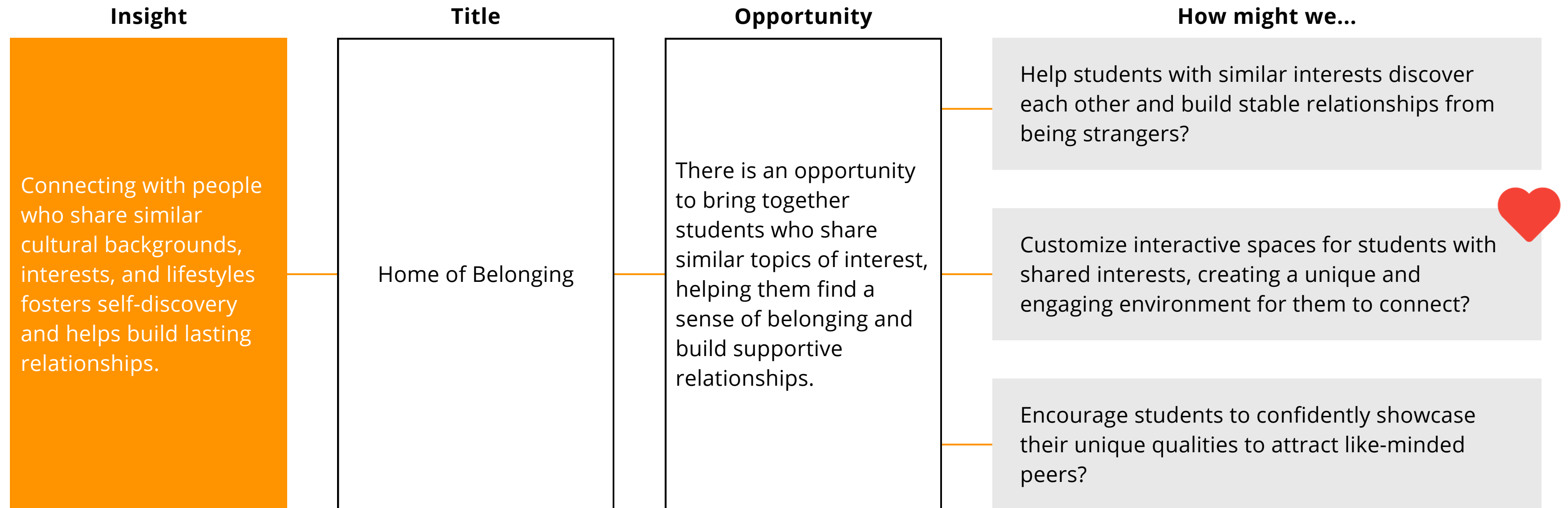
GENERATING INSIGHTS FROM USER DATA

Identifying Design Opportunities

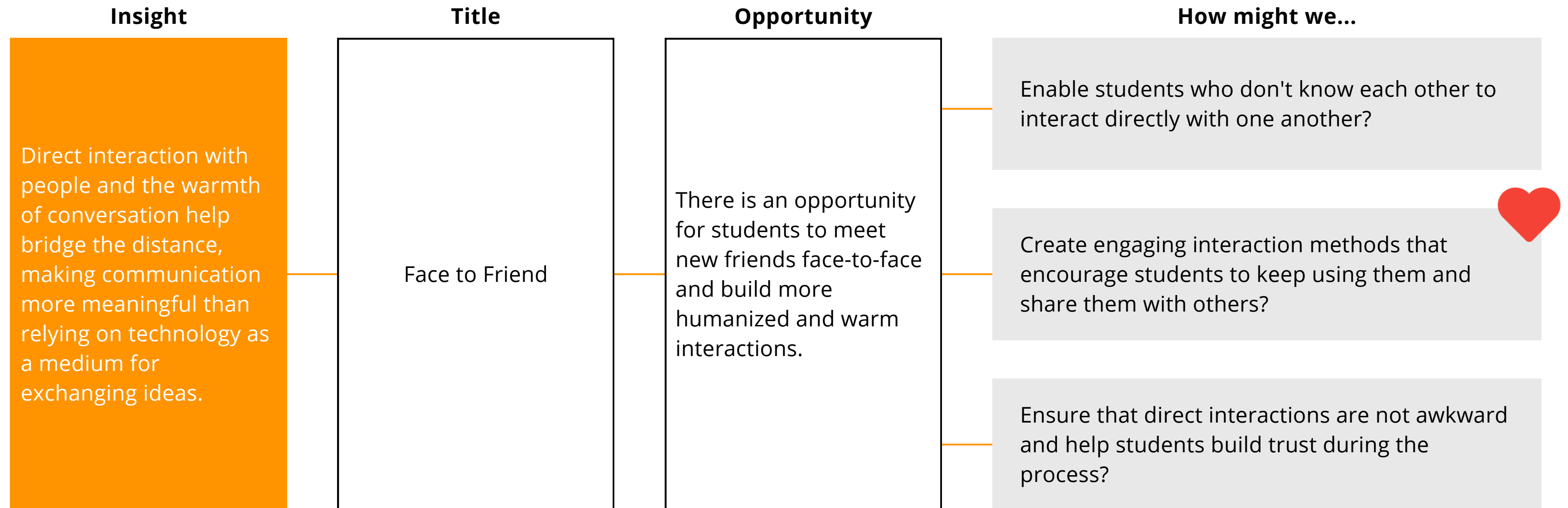
I took the insights into stride and sculpted my “How might we...” statements, which became the foundation of my ideation process for designing opportunities.



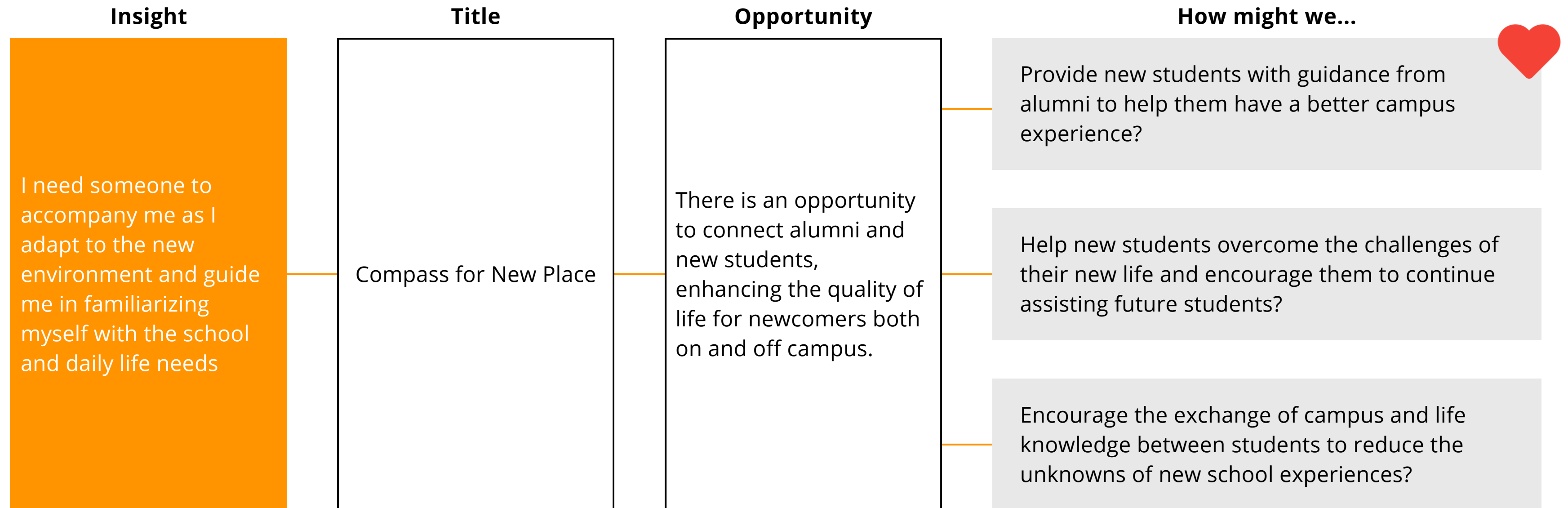
Identifying Design Opportunities



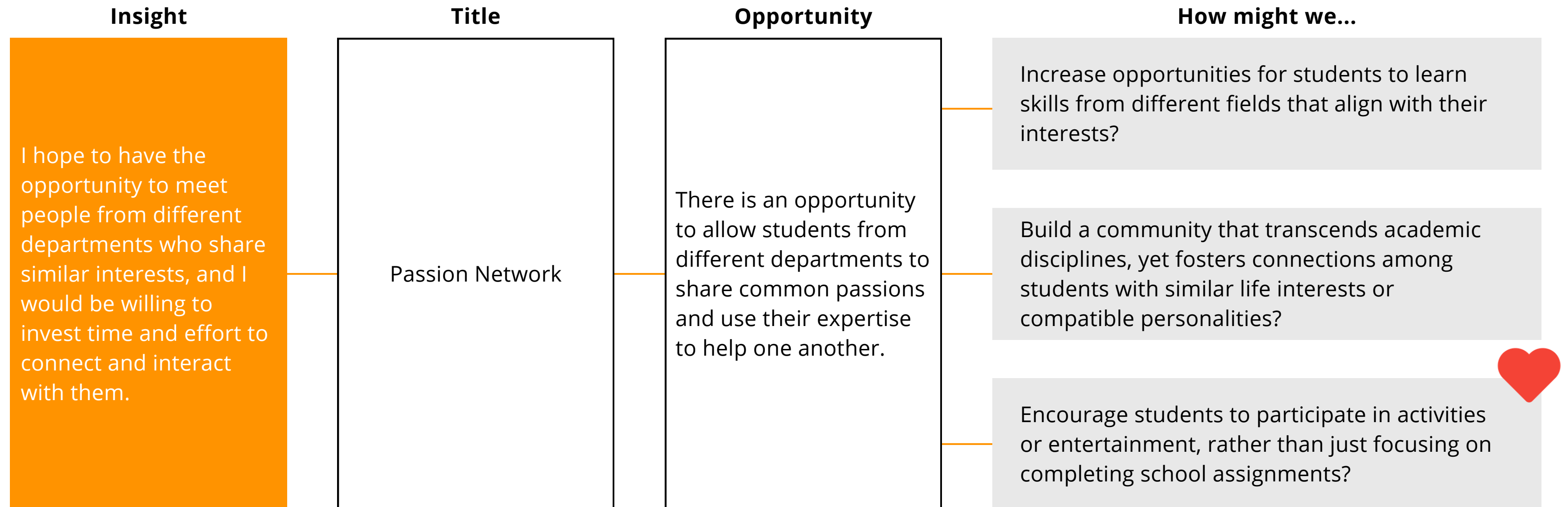
Identifying Design Opportunities



Identifying Design Opportunities



Identifying Design Opportunities



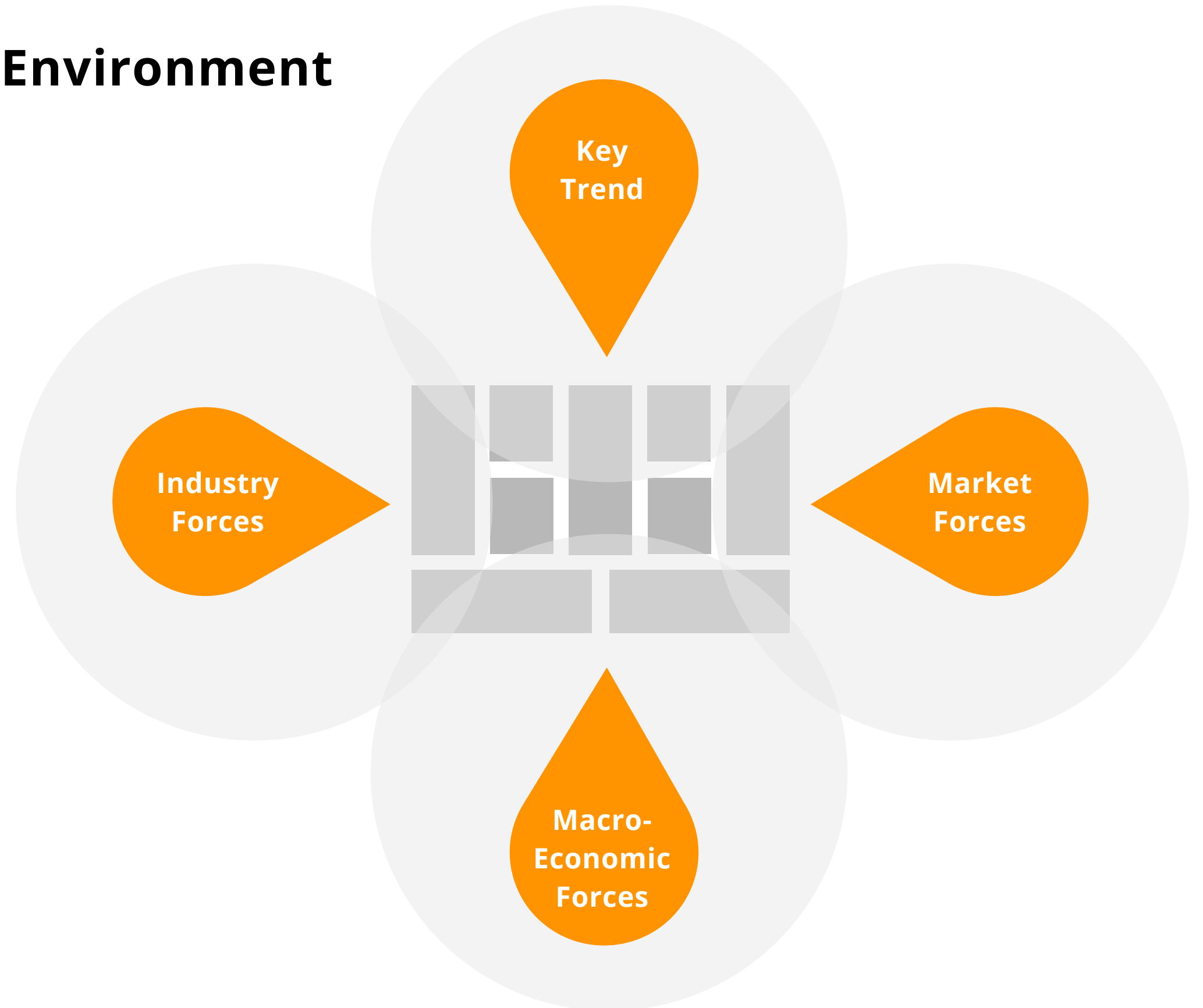
06

Build a Business

BUILD A BUSINESS

Examining the Business Model Environment

To better understand our target business landscape, I analyzed four key areas from Osterwalder's Business Model Generation (2010): Market Forces, Industry Forces, Key Trends, and Macroeconomic Forces.



BUILD A BUSINESS

Examining the Business Model Environment

To understand the elements shaping our Business Model Environment, I began by analyzing the key industry forces impacting the business model.

Industry Forces

Competitors

- On-campus counseling centers, mental health apps (e.g., BetterHelp, Talkspace)
- Student clubs, campus events, and social apps (e.g., Bumble for Friends)

Suppliers and Other Value Chain Actors

- Therapists, counselors, event organizers, NGOs, community support services
- University resources and student housing offices as implementation partners

Stakeholders

- Universities (administration, counseling centers, housing offices).
- Students (as both users and co-creators of community).
- Mental health professionals and non-profits.
- Tech partners (platform providers, AI/UX collaborators).
- Investors in EdTech and HealthTech.

New Entrants

- Startups offering community-based or AI-powered emotional support
- EdTech and HealthTech companies entering the mental wellness space

Substitute Products and Services

- Distractions such as video games, streaming content, or exercise as coping mechanisms



BUILD A BUSINESS

Examining the Business Model Environment

I also analyzed the latest key industry trends that could significantly impact the business model.

Key Trends

Technology Trends

- Growth in AI-based mental wellness tools and virtual companions
- Exploration of immersive social environments like the metaverse

Socioeconomic Trends

- Gen Z speaks up on mental health but distrusts institutions.
- Inequality, isolation, and money stress deepen loneliness.
- Students want meaningful, identity-based communities.

Societal and Cultural Trends

- Gen Z is more open to discussing mental health but may still hesitate to seek help
- Loneliness is increasingly recognized as a public health issue, not a personal failure

Regulatory Trends

- Increased government pressure on universities to address mental health
- Privacy regulations (e.g., HIPAA) require secure handling of student data



BUILD A BUSINESS

Examining the Business Model Environment

By examining the current market forces, I gained insights into the market trends and key stakeholders crucial to the business model.

Market Forces

Market Issues

- Loneliness is rising, especially among first-year and international students.
- Mental health services are reactive, stigmatized, and culturally limited.
- Students want emotional connection over clinical treatment.
- There's a need for safe, inclusive, interest-based communities.

Needs and Demands

- Emotional support, sense of belonging, social connection
- Low-barrier, non-clinical forms of interaction
- Multilingual and culturally inclusive support platforms or programs

Market Segments

- First-year college students, international students
- Students experiencing mild mental health issues or emotional challenges
- University departments (student affairs, mental health offices) as partners or paying clients

Revenue Attractiveness

- Schools have budgets for student wellness and retention improvement
- Potential for brand sponsorships or CSR partnerships to support mental health initiatives



BUILD A BUSINESS

Examining the Business Model Environment

I also considered broader macroeconomic forces, such as global market conditions, economic infrastructure, and capital markets, that could impact the business model.

Macroeconomic Forces

Global Market Conditions

- Loneliness and youth mental health are global concerns, especially post-pandemic.
- Global interest in scalable emotional support models and digital wellness tools.
- Rising mental health investment and support in higher education systems globally.

Economic Infrastructure

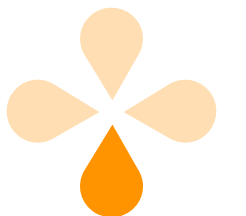
- Rising financial stress among students contributes to mental health challenges
- Growing demand for affordable, accessible emotional support options

Commodities & Other Resources

- Campuses often have available physical space and digital platforms for social programs
- High internet access and 5G support a variety of communication formats

Capital Markets

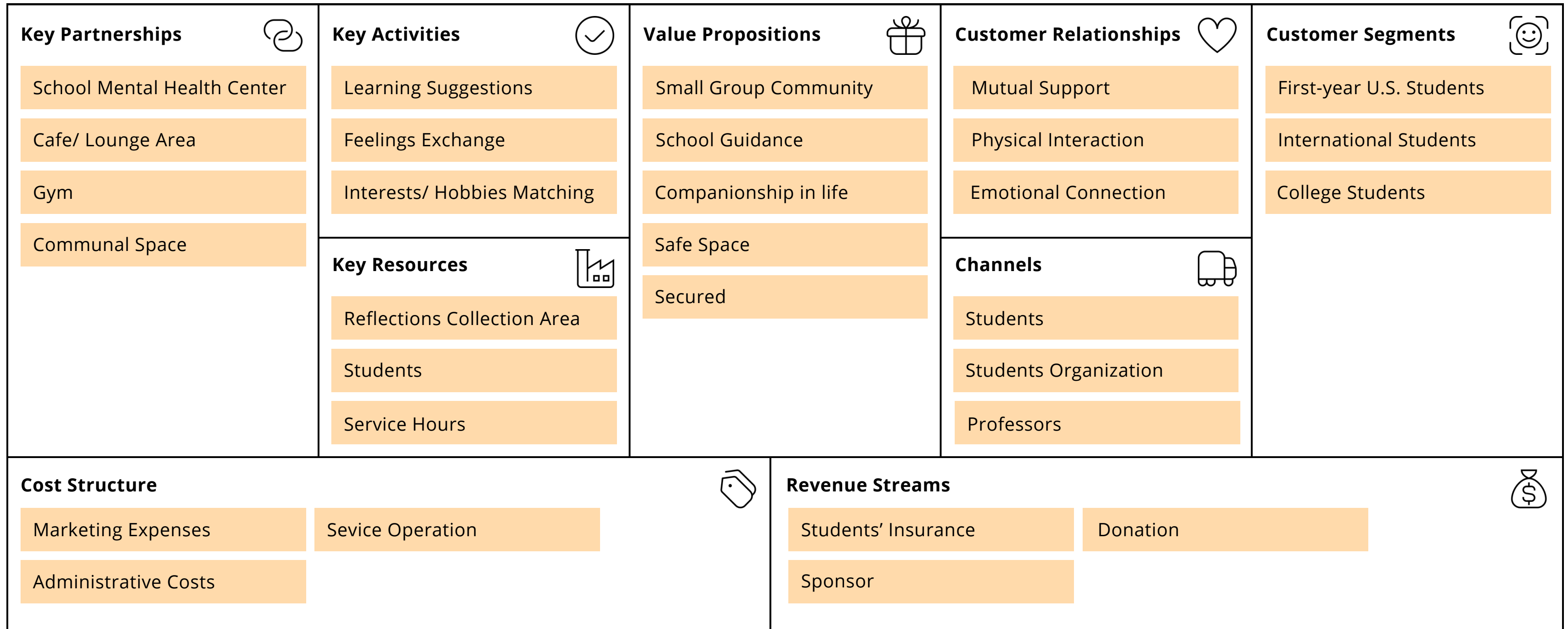
- Mental health tech is a growing area of interest for early-stage investors



BUILD A BUSINESS

Initial Business Model

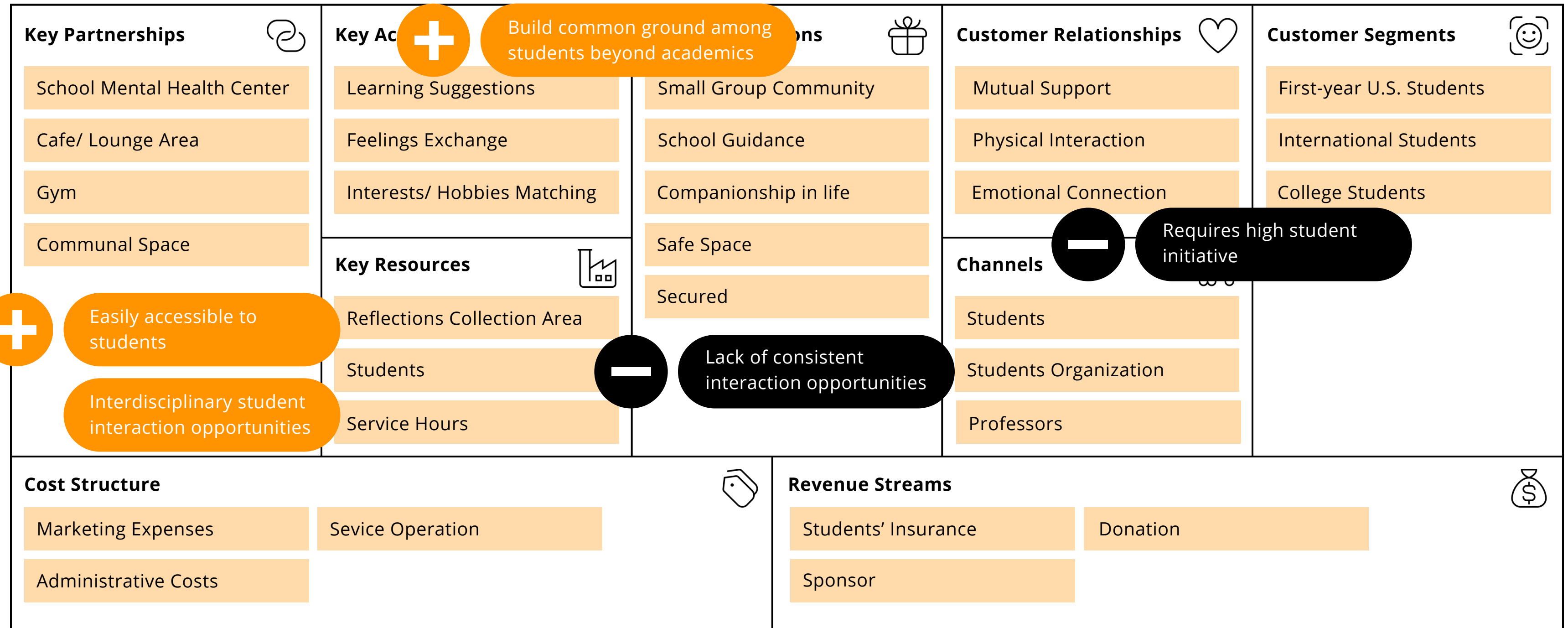
Based on my in-depth research and analysis, I developed a comprehensive business model tailored to address the unique needs and opportunities within the market.



BUILD A BUSINESS

SWOT Analysis

I used a SWOT analysis to assess the model. Building safe, meaningful student connections is a strength, but long-term engagement remains a challenge due to varying student initiative.



BUILD A BUSINESS

Value Proposition

For first-year college students

Who often experience loneliness,

Our interactive space

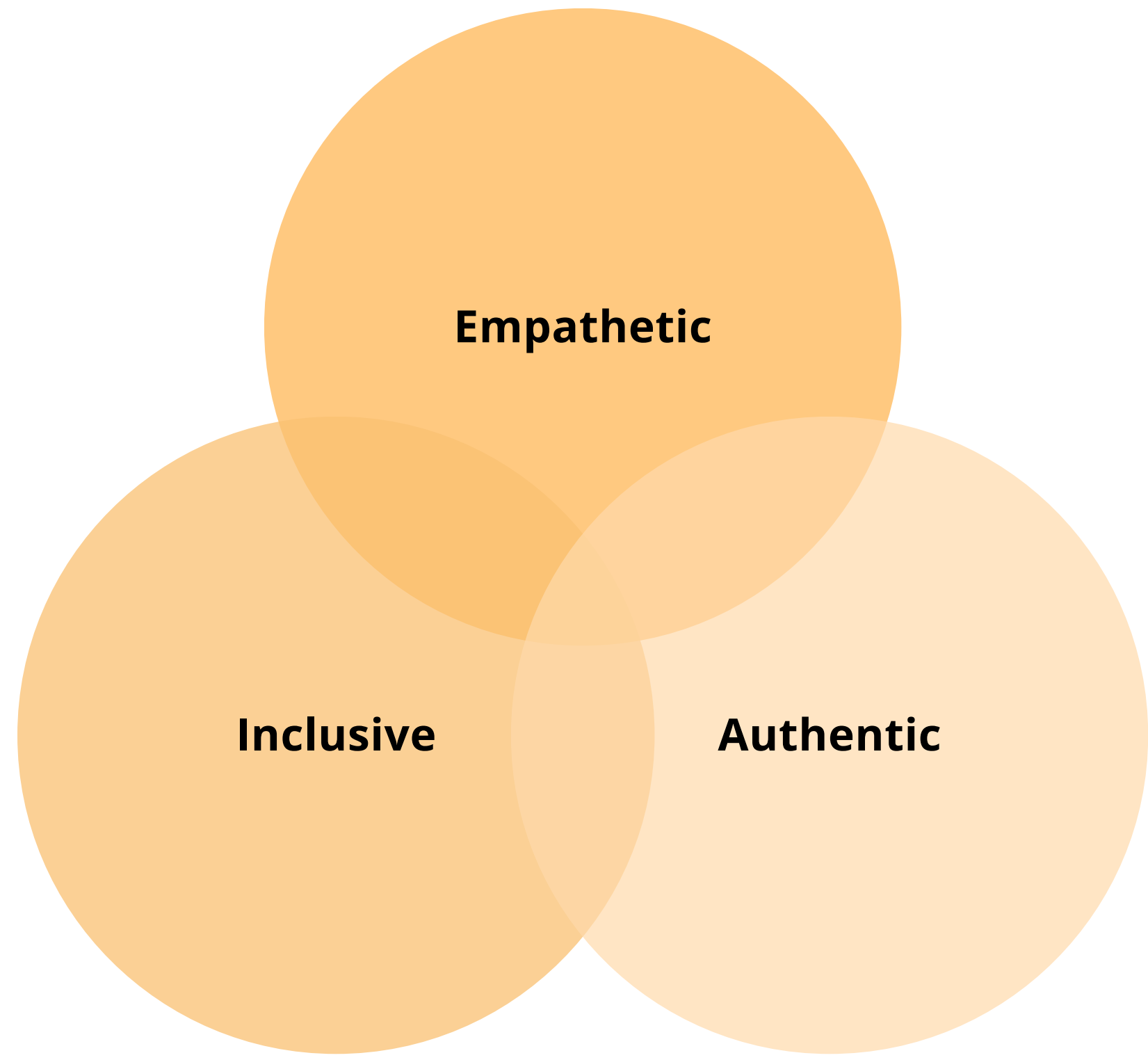
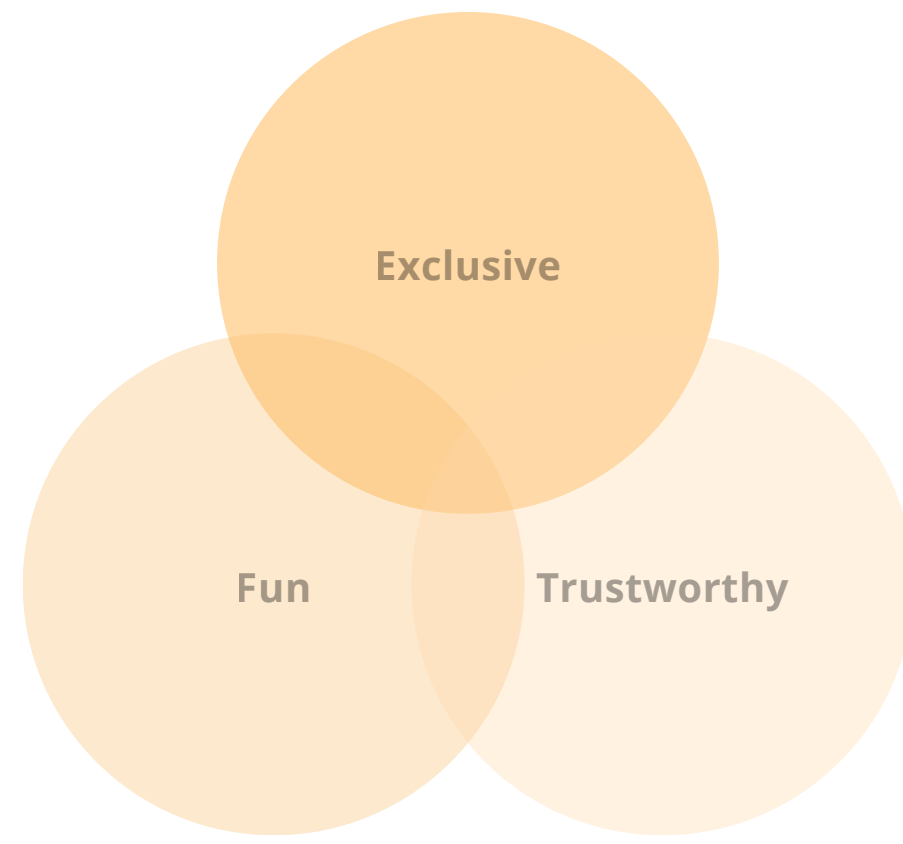
That offers a safe and welcoming environment to share thoughts and challenges, grounded in your interests, cultural background, and personal circumstances.

Unlike common mental health therapies or matching apps on the market, which rely heavily on digital connection and individual initiative,

Our solution embraces each person's uniqueness and fosters deeper, long-lasting relationships through warm, in-person interactions.

BUILD A BUSINESS

Reframing Value Pillars



BUILD A BUSINESS

Balanced Scorecard

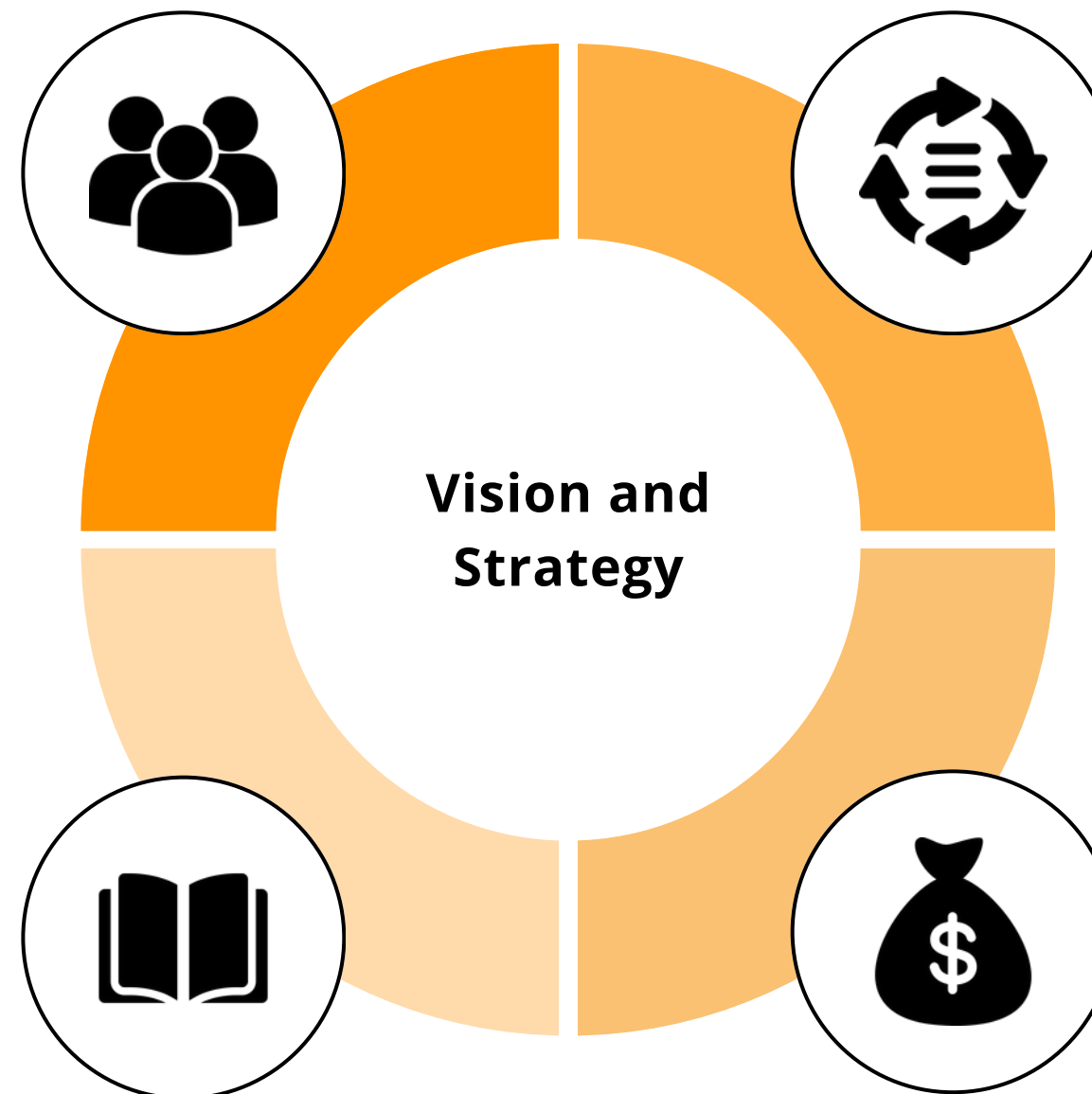
To ensure our business stays on the path to success, I created a Balanced Scorecard with key performance indicators, inspired by Brigitte Borja de Mozota's insights on design thinking (Lockwood, 2009).

Customer Relationship

- Reduction in student-reported loneliness, according to the school's mental health center.
- Increase in student engagement on campus
- Student Net Promoter Score (NPS) for recommending the school

Knowledge and Growth

- Number of students participating in off-campus social activities (e.g., jogging, picnics)
- Increased student scores in self-awareness and resilience assessments
- Improvement in students' confidence and initiative



Internal Process

- Number of interdepartmental collaborations (e.g., counseling, student affairs, academic advisors)
- Implementation status of loneliness risk identification processes
- Response rate to student feedback mechanisms

Financial

- Reduction in tuition loss due to student dropouts
- Amount of investment and donations received for the project
- Cost-benefit ratio of the project (resources spent vs. impact achieved)
- Increase in student retention rate

07

Design Development

DESIGN DEVELOPMENT

Main Insights

By synthesizing insights from all primary and secondary research, I identify the key areas of need and the most influential factors to guide the design development.



Feel Respected

When students feel safe and respected, they become more confident and willing to express their ideas.



Similar Cultural Backgrounds

Sharing a similar cultural background helps students find a sense of belonging and identity, making them feel more understood during interactions.



Warm Connection

Compared to digital interactions, students often prefer face-to-face connections, as they feel warmer and reduce the emotional distance between people.



Guidance

When students enter a new environment, guidance can be a powerful way to help strangers connect and foster a mindset of mutual support.



Same Interest

People with similar interests are more likely to have comfortable, engaging conversations, helping students feel at ease more quickly.

DESIGN DEVELOPMENT

Persona

I combined the U.S. college freshmen and international first-year students groups to create a unified persona by identifying their shared needs and pain points. This persona will guide my design concepts and planning for the next stages.



Age: 18
Location: Savannah, GA
Occupation: Freshman
Hometown: Korea

About Me:

Although I grew up in Texas, this is my first time coming to Savannah to attend college. I'm majoring in Furniture Design, and while I feel nervous about the new environment, I'm also really excited and hope to make some new friends here. I don't drive, so getting around in a new place can feel a bit challenging.

Goal:

After graduating from college, she hopes to become a furniture designer and work in the field for a while. Once she has enough savings, she plans to launch her own brand. In the future, she dreams of traveling the world and enjoying local cuisines from different countries.

Personality:

- ENFJ
- Outgoing
- Social introvert
- Sensual
- Reasonable
- Eager to help
- Dog person

Interest:

- Enjoys trying new food
- Traveling
- Working out
- Occasionally works at cafés
- Likes discussing ideas with others

Needs:

- I need someone to guide me on how to take the school bus.
- I want to find friends who also enjoy working out.
- I'd like someone to tell me where to find good food.

Pain Points:

- I don't have any transportation.
- I can't cook in the dorms.
- School assignments keep me really busy, and I don't have time to rest.
- I don't know how to find resources in the school library.

DESIGN DEVELOPMENT

Introducing Business Offering

Echo Corner is an interactive space where students can comfortably share their thoughts. Echo Corner provides a safe and relaxed environment that fosters mutual respect and allows students to connect with one another at any time.

Concept

Building connections through shared interests and cultural backgrounds, Echo Corner offers three purpose-driven interactive spaces – Look, Listen, Lend Your Hand – to foster meaningful, lasting connections. Inspired by the TED Talk "The Dangers of Loneliness" by Richard Pile.

Goal

Echo Corner will be placed in accessible locations, making relationship-building easy and convenient for students. It aims to guide students from understanding one another and building self-confidence to fostering deeper, lasting connections, ultimately creating an inclusive, supportive, and empathetic learning environment.

Echo Corner

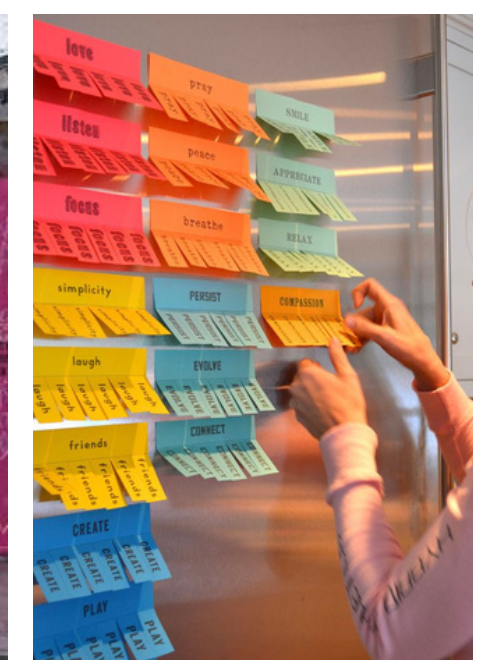
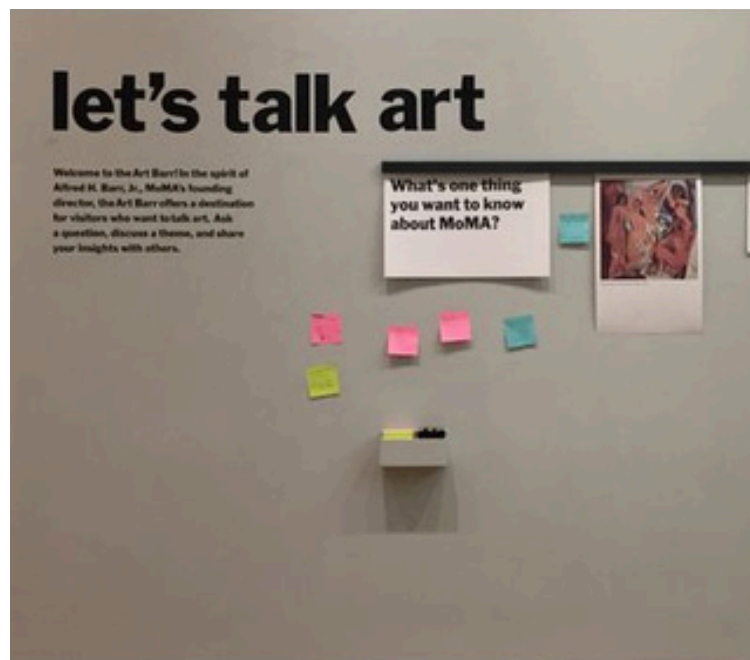
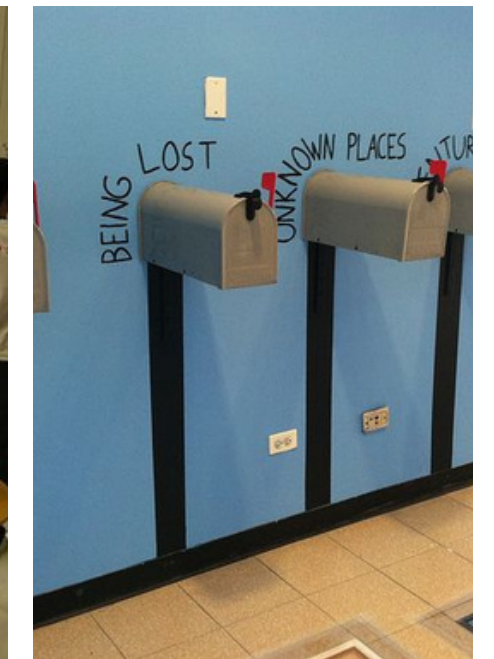
Echo Corner represents the idea that your voice will be heard and responded to, like an echo.



DESIGN DEVELOPMENT

Idea Board

The Idea Board is designed to help me explore the formats and presentation methods for interactive spaces.



DESIGN DEVELOPMENT

Mood Board

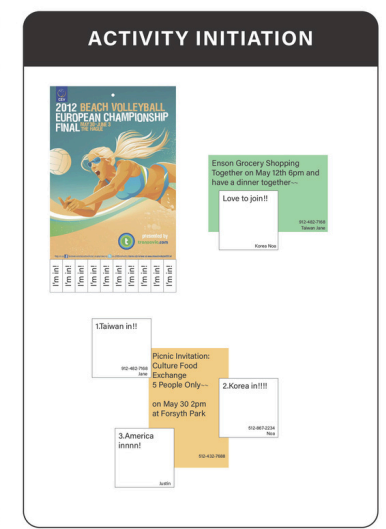
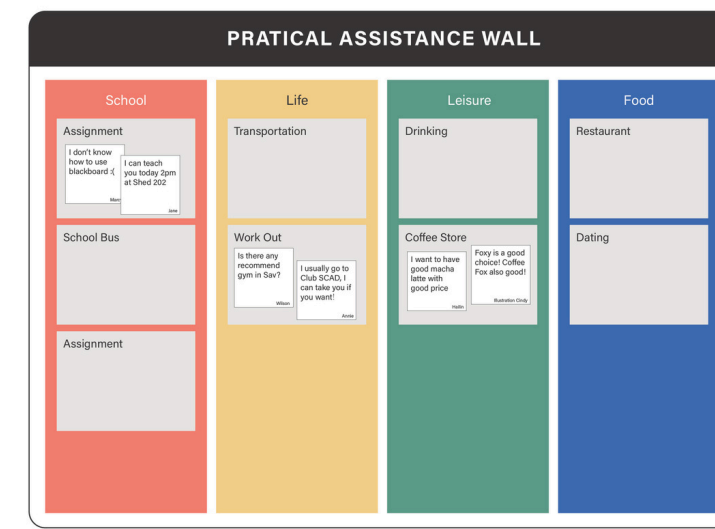
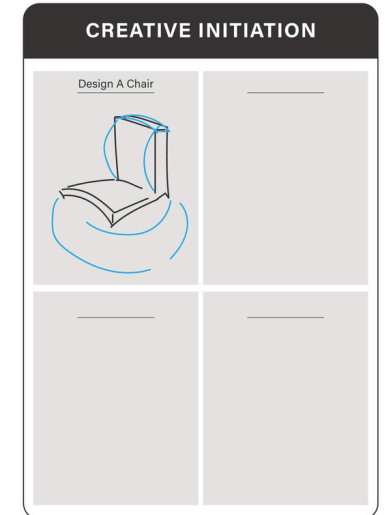
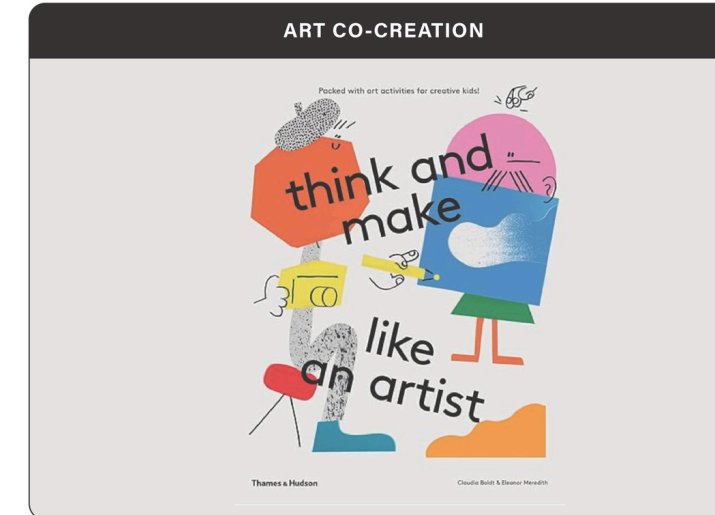
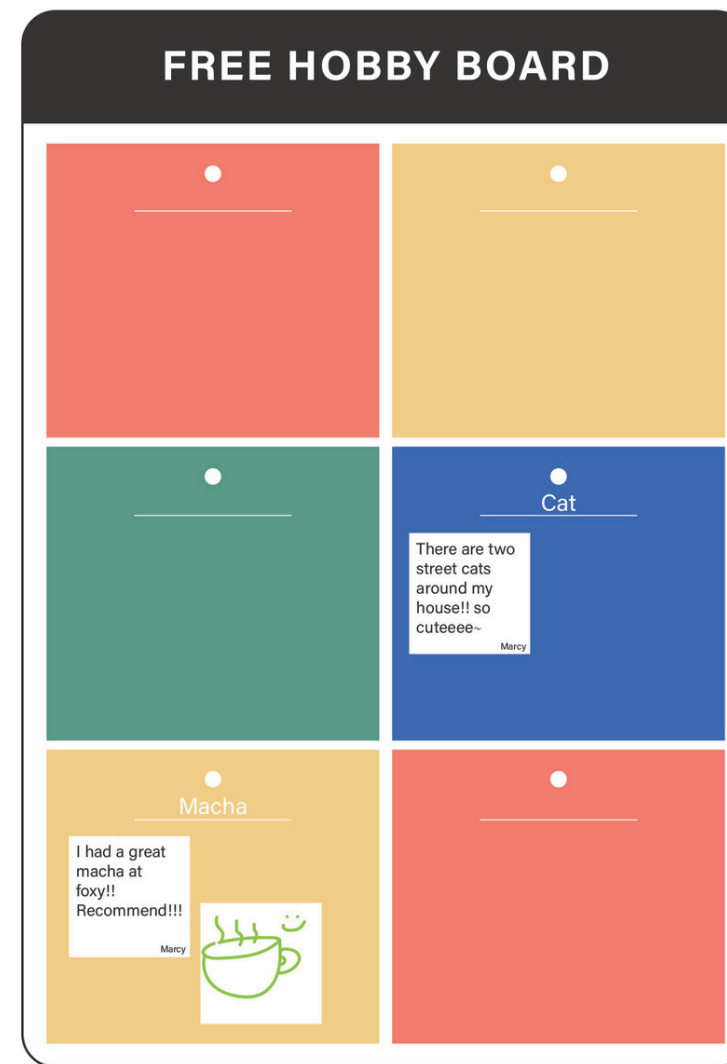
The Mood Board is designed to help me explore the atmosphere and experience of interactive spaces.



DESIGN DEVELOPMENT

Initial Prototype

The next critical step in my process was designing physical interaction spaces for students. My initial prototype introduces three distinct thematic approaches. I am excited to test this prototype in the next phase and gather insights into the core features that will create real value for the users.



08

User Feedback

USER FEEDBACK

Testing Hypotheses

In the eighth week of our course, I conducted user and usability testing to validate the prototypes and confirm they effectively addressed the needs of the target user groups.

We believe that

Our users will feel safe and comfortable sharing their thoughts, with easy-to-access spaces that foster potential connections and build self-confidence.

To verify that,

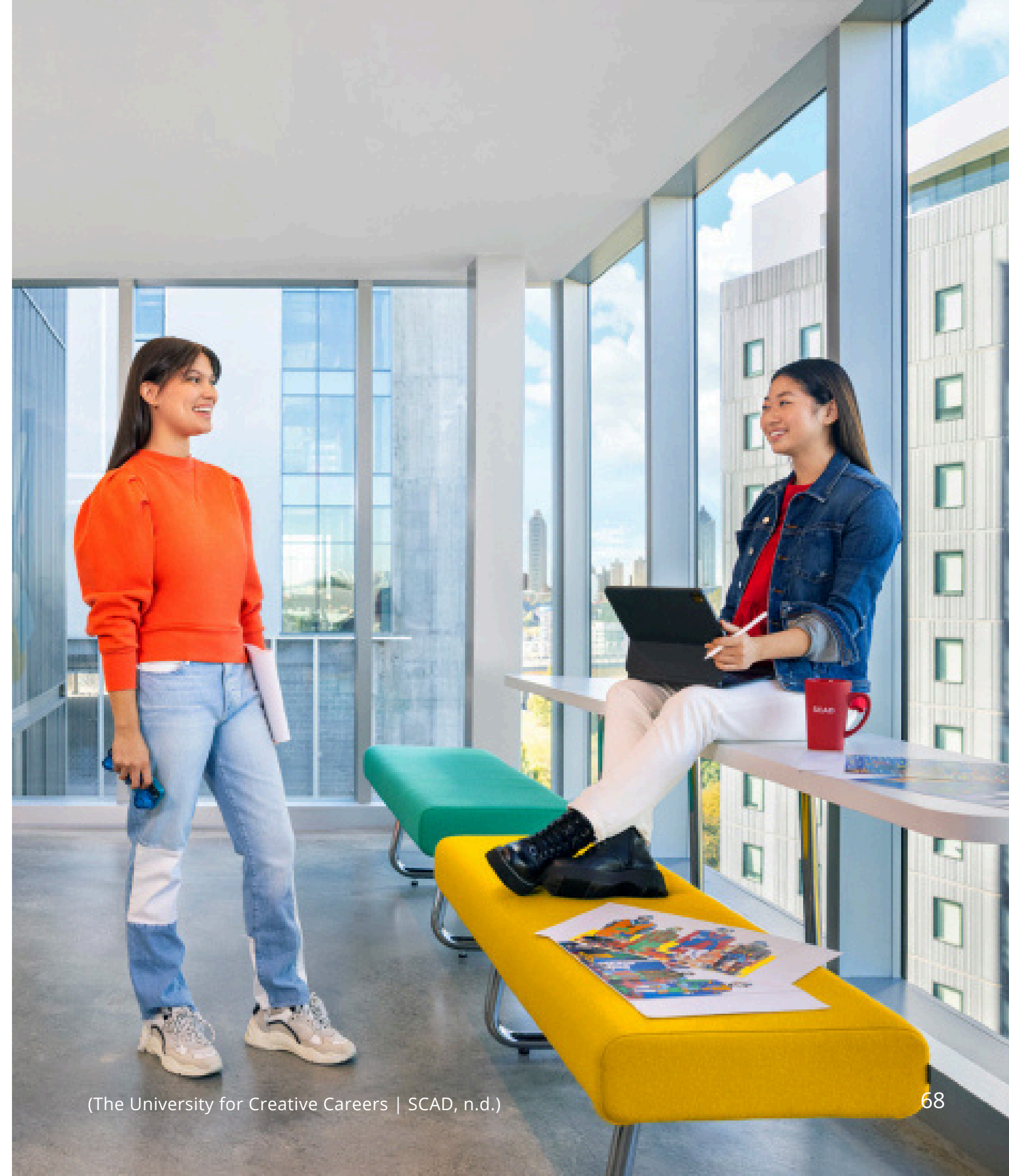
We will list some features and emotions to understand which themes and approaches are most effective in helping them build connections with each other.

And measure

User satisfaction by tracking their mood changes as they experience different themes.

We are right if

The user is satisfied with our current navigation and is willing to participate in this interactive space, share their thoughts, and recommend it to other students on campus.



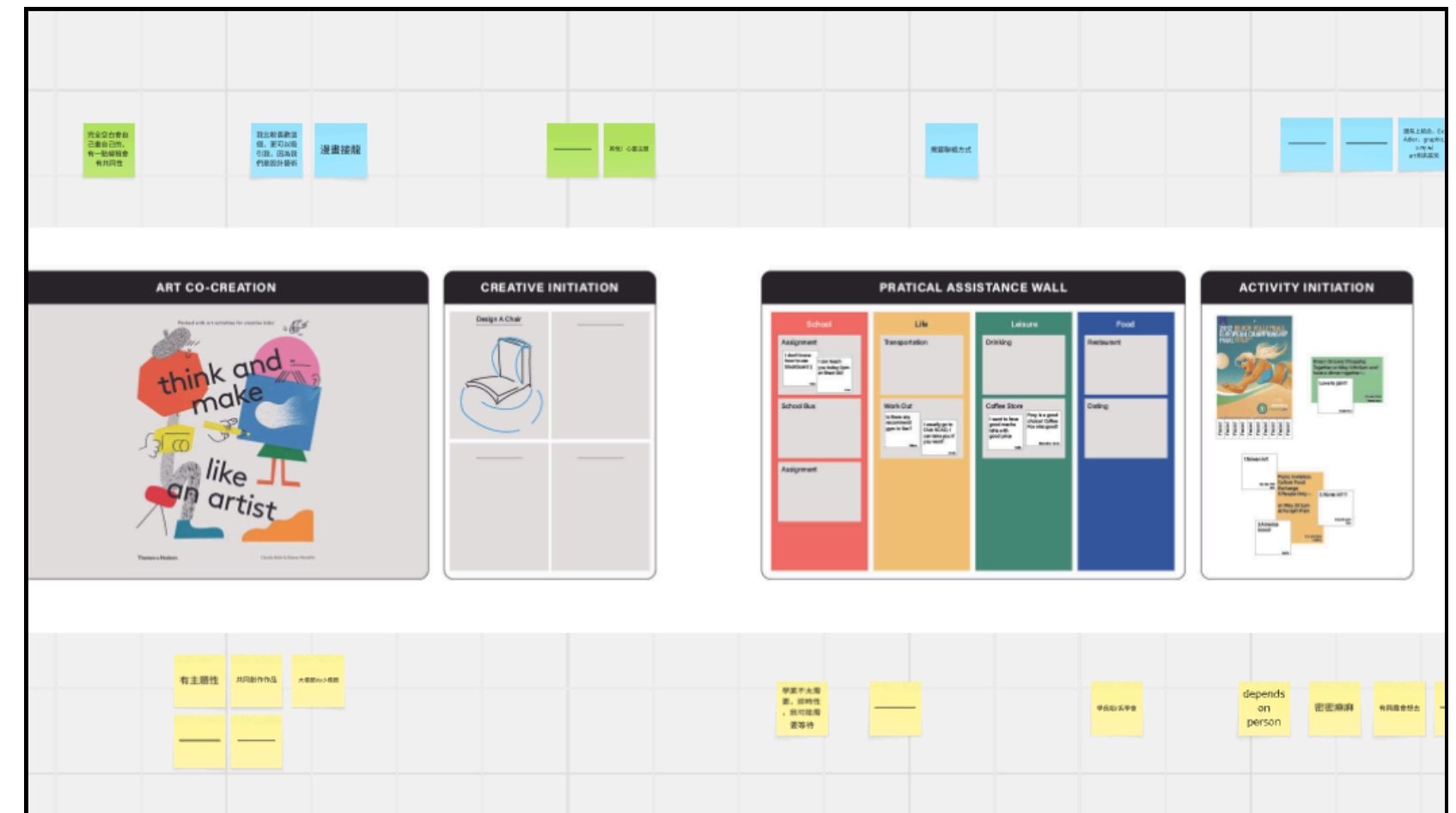
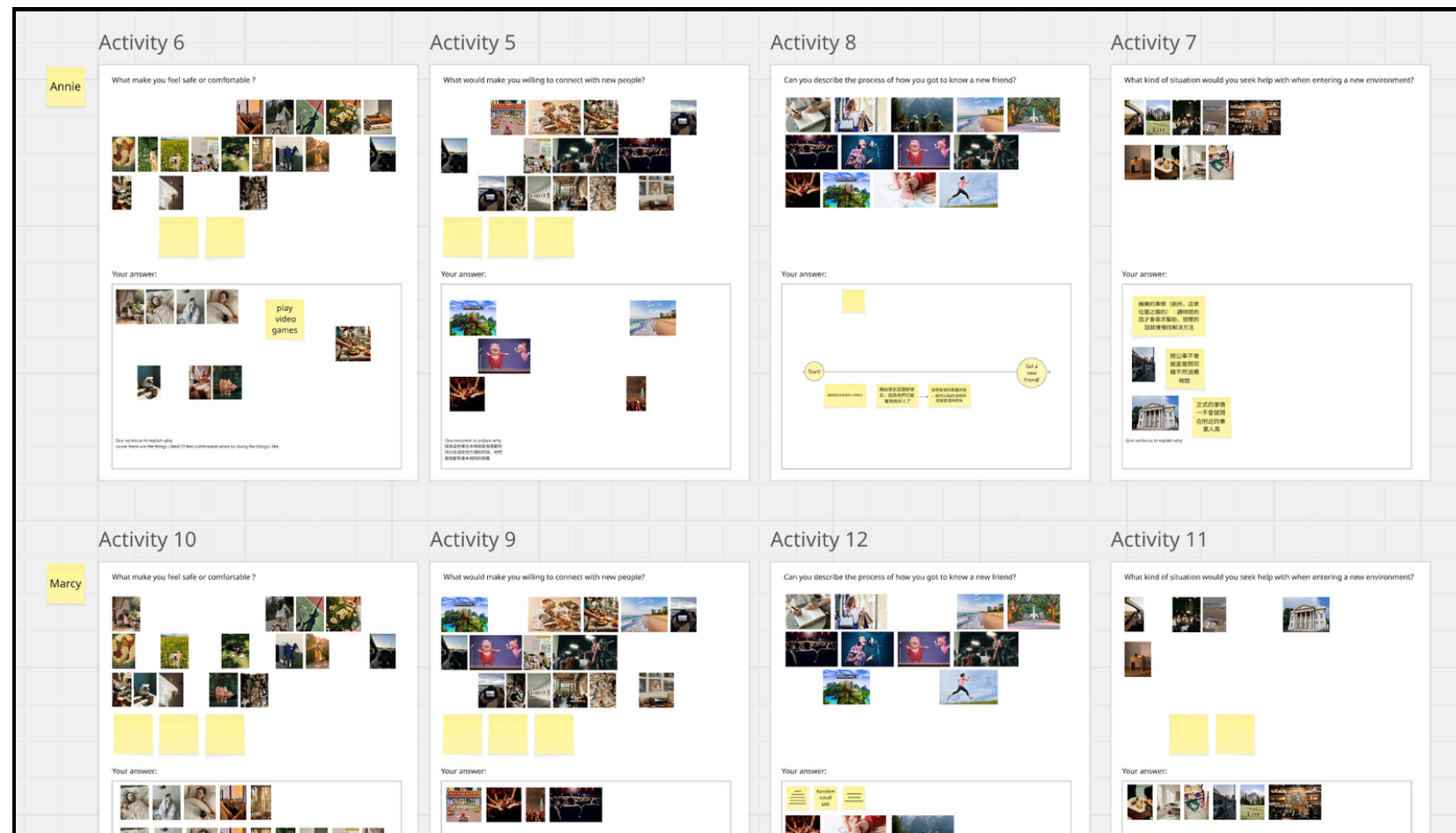
USER FEEDBACK

An Overview of Testing Approach

While I understood what users were looking for, the big question was: how do they want those needs met? To find out, I ran five creative exercises. This lets participants imagine their ideal space experience without bias. I tested in two formats to gather honest, uninfluenced insights.



8 Responses



Co-Creation Activities

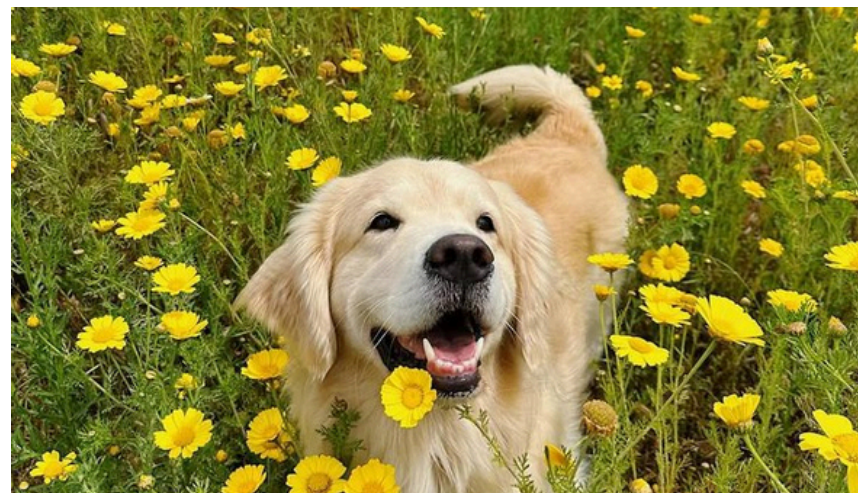
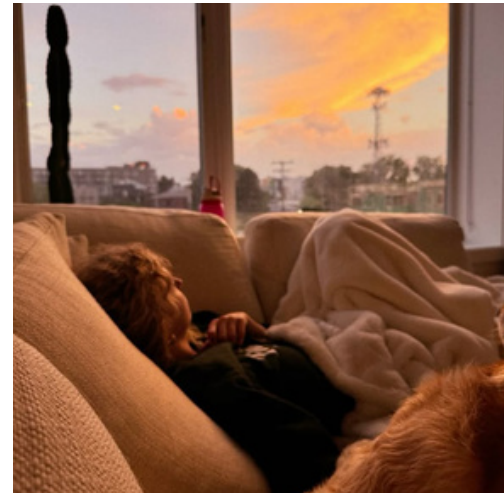
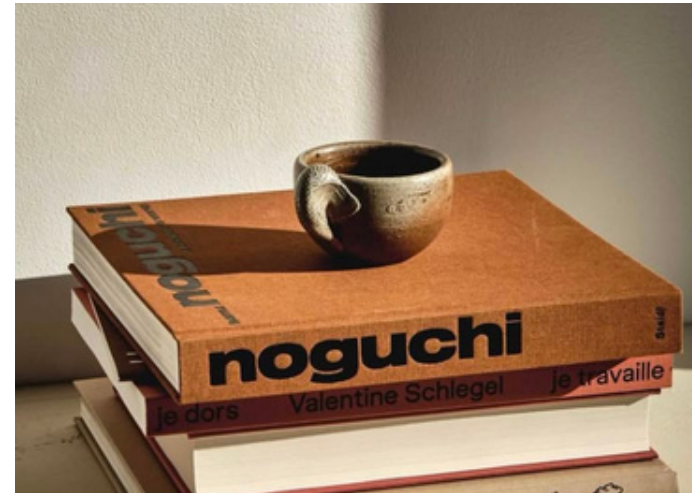
User-centered design is the key to the concept, so I hope to gain insights into users' expectations and ideas for Echo Corner through co-creation. By involving them in activities, I aim to collaboratively design the space layout, event planning, and overall experience of Echo Corner.

Prototype Feedback and Suggestions

This approach allowed me to directly engage with the target audience, providing an opportunity to observe their immediate reactions and gather valuable feedback as they interacted with the visual prototypes I had developed based on insights from the first round of testing.

USER FEEDBACK

Test 01 - Environment and Experience Preference



“What makes you feel safe or comfortable?”

I used images and additional sticky notes to help users visualize and express what they consider comfortable or safe spaces, encouraging them to describe the key factors that make them feel at ease.

This testing helped me understand user preferences and their ideal environments where they feel most relaxed and comfortable being themselves without worrying about others. By gaining insight into these preferences, I can better design interactive spaces and create more thoughtful, user-centered experiences.

USER FEEDBACK

Test 02 - Moments of Openness

“What would make you willing to connect with new people?”

I used images to inspire and help users recall how they have met new people in the past and how they hope to do so in the future. This approach allowed me to identify the situations and contexts that typically create potential connection opportunities.

This testing not only helped me understand how users take the first step in meeting new people but also provided valuable insights for designing activities and interactions that encourage them to reach out to others, making the interactive spaces more inviting and engaging.



USER FEEDBACK

Test 03 - The Process of Making New Friends



“Can you use graphics or words to describe the process of how you got to know a new friend?”

Start

Get a New Friend



I used images and additional sticky notes to help users visualize and express what they consider comfortable or safe spaces, encouraging them to describe the key factors that make them feel at ease.

This testing helped me understand user preferences and their ideal environments where they feel most relaxed and comfortable being themselves without worrying about others. By gaining insight into these preferences, I can better design interactive spaces and create more thoughtful, user-centered experiences.

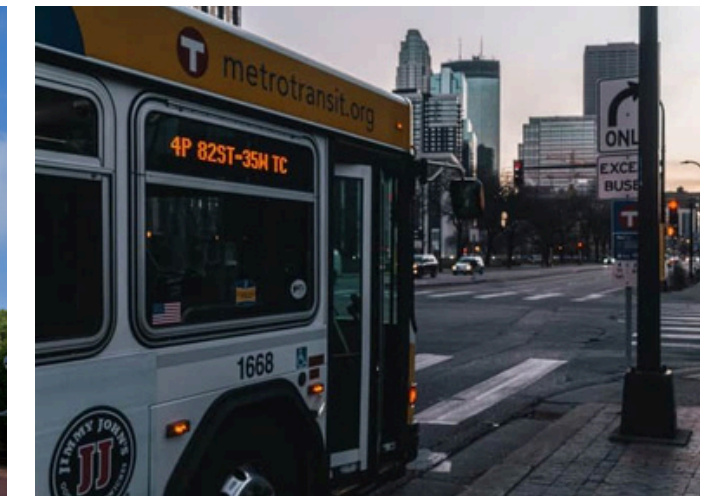
USER FEEDBACK

Test 04 - Moments When Help is Needed

“What kind of situation would you seek help with when entering a new environment?”

I used images to ask users about the moments when they often need help from others after arriving in a new place. This approach helped me identify common challenges faced by users, which I then integrated into our interactive spaces.

This testing allowed me to understand users' needs in unfamiliar environments and identify tasks they typically find difficult to handle alone. It also revealed potential opportunities for creating connections that encourage mutual support among users.



USER FEEDBACK

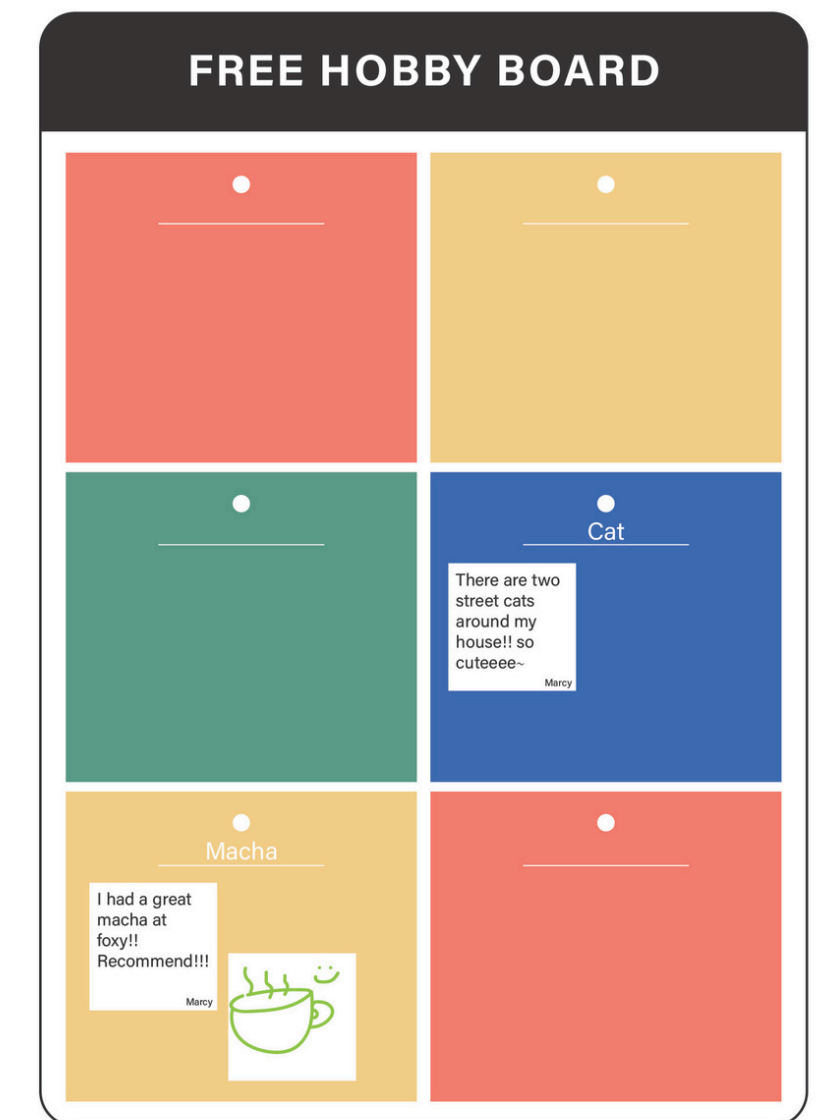
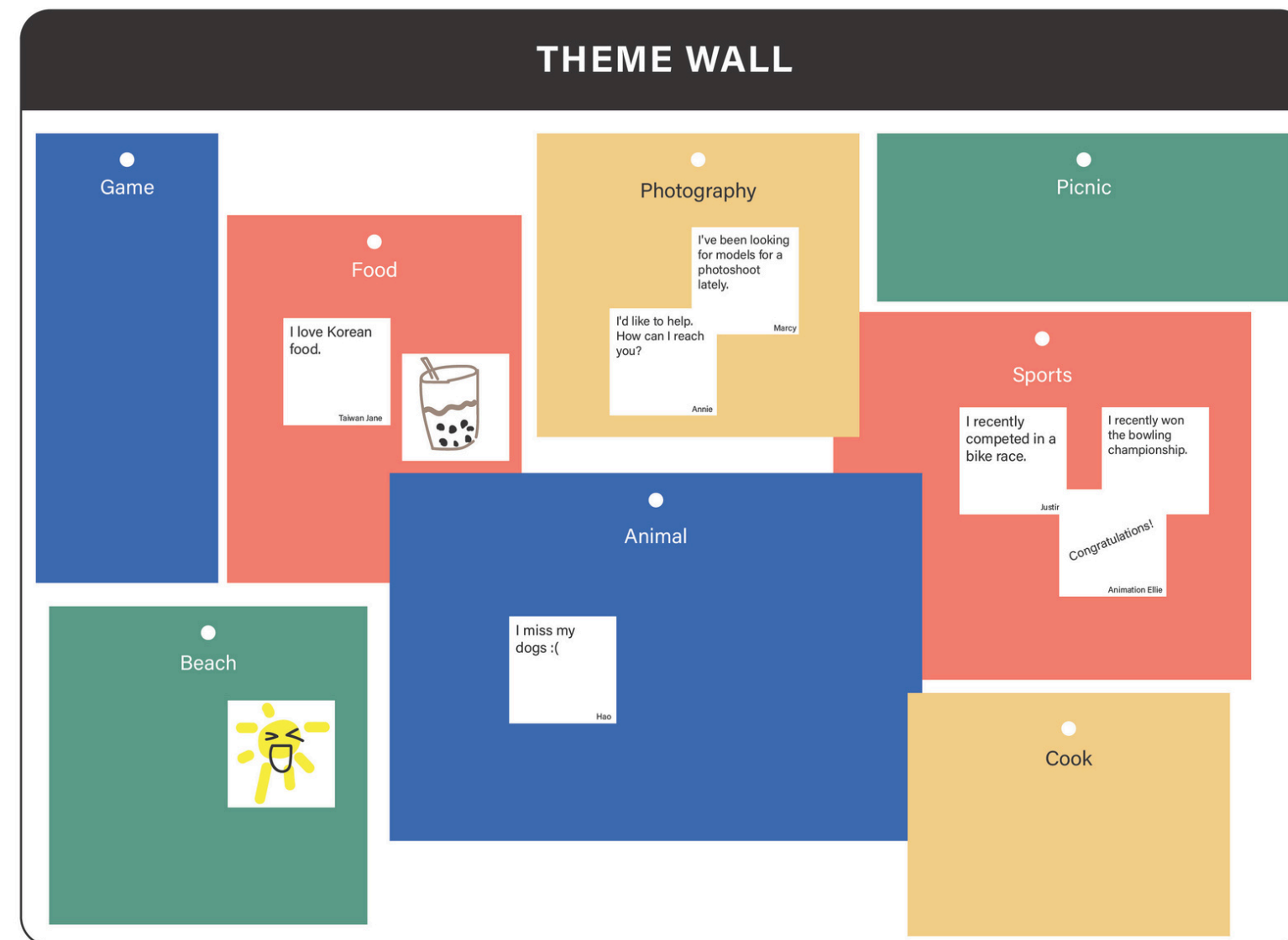
Test 05 - Usage of Prototype

To gain clearer insights into user flow and satisfaction, I showcased my prototype draft in the latest test. With my initial hypothetical questions now addressed, I focused on gathering direct user feedback on the interactive content and formats of the space, aiming to refine the design based on their specific needs and preferences.

Station 1: Look

By building indirect connections through shared interests, students can discover others with similar passions, creating natural conversation starters. Additionally, students have the freedom to create new interest boards, sparking fresh topics and connections.

This testing helps me understand students' willingness to share their interests and the potential for interactions based on common passions. It also provides insight into their interest in participating in this type of connection space.



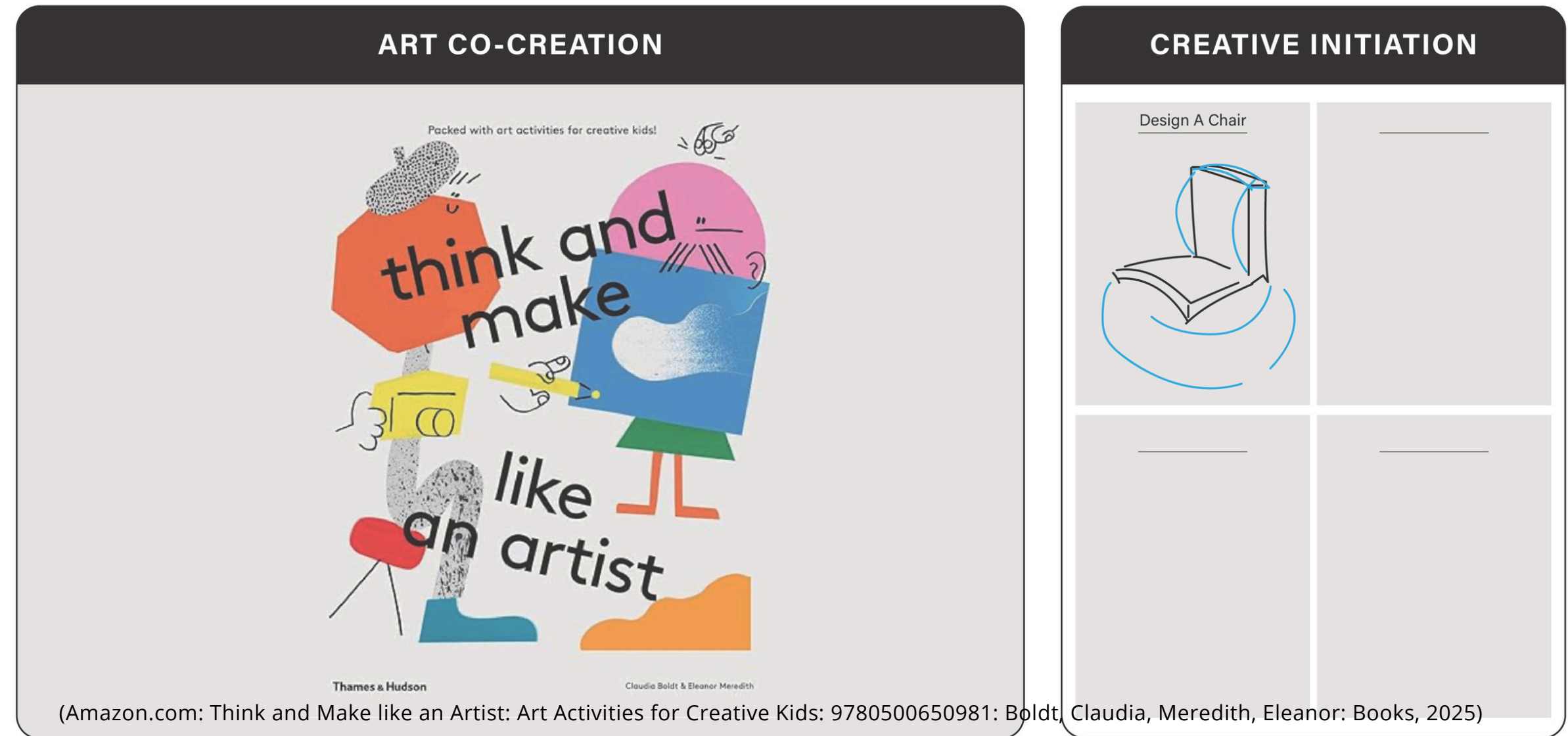
USER FEEDBACK

Test 05 - Usage of Prototype

Station 2: Listen

For my initial design, I chose SCAD as the location, leveraging the students' shared skills in drawing and design as a foundation for campus-wide connections. By creating theme-based spaces, I provide students with common goals and a deeper understanding of each other's creative expression.

This testing will help me assess students' willingness to participate in large, theme-based drawing spaces and gather their feedback on how to improve these environments.



USER FEEDBACK

Test 05 - Usage of Prototype

Station 3: Lend Your Hand

With the ultimate goal of fostering connections, this approach focuses on direct interactions based on mutual support around different themes. By encouraging students to share their skills and knowledge, I aim to create the first steps toward meaningful connections.

This testing helps me understand whether students are willing to help strangers, accept support from others, and use this method as a way to connect. Additionally, it reveals whether students would be interested in participating in non-academic activities or gatherings if someone shares an interesting event.

PRATICAL ASSISTANCE WALL

School	Life	Leisure	Food
Assignment I don't know how to use blackboard :(I can teach you today 2pm at Shed 202 Marc Jane	Transportation	Drinking	Restaurant
School Bus	Work Out Is there any recommend gym in Sav? I usually go to Club SCAD, I can take you if you want! Wilson Annie	Coffee Store I want to have good macha latte with good price Foxy is a good choice! Coffee Fox also good! Hallin Illustration Cindy	Dating
Assignment			

ACTIVITY INITIATION

2012 BEACH VOLLEYBALL EUROPEAN CHAMPIONSHIP FINAL
MAY 20 - JUNE 3 THE TRIANGLE
presented by crossovis.com

Enson Grocery Shopping Together on May 12th 6pm and have a dinner together--
Love to join!!
912-432-7188 Taiwan Jane
Korea Noa

1.Taiwan in!!
912-432-7188 Jane

Picnic Invitation: Culture Food Exchange 5 People Only--
on May 30 2pm at Forsyth Park
912-432-7688

2.Korea in!!!!
912-867-2234 Noa

3.America innnn!
Justin

USER FEEDBACK

Test 05 - Usage of Prototype

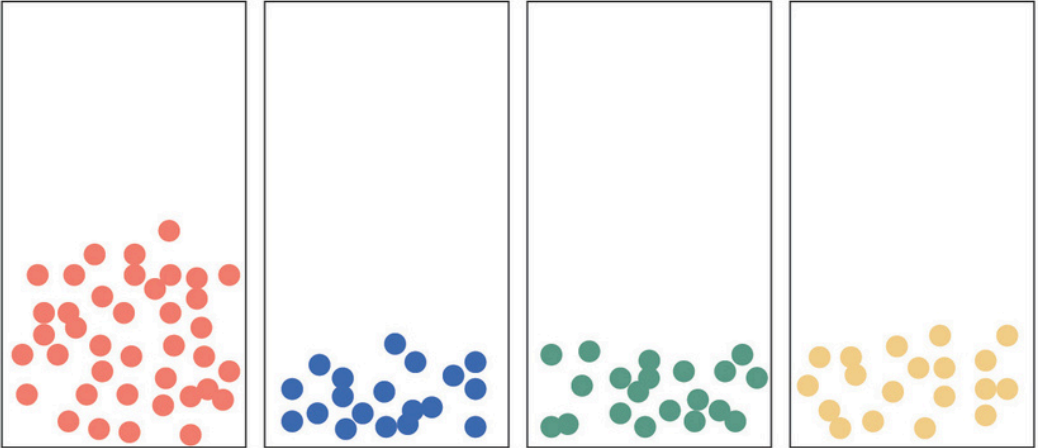
Common Interaction Board

This board is present in all three interactive spaces, encouraging students to engage in self-reflection and understand their own emotions and state of mind before interacting with others. By sharing their feelings, students gain a space for emotional expression.

This test helps me understand whether self-reflection is important to students and whether there is potential to expand this concept into a standalone interactive space.


Emotional Expression

Mood Check



Happy Sad Exhausted Excited

How are you today?



Sand Festival was funnnnn!!
Cindy

I found that the Clark Hall, the architecture department building, is really beautiful.
Andy

I'm in a bad mood today because I can't finish my homework.
Jane

I went to foxy loxy yesterday and the atmosphere was great.

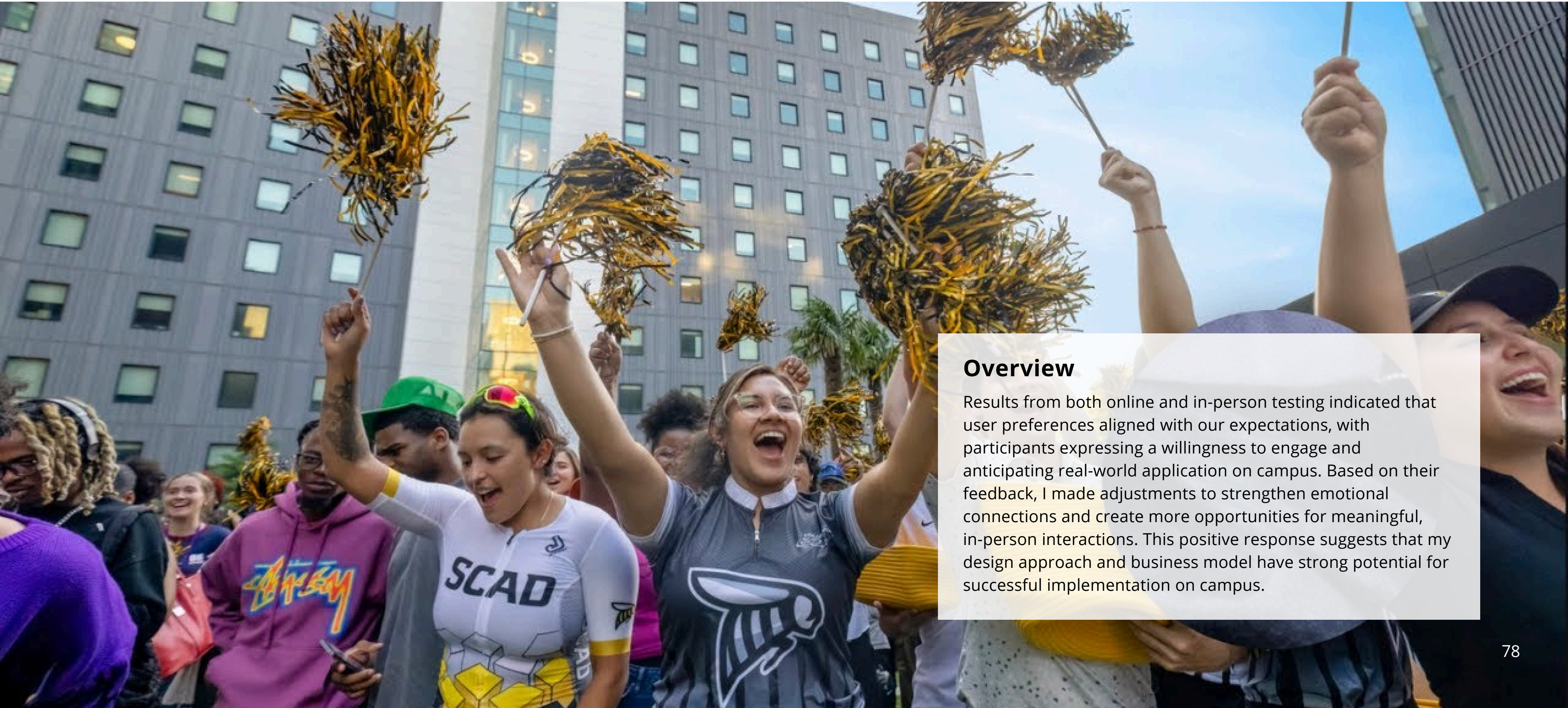
I really like their matcha latte.

Their outdoor space is amazing!
Korean Cathy

Where's foxy loxy?
Bruce

USER FEEDBACK

What Findings Revealed



Overview

Results from both online and in-person testing indicated that user preferences aligned with our expectations, with participants expressing a willingness to engage and anticipating real-world application on campus. Based on their feedback, I made adjustments to strengthen emotional connections and create more opportunities for meaningful, in-person interactions. This positive response suggests that my design approach and business model have strong potential for successful implementation on campus.

USER FEEDBACK

What Findings Revealed

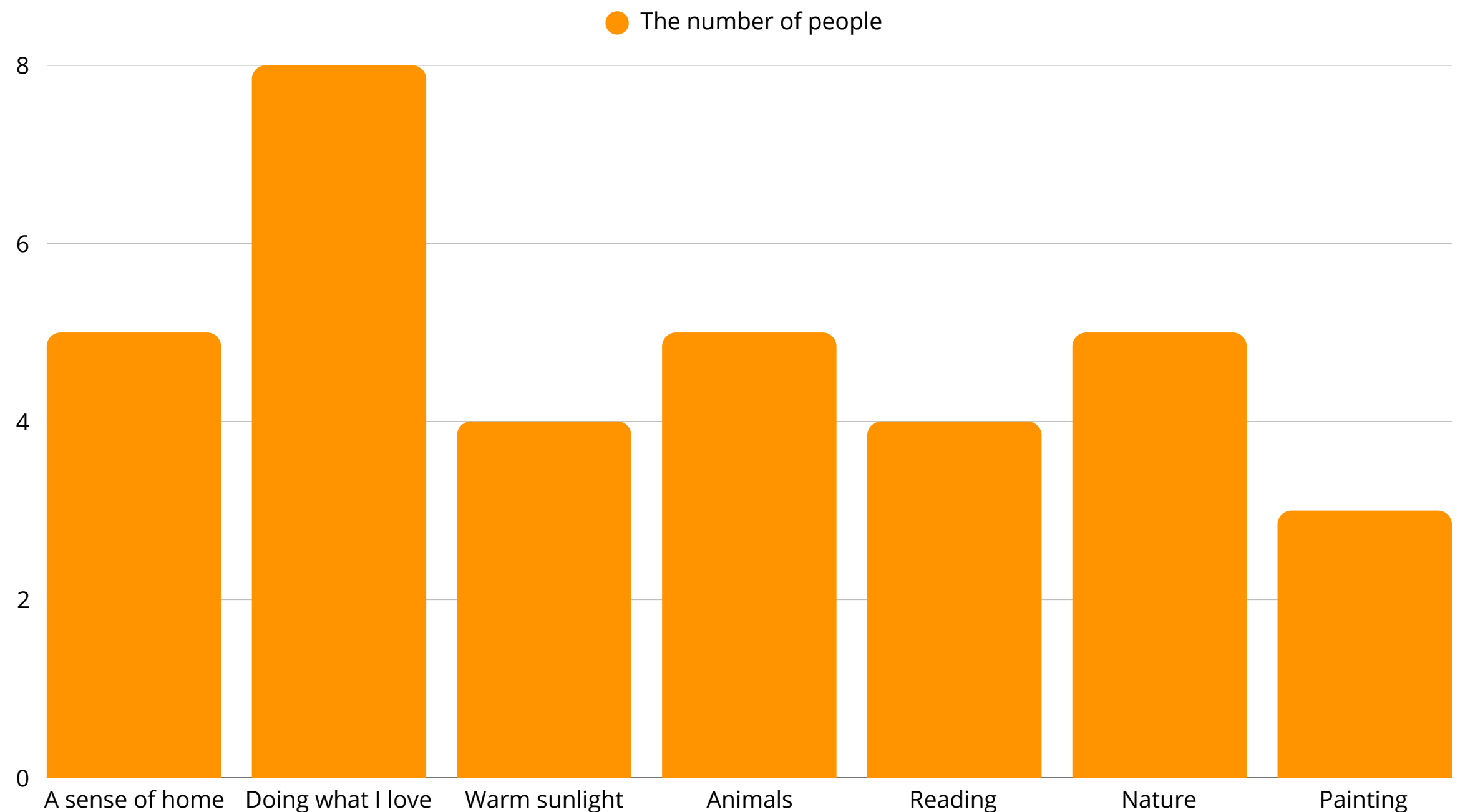
“I feel safe at home, in my bed, with my family”

“Staying close to animals and nature creates a sense of wellness.”

Test 01

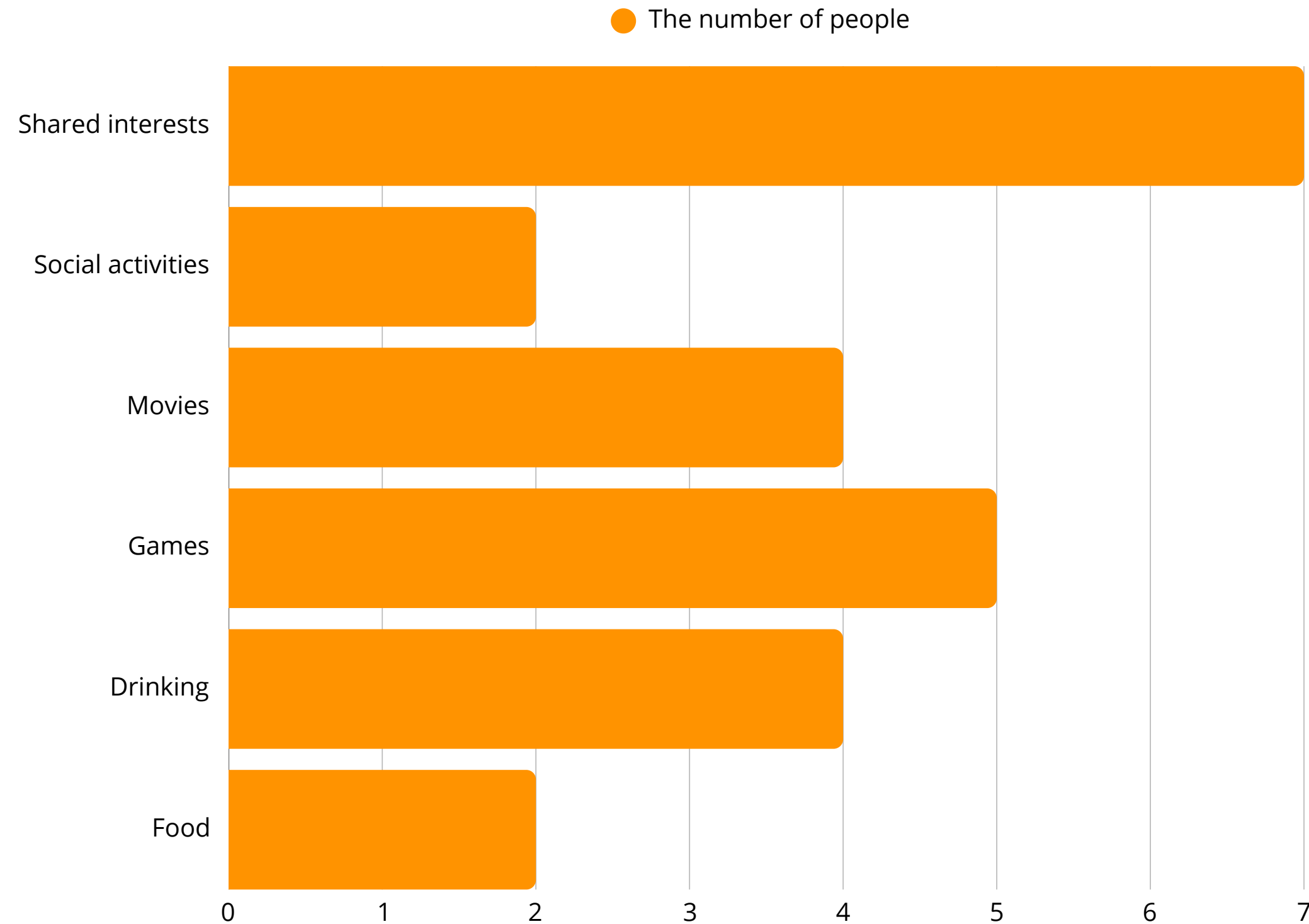
Environment and Experience Preference

Most users mentioned that as long as they are doing what they enjoy, they often feel safe and comfortable. Additionally, many of them highlighted that sensory experiences, like warm lighting, furry animals, or being surrounded by nature, help them relax and create a sense of being at home.



USER FEEDBACK

What Findings Revealed



“I like meeting new people in places I enjoy, because it usually means we already share some common interests.”

Test 02

Moments of Openness

Many users emphasized that having shared interests is one of the main ways they are willing to meet new people, with movies being a common topic for many. Additionally, some users mentioned that games are also a way to build connections, as they often require others to play together, making them a natural way to meet new friends.

USER FEEDBACK

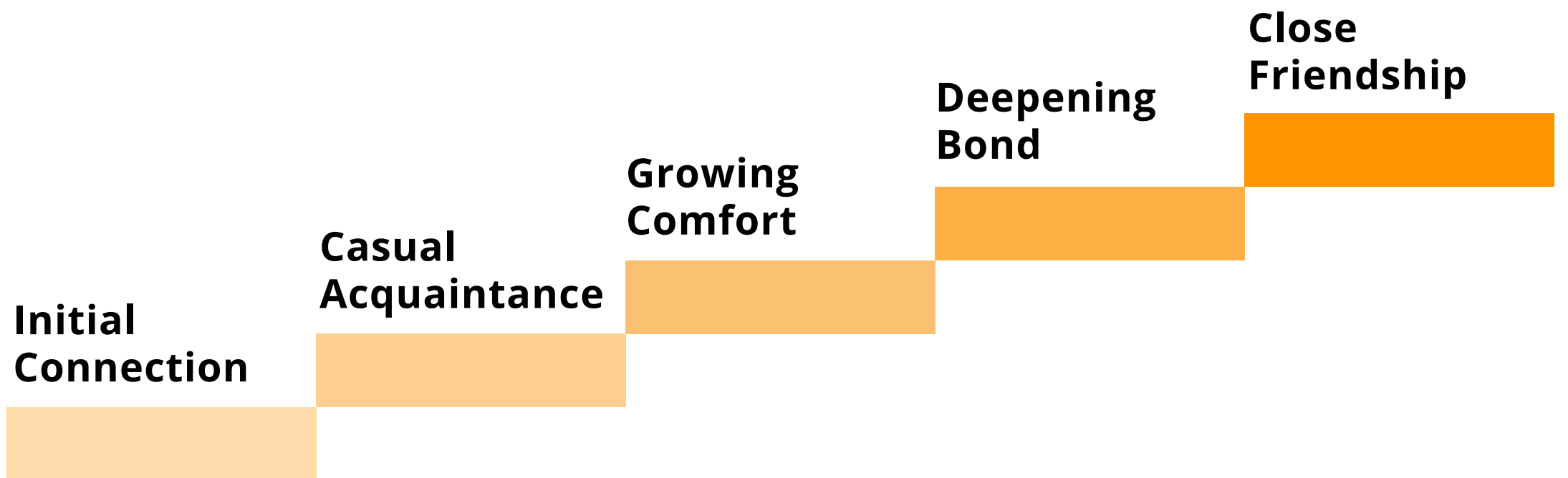
What Findings Revealed

“Having the same interests as me is the beginning of meeting new people.”

Test 03

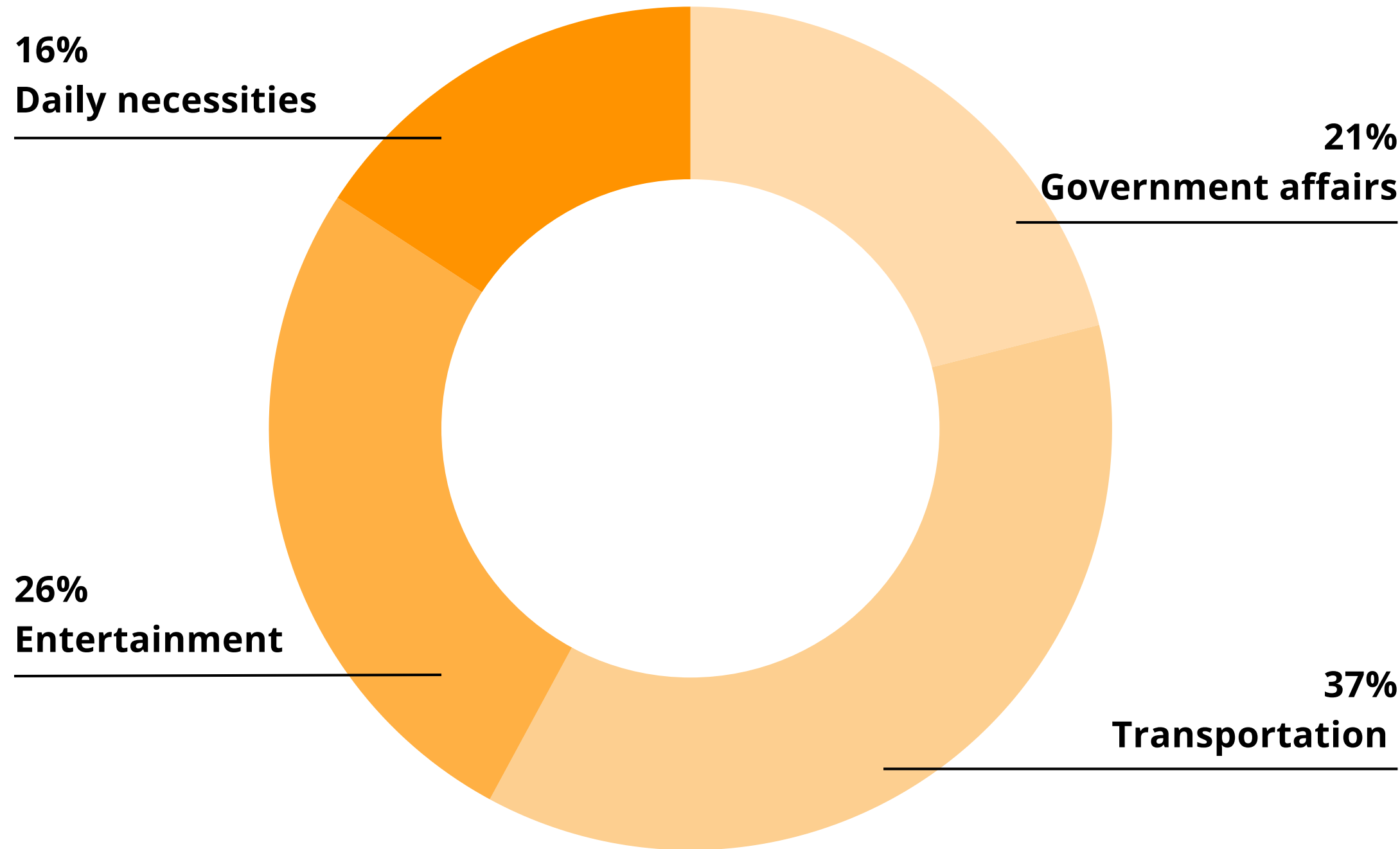
The Process of Making New Friends

When users described the process of making new friends, most mentioned that being introduced through mutual friends is the most common way, as it helps them get comfortable with each other more quickly. Besides that, meeting through classes or living together also provides opportunities to connect. As they spend more time together, activities like drinking or hanging out tend to deepen their relationships.



USER FEEDBACK

What Findings Revealed



“I don't want to get lost, so I would look to others to prevent getting lost.”

“I would appreciate it if someone could recommend some great options when I visit a new coffee shop.”

Test 04

Moments When Help is Needed

When entering a new environment, transportation is often a major concern for users, whether they are driving or taking the bus, as they are unfamiliar with the area. In addition to this, they also hope to have guidance or support when it comes to entertainment options and navigating government services.

USER FEEDBACK

What Findings Revealed

"I think this is a great idea to encourage people to connect with others in a physical space."

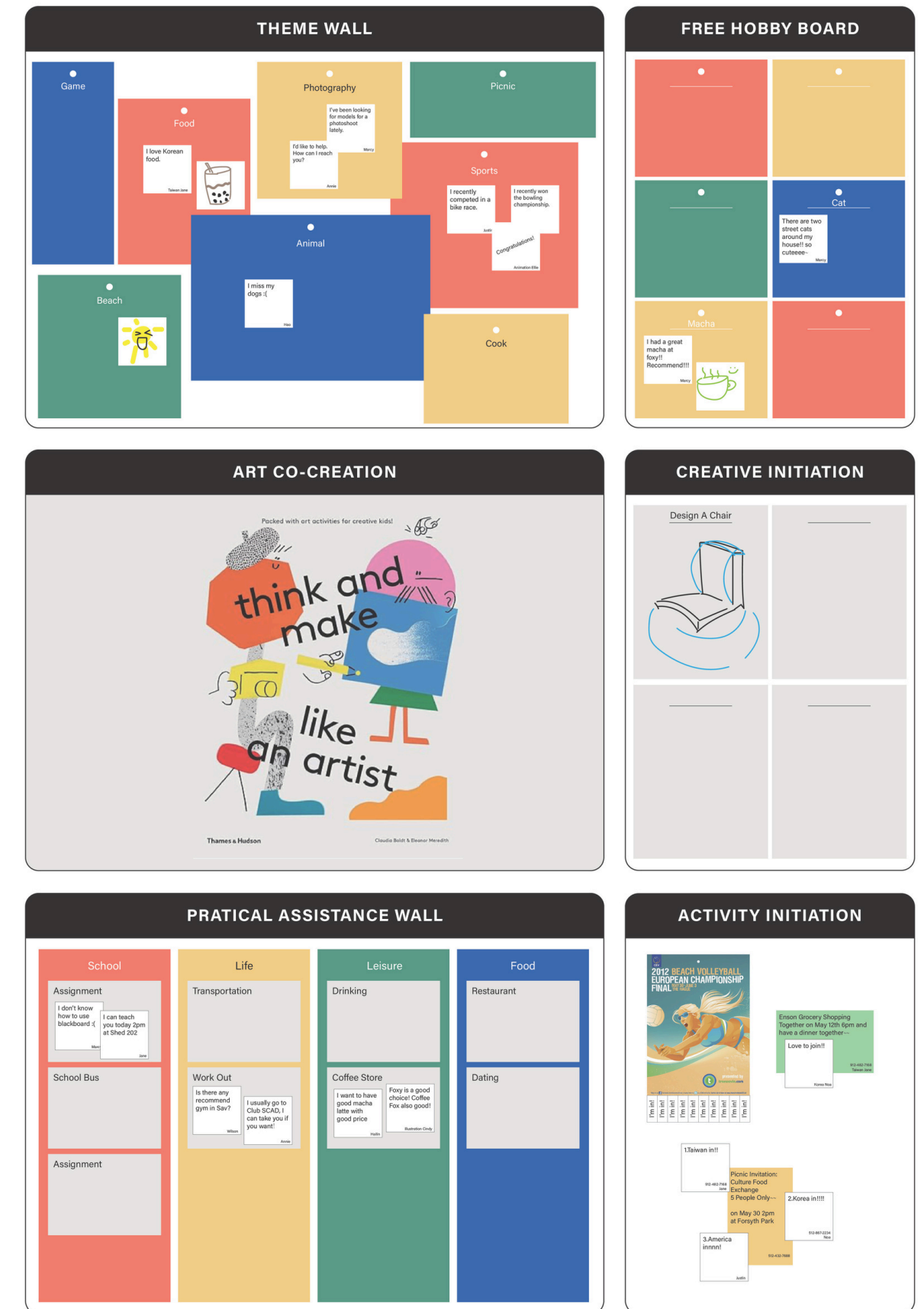
"It would be nice to have a dedicated emotional space as well."

Test 05

Usage of Prototype

Through genuine conversations with students, many expressed that if the Echo Corner space truly existed, it would be beneficial to have the option to exchange contact information with others. Additionally, for the collaborative drawing area, students suggested that having themed prompts or light background sketches might better encourage group creativity.

Furthermore, they proposed making the "Emotional Expression" section more prominent, potentially in collaboration with the Mental Health Center, to positively influence students' daily moods — perhaps by sharing encouraging messages based on the overall emotional tone of the day.



USER FEEDBACK

What Findings Revealed

01

Home-like Relaxation Space

Students mentioned that when a space feels as comfortable as home, it helps them relax and feel safe. Features like windows that let in natural sunlight, soft beds and cozy blankets, along with some plants and artwork, can create a calming and welcoming atmosphere that makes the space feel more secure.

02

Emotional Connection based on similar interest

For students, starting new conversations and meeting new people through shared interests is one of the most common and comfortable ways to connect. It helps bridge the gap more quickly, creating a sense of familiarity and mutual understanding, which can make the initial interactions less awkward and more engaging.

03

Spark Interest Through Meaningful Activities

Students are often drawn to activities that have a meaningful impact on their lives, making them more likely to engage voluntarily. The most significant factor is whether the activity aligns closely with their personal interests, followed by the perceived value it brings – whether it offers opportunities for personal growth or contributes positively to the environment and community.





09

Finalize Solution


FINALIZE SOLUTION

Reframed Prototype

INTEREST CLASSIFICATION

GAME	FOOD	PHOTOGRAPHY
	<p>I love Korean food. <small>Taiwan Jane</small></p> 	<p>I've been looking for models for a photo shoot lately.</p> <p>I'd like to help. How can I reach you?</p>
BEACH	MOVIE	ANIMAL
	<p>I went watching "how to train your dragon" It was amazing!!</p>	<p>I miss my dogs :(<small>Hao</small></p>
SPORTS	COOKING	PICNIC
<p>I recently competed in a bike race.</p> <p>I recently won the bowling championship.</p> <p>Congratulation!! <small>Animation Elle</small></p>		

FREE HOBBY

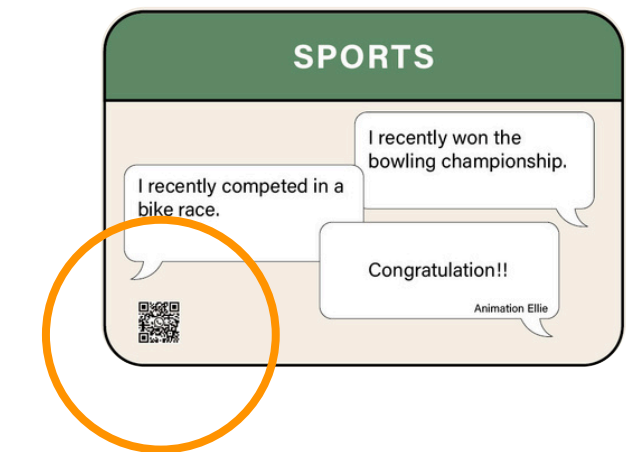
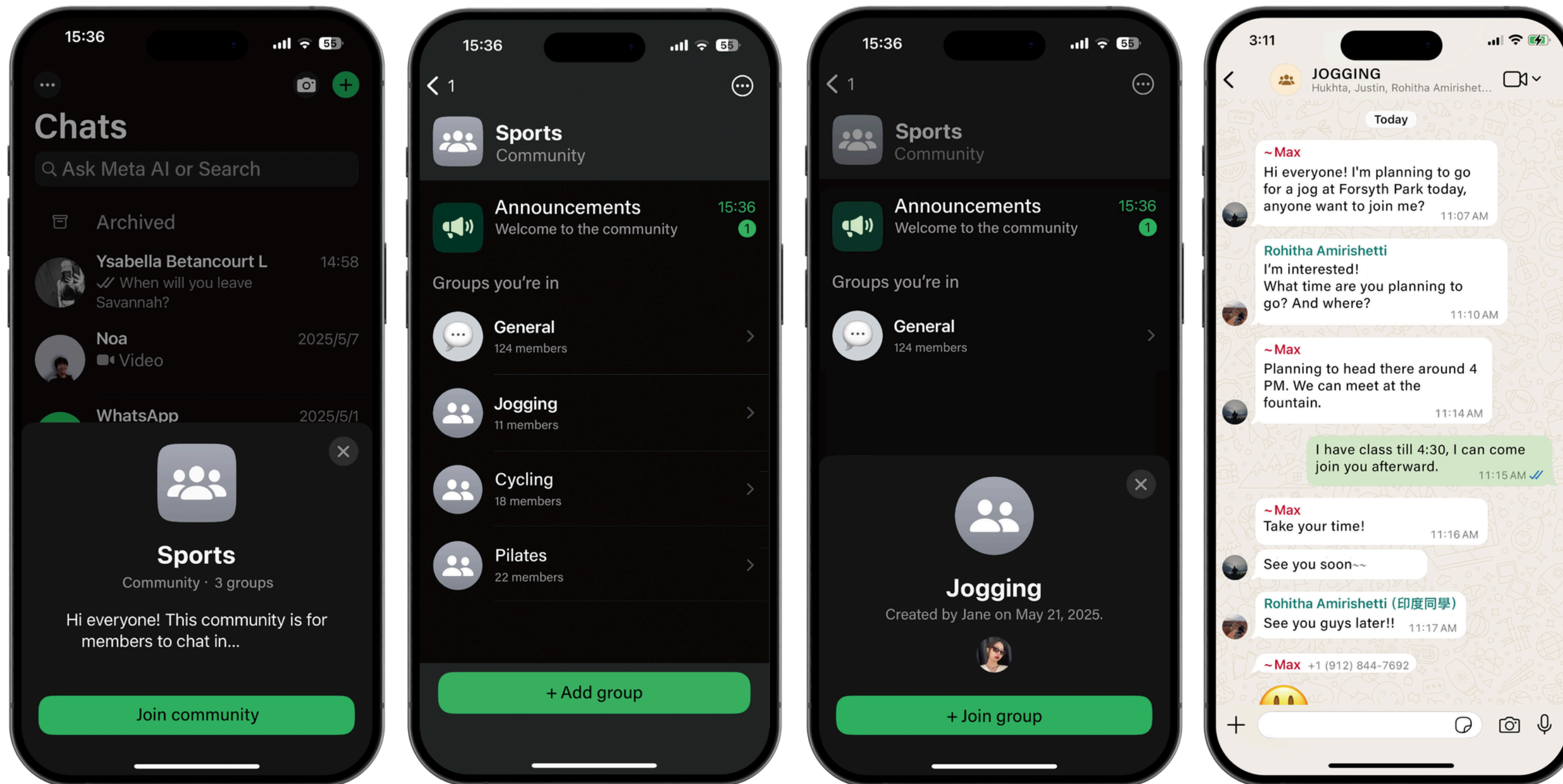
	CAT
	<p>There are two street cats around my house!! so cuteeee- <small>Annie</small></p>
MATCHA	
<p>I had a great matcha at foxy!! Recommend!!! <small>Marcy</small></p> 	

Station 1: Look

Based on student feedback, maintaining connections through shared interests remains a priority. By reorganizing the layout, each interest board is given equal space, ensuring that every topic receives the same level of attention and opportunity for connection. This approach not only fosters inclusivity but also encourages students to explore diverse interests, strengthening the sense of community and mutual support.

FINALIZE SOLUTION

Reframed Prototype



Further Connection

After students initially connect with one another through shared interests, they can choose whether to join a digital community for deeper and more detailed sharing. Using WhatsApp, students can join interest-based communities and further explore specific topics of their choice.

FINALIZE SOLUTION
Reframed Prototype

FREE HOBBY

SEARCH	WATCH
GAME	SPORTS
BEACH	MOVIE
FOOD	COOKING
PHOTOGRAPHY	ANIMAL
PICNIC	

INTEREST CLASSIFICATION

GAME	FOOD	PHOTOGRAPHY
BEACH	MOVIE	ANIMAL
SPORTS	COOKING	PICNIC

EMOTIONAL EXPRESSION

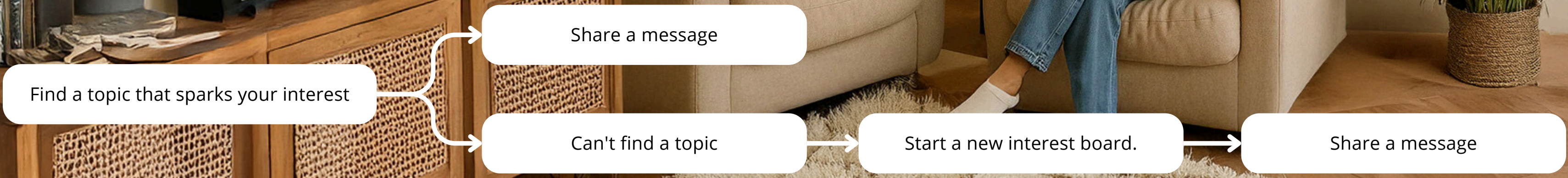
Mood Check

HAPPY: 20	EXCITED: 12
EXHAUSTED: 24	SAD: 15

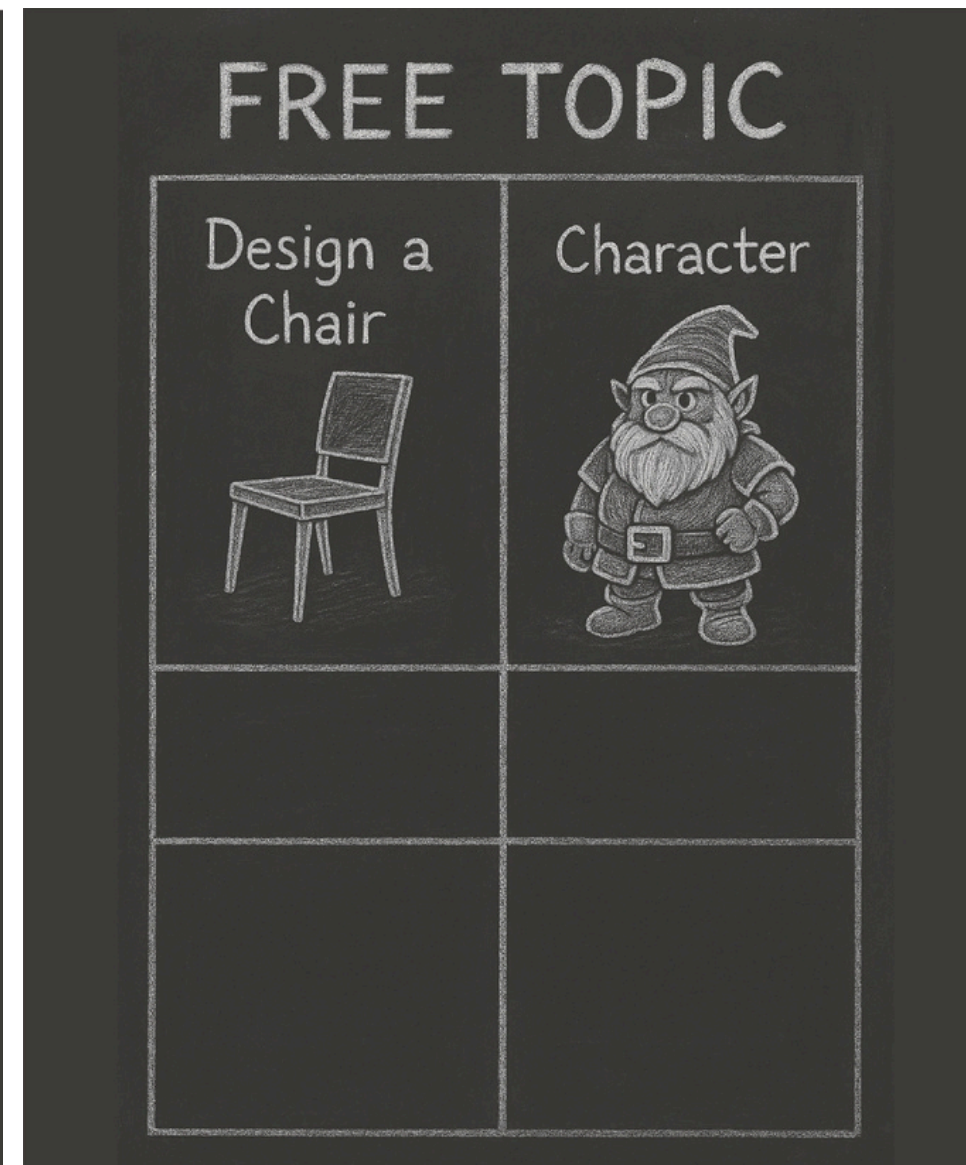
"Sometimes the most productive thing you can do is rest."
- Mark Black

How are you today?

Great! I went to the park and saw some beautiful flowers.	I'm a bit tired because I can't find my homework.	I want to go to the gym but I don't have time.	I love my new book!
Where's my bag?			



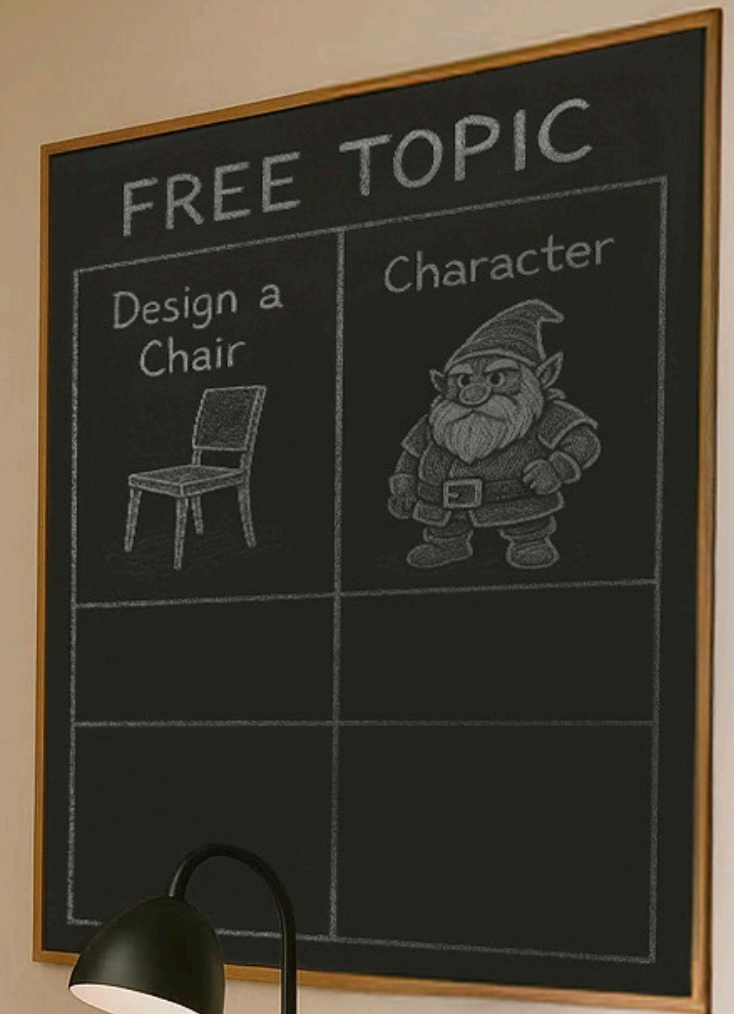
FINALIZE SOLUTION
Reframed Prototype



Station 2: Listen

By creating a shared theme and providing simple line sketches, students can work towards a common goal, fostering mutual understanding of each other's artistic intentions. Additionally, the free-topic board can bring together students with similar backgrounds and skills, enhancing their connections and collaborative relationships.

FINALIZE SOLUTION
Reframed Prototype



View the theme of the drawing board

Understand the meaning behind others' artwork

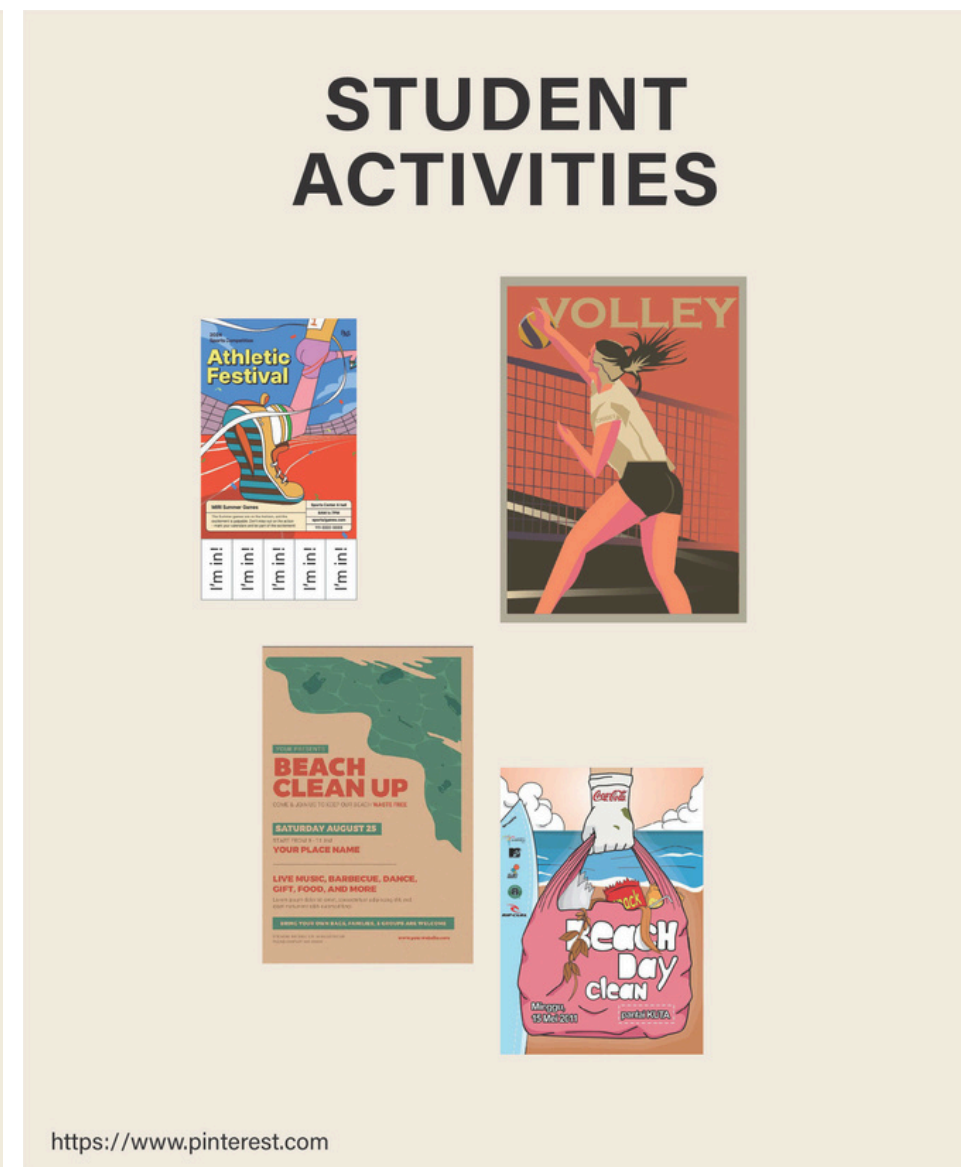
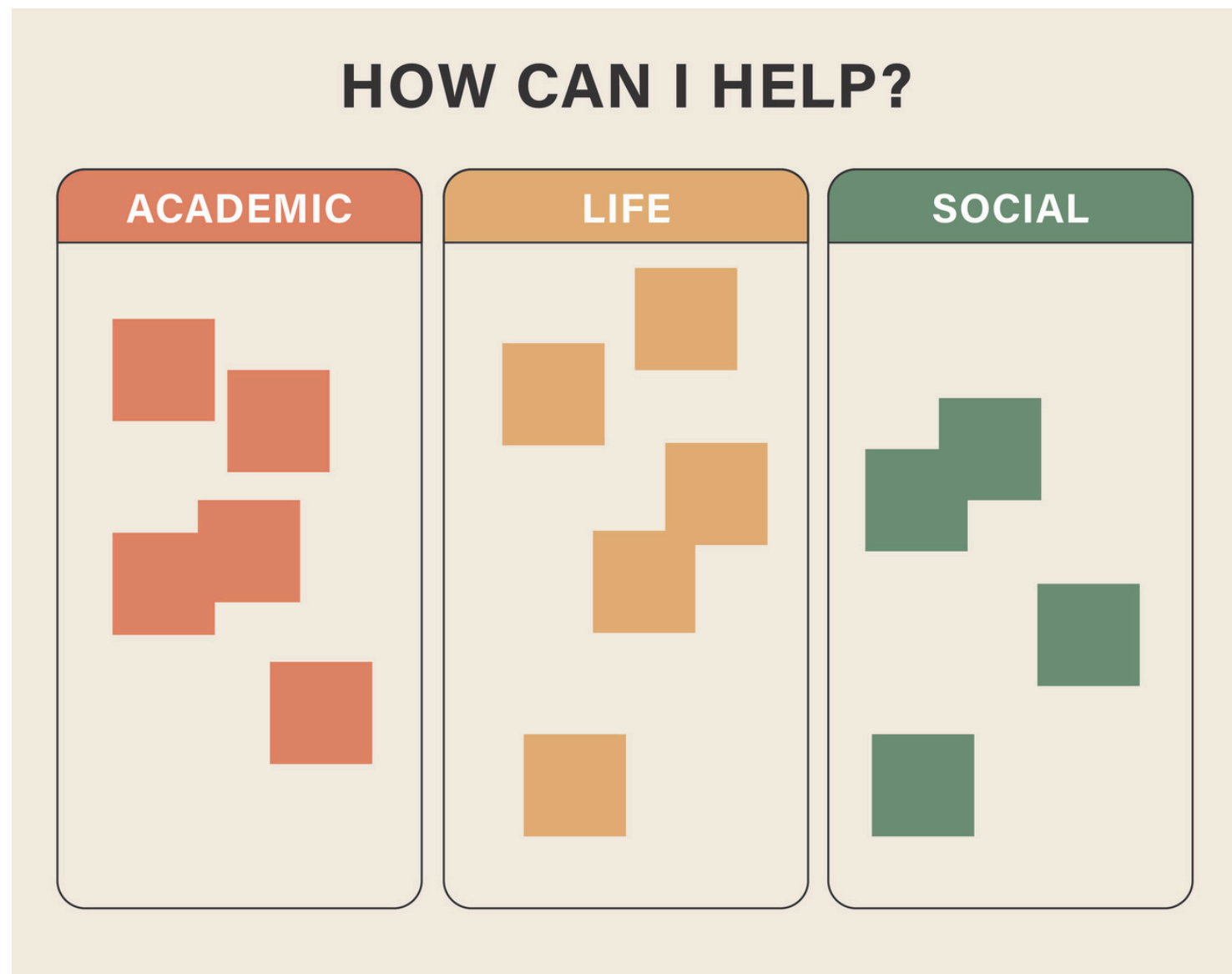
Join the drawing

Start a new drawing theme

Sketch your initial ideas

FINALIZE SOLUTION

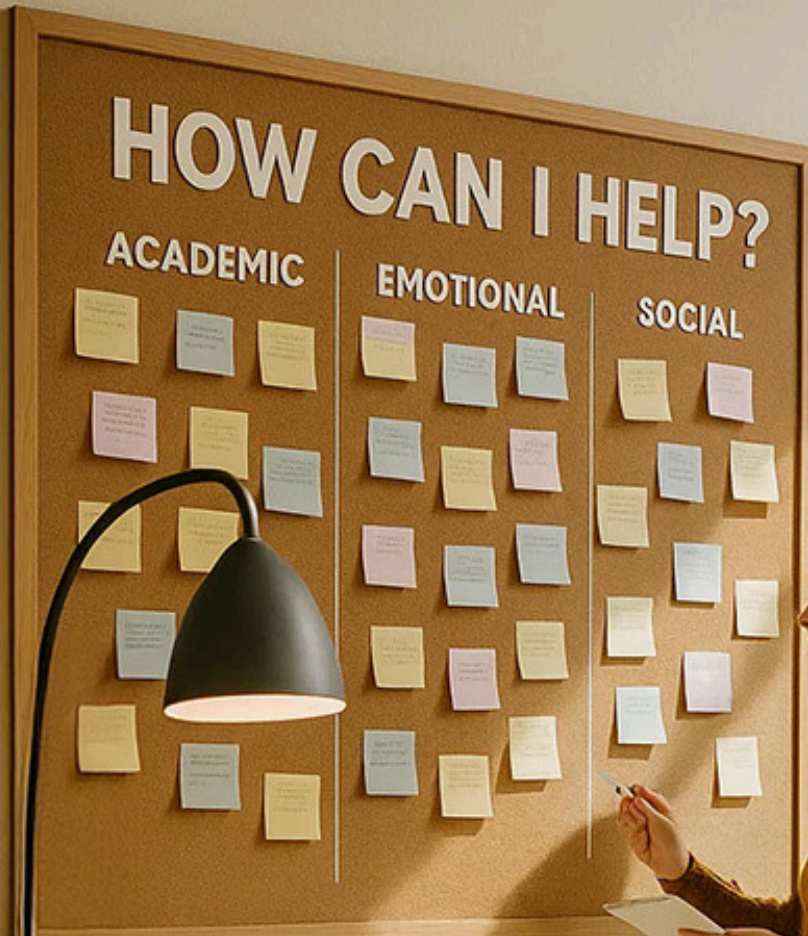
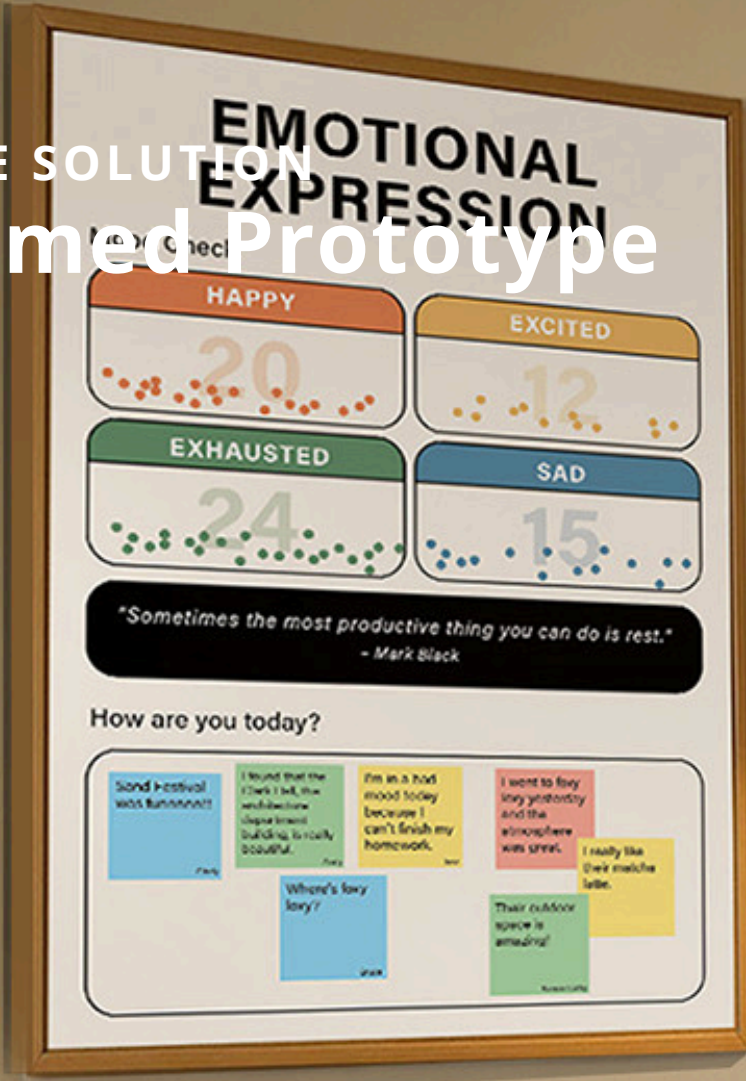
Reframed Prototype



Station 3: Lend Your Hand

Through co-creation activities, students can support each other in three main areas: academics, daily life, and social connections. By organizing these interactions into these categories, students are encouraged to share experiences, solve each other's challenges, and build meaningful connections, fostering a sense of belonging and collaboration within the community.

FINALIZE SOLUTION
Reframed Prototype



FINALIZE SOLUTION

Reframed Prototype

The Mood Check area allows students to check in on their current mood. It integrates electronic touch screen technology, automatically counting and displaying the number of participants when a student touches the screen.

The electronic screen will display encouraging messages based on the most common mood of the day. For example, if the majority of students feel exhausted, the screen will show supportive messages to help them relax.

The Mood Sharing area encourages students to express their emotions through words, providing a space where they can share their feelings and support each other.

EMOTIONAL EXPRESSION

Mood Check

HAPPY 20	EXCITED 12
EXHAUSTED 24	SAD 15

*"Sometimes the most productive thing you can do is rest."
- Mark Black*

How are you today?

Sand Festival was funnnnn!!
Cindy

I found that the Clark Hall, the architecture department building, is really beautiful.
Andy

I'm in a bad mood today because I can't finish my homework.
Jane

I went to foxy loxy yesterday and the atmosphere was great.
I really like their matcha latte.

Where's foxy loxy?
Bruce

Their outdoor space is amazing!
Korean Cathy

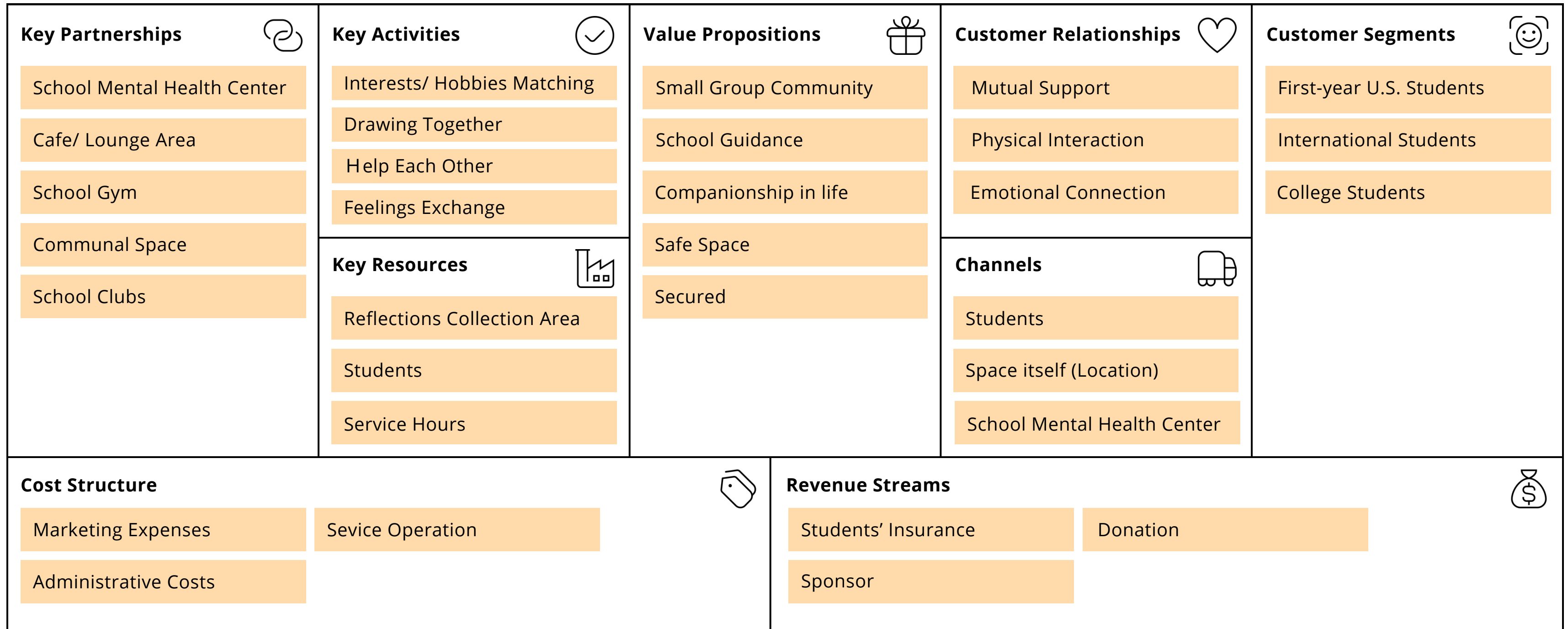
Emotional Expression

The Mood Sharing Board encourages students to check in on their daily emotions and overall state of mind, helping them gain a deeper understanding of themselves. It emphasizes that every student has the right to express and share their feelings, fostering emotional intelligence by promoting self-awareness and empathy. By reflecting on their emotions, students can better understand their own needs, recognize the feelings of others, and build stronger, more supportive connections.

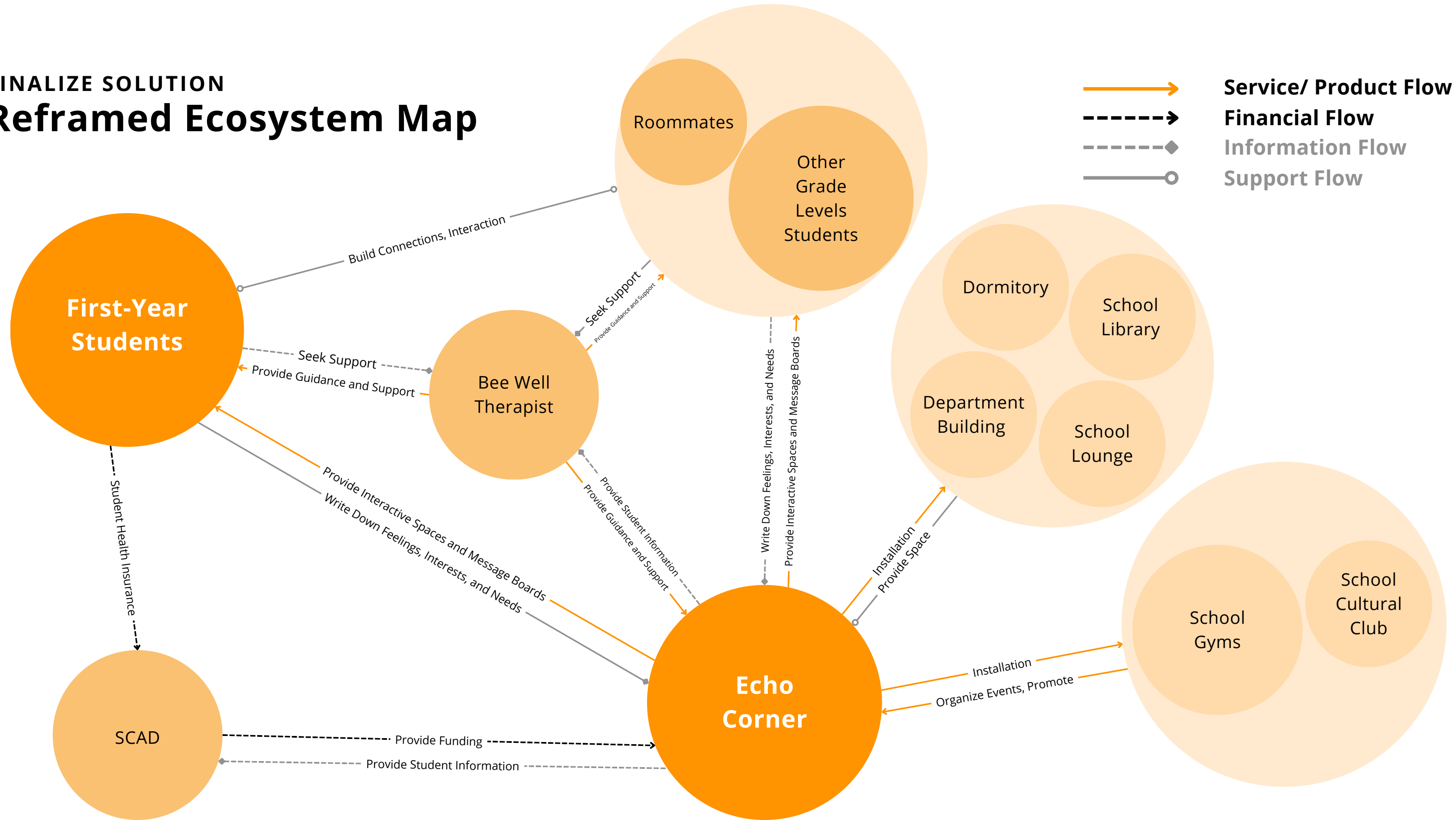
FINALIZE SOLUTION

Reframed Business Model

Based on the in-depth research and analysis, I refined and finalized a comprehensive business model specifically designed to meet the unique needs and opportunities of our target market.



FINALIZE SOLUTION
Reframed Ecosystem Map



FINALIZE SOLUTION

Reframed Stakeholder Map

Core

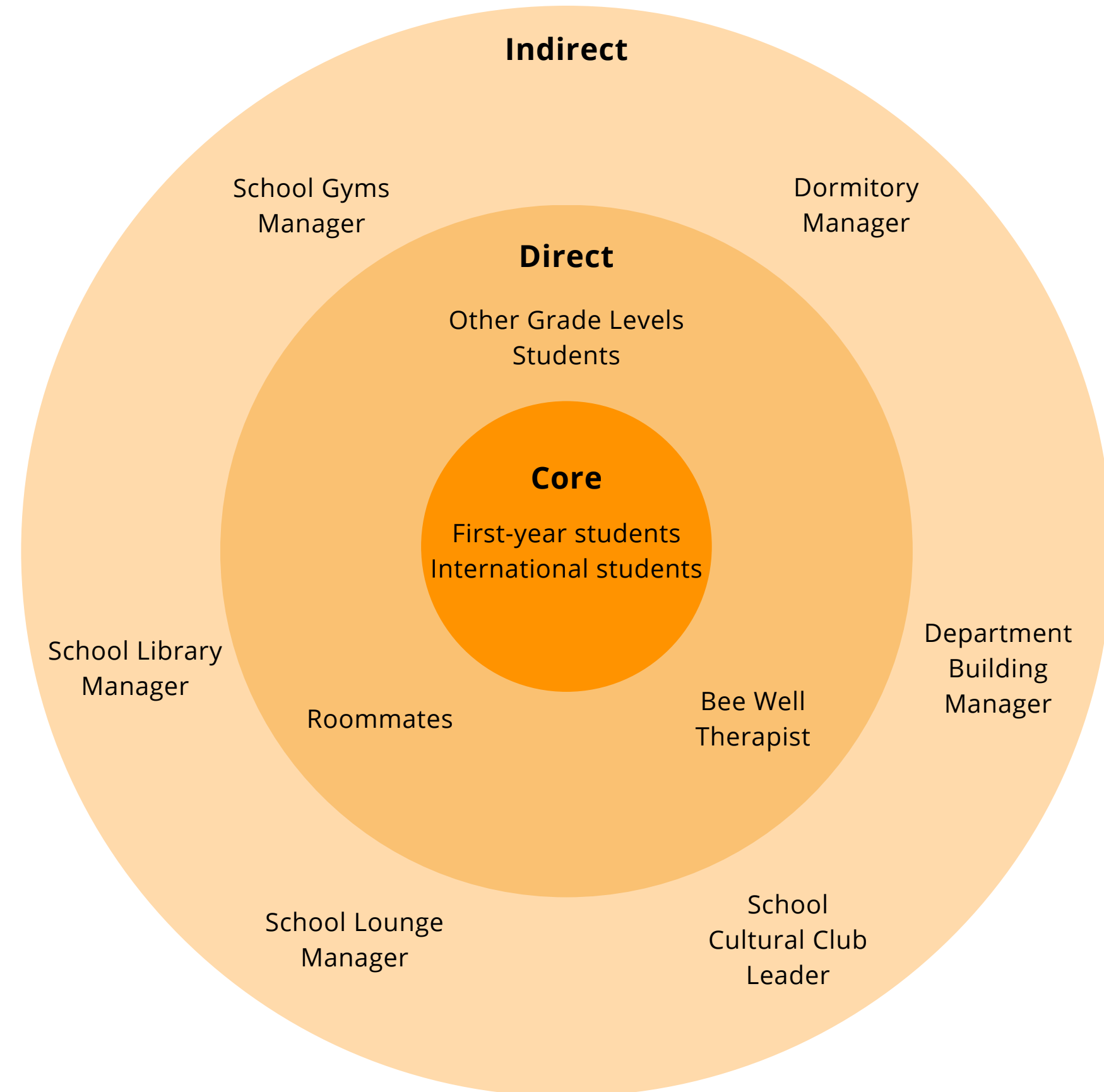
Echo Corner are centered around them, aiming to reduce their sense of loneliness on campus.

Direct

Direct Relationships refer to the people Core Users will directly interact with in **Echo Corner**. These connections are essential for Core Users to reach the ultimate goal of building meaningful relationships.

InDirect

Echo Corner relies on the support of these Indirect Relationships to provide Core Users with more opportunities to engage. With their assistance, **Echo Corner** can increase interactions between Core Users and their direct relationships, fostering a more connected environment.



FINALIZE SOLUTION

Next Steps

Here are the next steps I will take as I prepare for the final presentation to partners.

01

Conduct a thorough review of the collected resources and key data insights to identify potential gaps, validate assumptions, and determine if any modifications are required to strengthen the final presentation.

02

As I complete the final pitch deck and define our services, I am also applying the expertise to ensure future deliverables are not only well-executed, but also aligned with long-term goals and user needs.

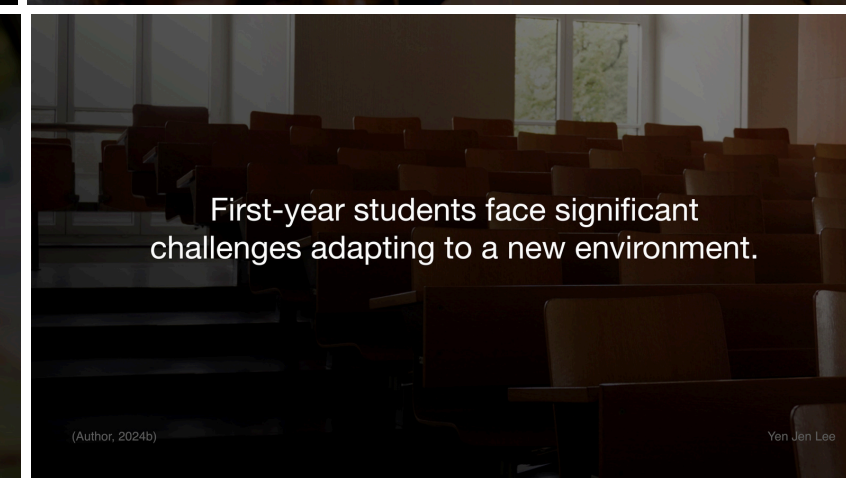
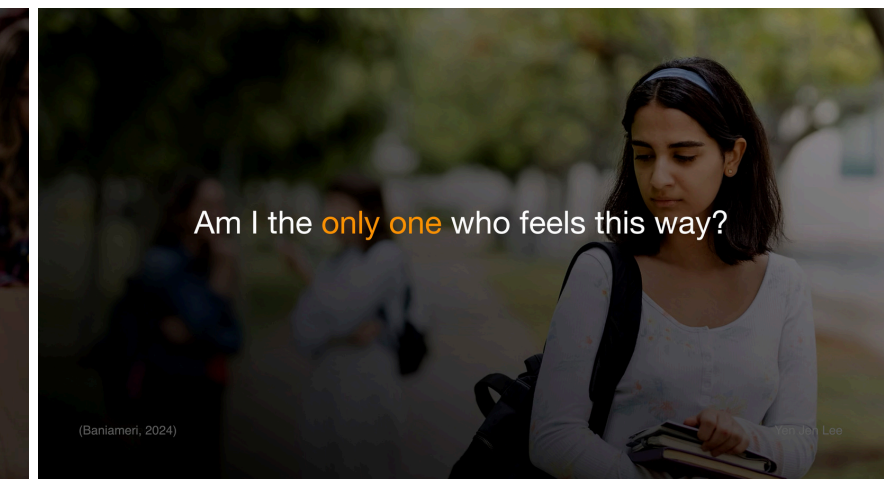
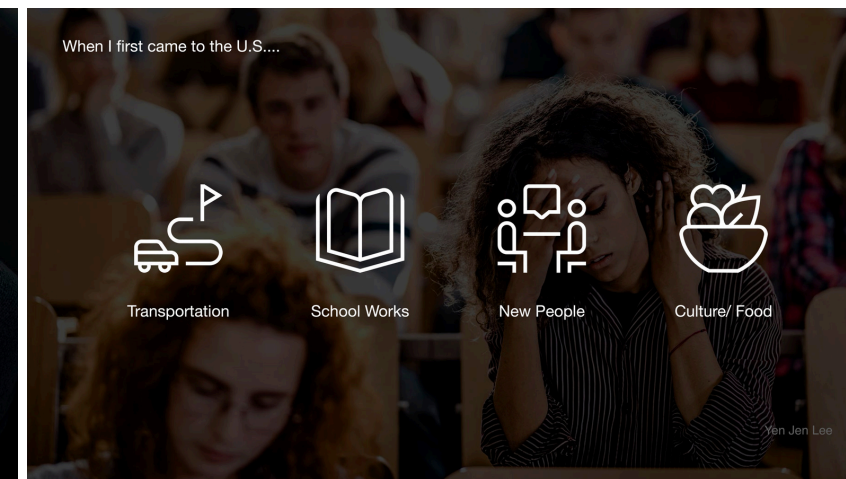
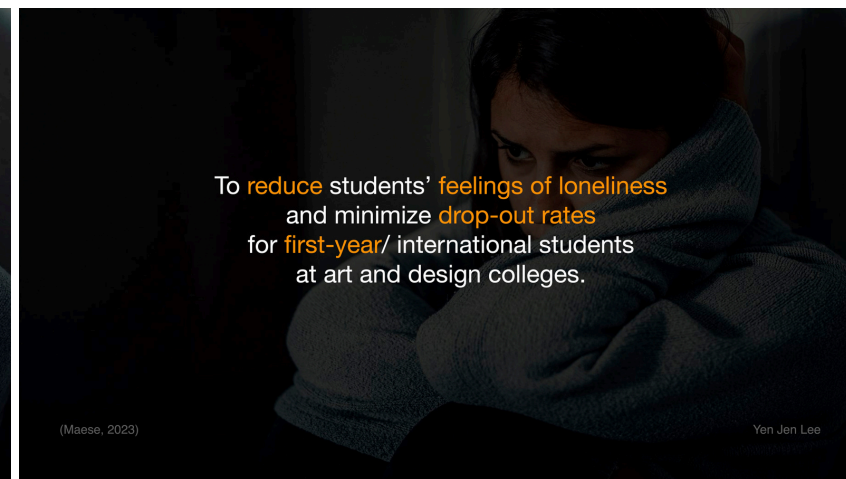
03

Upon completion, the Echo Corner project will be presented to SCAD ISSO as a proposed model for fostering connection and reducing student dropout rates. The project findings will be used to provide concrete recommendations that ISSO may consider for future service design and student engagement strategies.

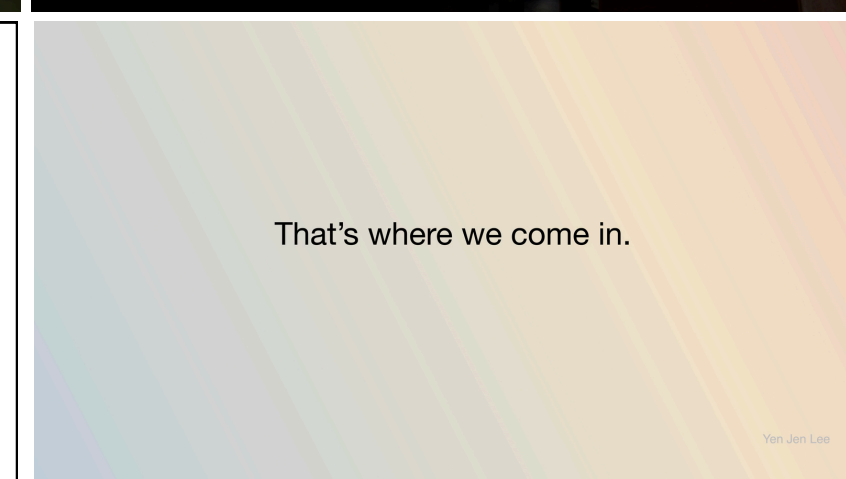
10

Final Pitch

FINAL PITCH Presentation



- Gwinn, Freshman**: "I wish someone could guide me through the school's academic system because it's hard for me to navigate."
- Sky, International Senior**: "I want people from my department who share similar interests to join the activity together."
- Ysa, International Junior**: "My fear is that I couldn't find someone to talk to."
- Kedrick, Junior**: "I need an inclusive environment where I can share my ideas comfortably without fear of judgment."
- Ankita, International Grad**: "If I don't know anyone there, I just freeze."
- Chloe, BeeWell Therapist**: "Students need to understand that building long-lasting and deep relationships requires effort and time."
- Alexia, Sophomore**: "There's not much strong connections among students in my major."



FINAL PITCH Presentation

Echo Corner

Inclusive Empathetic Authentic

Yen Jen Lee

EMOTIONAL EXPRESSION

Mood Check

HAPPY 20	EXCITED 12
EXHAUSTED 24	SAD 15

"Sometimes the most productive thing you can do is rest."
- Max Black

How are you today?

Yen Jen Lee

Echo Corner

Inclusive Empathetic Authentic

Yen Jen Lee

INTEREST CLASSIFICATION

GAME	FOOD	PHOTOGRAPHY
BEACH	MOVIE	ANIMAL
SPORTS	COOKING	PICNIC

FREE HOBBY

CAT
MATCHA

Yen Jen Lee

SPORTS

I recently competed in a bike race.

I recently won the bowling championship.

Congratulation!!

Further Connection Through Digital Platforms

Yen Jen Lee

Chats

Join The Community You Like

Yen Jen Lee

Sports

Choose The Group Fit With Your Preference

Yen Jen Lee

Jogging

Join The Group

Yen Jen Lee

JOGGING

Start Connecting Through Shared Interests

Yen Jen Lee

Yen Jen Lee

Echo Corner

Inclusive Empathetic Authentic

Yen Jen Lee

WINTER

FREE TOPIC

Design a Chair Character

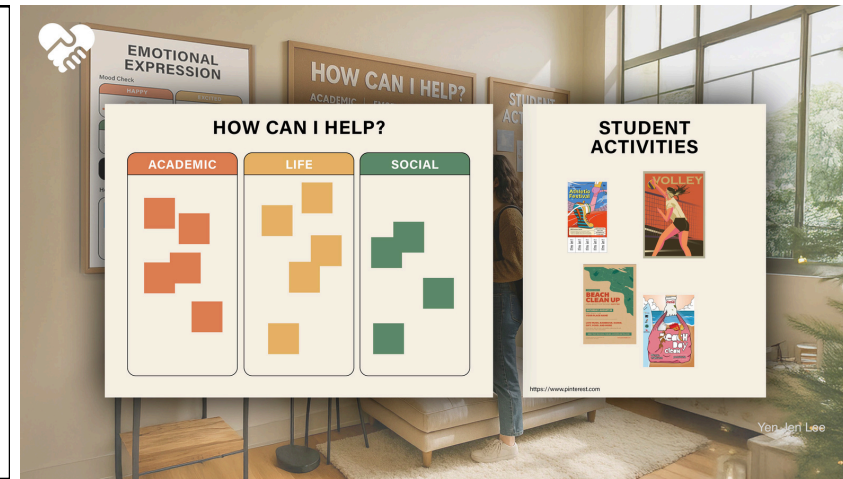
Yen Jen Lee

FINAL PITCH Presentation

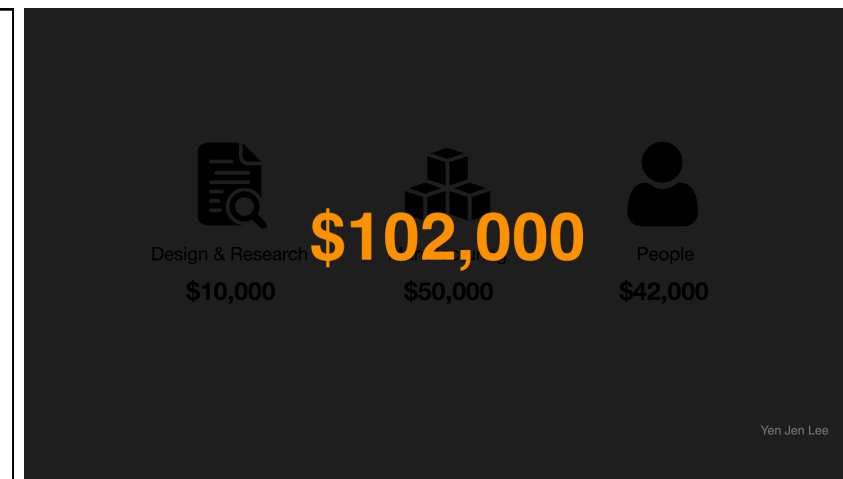
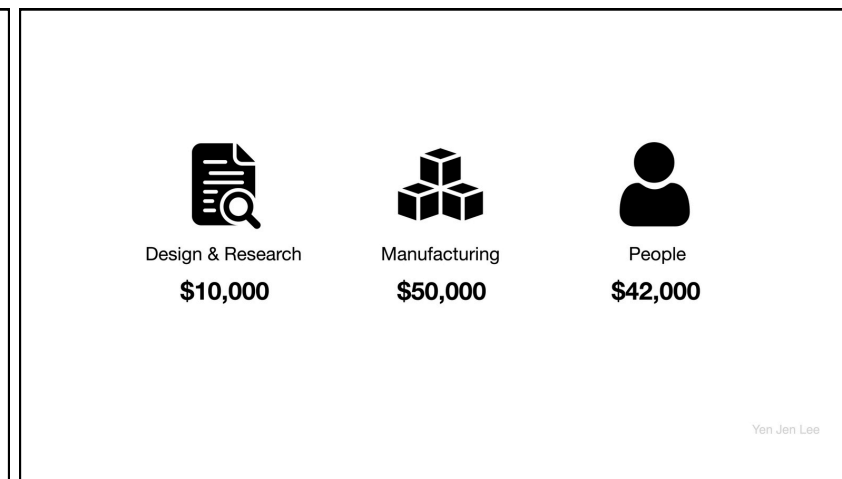


Echo Corner

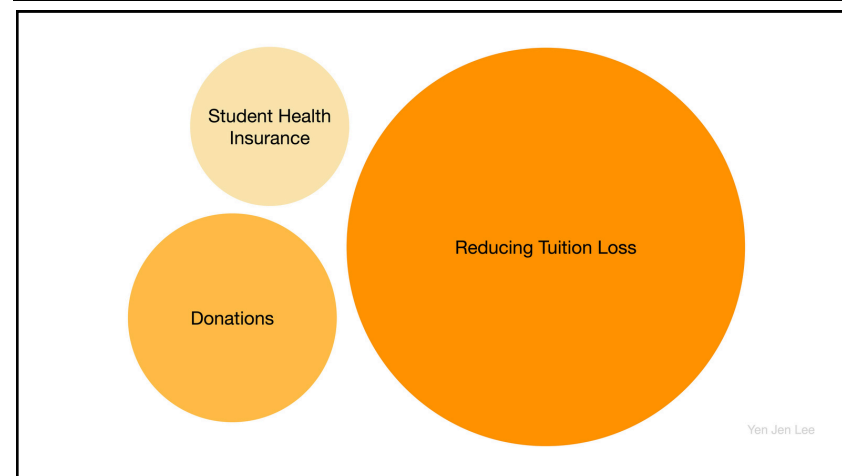
Inclusive Empathetic Authentic



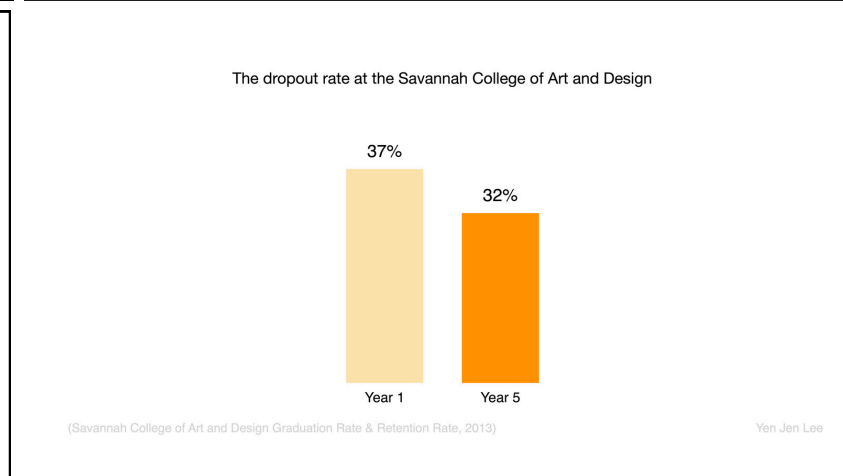
How much will it cost to get started?



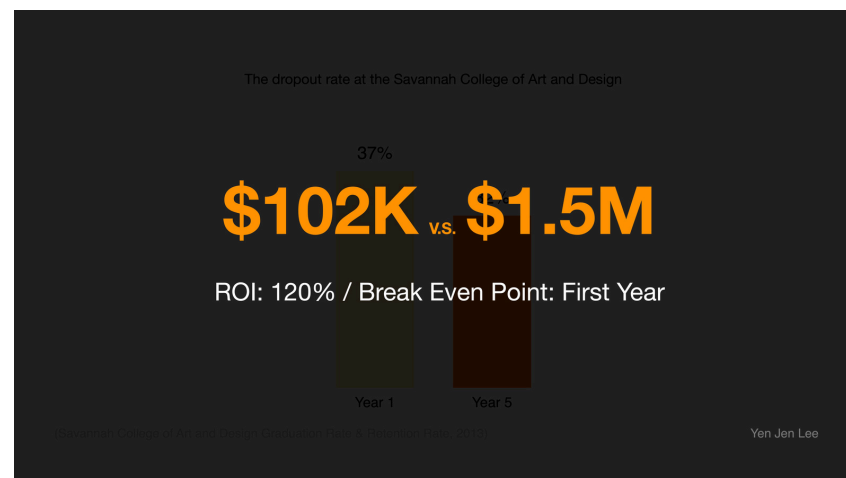
How will we make our first dollar?



Why should we invest in this?

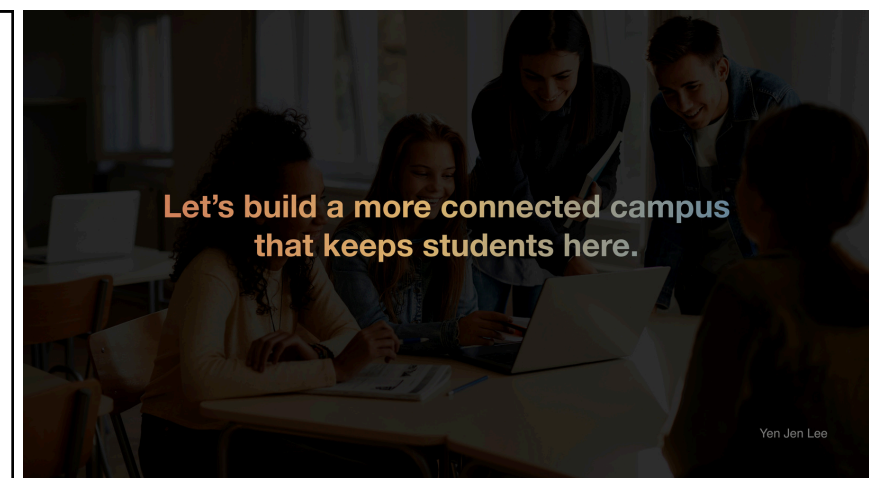
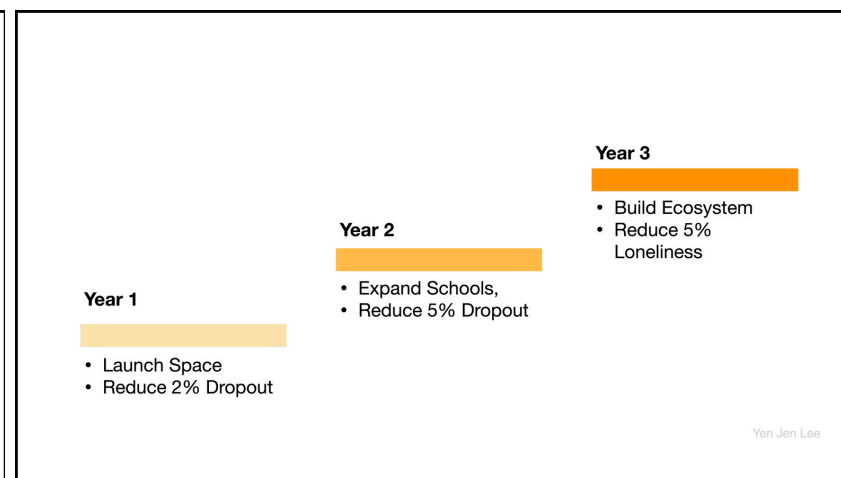


FINAL PITCH Presentation



How do we make this work?

Yen Jen Lee











11

Appendix

APPENDIX

Innovation Brief

Why	<p>Area of Focus</p> <p>To reduce student dropout rates By minimizing the feeling of loneliness With increased social connections For first-year/ international students at art and design colleges.</p> 		<p>Data Insights</p> <ul style="list-style-type: none"> Loneliness has become a growing epidemic in the United States, further intensified by the pandemic. Young adults are among the most affected, with 61% of individuals aged 18 to 25 experiencing loneliness—impacting approximately 18.6 million people. Nearly two-thirds of university students report feeling lonely, and 51.7% express concerns about their peers' mental health. The main causes of student loneliness include high expectations, misperceptions, the impact of technology, adaptation challenges, and mental health struggles. These five factors all highlight that when students lack social connection, they experience feelings of loneliness. 		<p>Business Opportunity</p> <ul style="list-style-type: none"> Research shows loneliness is a major contributor to college dropout rates. 1 in 4 lonely students fail to complete their degree. Only 61% of students return for their second year. Loneliness is frequently cited as a key reason for dropping out. U.S. colleges face an estimated \$16 billion in annual revenue loss due to student attrition. 																																								
	Who	<p>Target Audience</p> <p>Primary/ Private art and design colleges</p> <p>Secondary/ General private colleges</p> 		<p>User Audience</p> <p>Primary/ First-year college students/ Secondary/ International students</p> 		What	<p>Solution/ Product/ Service</p> <p>Build relationships among students and increase social connections</p> 		When	<p>Time</p> <p>Break time</p> 		Where	<p>Location</p> <p>On campus</p> 																																
How		<p>Roadmap</p> <p>Phase 1(w1-w2): Industry/ Market Identification Phase 2(w3-w5): Secondary/ Primary Research/ Synthesize Insights Phase 3(w6): Opportunity Development Phase 4(w7-8): Prototype/ User Feedback + Usability Testing Phase 5(w9): Finalize Design Solution Phase 6(w10): Final Pitch Presentation/ Process Book</p> 					How much	<p>Budget</p> <table border="0"> <tr> <td colspan="4"><i>Costs</i></td> </tr> <tr> <td>Development costs (Research)</td> <td>\$3000</td> <td></td> <td></td> </tr> <tr> <td>Prototyping Costs</td> <td>\$5000</td> <td></td> <td></td> </tr> <tr> <td>Testing Costs</td> <td>\$1000</td> <td></td> <td></td> </tr> <tr> <td>Trial Run Costs</td> <td>\$1000</td> <td></td> <td></td> </tr> <tr> <td>Maintenance Staff</td> <td>\$20/ hour</td> <td></td> <td></td> </tr> <tr> <td>Marketing</td> <td>\$100</td> <td></td> <td></td> </tr> </table> 					<i>Costs</i>				Development costs (Research)	\$3000			Prototyping Costs	\$5000			Testing Costs	\$1000			Trial Run Costs	\$1000			Maintenance Staff	\$20/ hour			Marketing	\$100			<p><i>Investment</i></p> <table border="0"> <tr> <td>Student Health Insurance</td> <td>\$5/ per student</td> </tr> <tr> <td>Personal Money</td> <td>\$1000</td> </tr> </table>				Student Health Insurance
	<i>Costs</i>																																												
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Personal Money	\$1000																																												

APPENDIX

Primary Research Survey

Loneliness & Campus Life

This survey aims to understand university students' experiences with loneliness, its causes, and potential solutions to improve campus environments. All responses will remain anonymous and used for research purposes only.

Basic Information

1. What year are you currently in? *

- Freshman
- Sophomore
- Junior
- Senior
- Graduate student
- I'm not in school anymore.
- 其他 : _____

2. What type of university do you attend? *

- Public university
- Private university
- Community college
- 其他 : _____

Experiences with Loneliness

Please think back to your first year on campus...

3. How often did you feel lonely during your first year on campus? *

- Always
- Often
- Sometimes
- Rarely
- Never

4. What do you think causes you to feel lonely? (Select all that apply) *

- Lack of friends
- Lack of a social circle
- Academic pressure
- Being far away from family/home
- Language barrier
- Overly dependent on technology
- Lack of deep conversations with others
- Limited interaction with roommates
- Limited interaction with classmates
- 其他 : _____

5. How do you usually cope with loneliness? (Choose up to 3) *

- Watching movies
- Playing video games
- Exercising / working out
- Talking to friends or family
- Seeking help from professionals (Student Mental Health Center)
- Joining clubs or participating in activities
- Reading / writing
- Sleeping
- 其他 : _____

6. Where on campus do you find it easiest to cope with loneliness? (Select all that apply) *

- Library
- Student center
- Sports field / gym
- Café / lounge areas
- Club or student activity spaces
- Mental Health Center
- I didn't find the right place.
- 其他 : _____

APPENDIX

Primary Research Survey

Campus Environment

7. Are you aware of any resources or services at your school that help students cope with loneliness? *

- Yes
- No
- Maybe

8. What school activities do you usually participate in? (Select all that apply) *

- Clubs (e.g., sports, arts, hobbies)
- Volunteer or service groups
- Cultural or international student organizations
- Career-related events or workshops
- Social events or mixers
- Mental health or wellness programs
- Study groups or tutoring sessions
- I don't usually participate in any activities
- 其他 : _____

9. From the answer to the last question, do you think participating in these activities helps reduce your feelings of loneliness? *

- Yes, it helps a lot
- Yes, it helps a little
- Maybe
- No, it doesn't help at all

10. Do you have any suggestions on how your school could better support students and reduce feelings of loneliness?

您的回答 _____

Willingness to Interview

Thank you very much for completing our survey! If you have a story you'd like to share with us and are willing to be interviewed, we'll be able to get more valuable insights and better ways to improve loneliness on our campuses.

Would you be open to a short follow-up interview?
If yes, please leave your contact.

您的回答 _____

APPENDIX

Interview Questions SCAD Mental Health Advisor

Warm-up Questions

1. Can you tell me a bit about your role at SCAD and how long you've been working here?
2. What types of student concerns do you typically encounter?
3. How would you describe the overall mental health climate among SCAD students?

Core Questions

1. In your experience, how common is loneliness among students, especially new ones?
2. What are some signs or behaviors that indicate a student might be feeling lonely?
3. Are there specific groups of students who seem more affected by loneliness?
4. What services does SCAD currently offer to support students dealing with loneliness?
5. How do you think technology and social media affect connection or disconnection?
6. Are there any programs that positively impact students' sense of belonging?
7. How do students typically respond to outreach or campaigns?
8. Do students seem open to seeking help? What are the barriers?
9. Have you collaborated with other departments on loneliness-related efforts?
10. If you had unlimited resources, what would you create to support students better?

Wrap-up Questions

1. Is there anything you wish students understood better about loneliness and support?
2. Do you have any suggestions for students or researchers designing solutions?

APPENDIX

Interview Questions Students

Warm-up Questions

1. What's your name (optional), major, age, and year in school?
2. What do you enjoy most about studying at SCAD?
3. How has your overall experience at SCAD been so far?

Core Questions

1. Do you remember how you felt during your first year on campus (at SCAD)?
2. What challenges do you face in making friends or feeling connected?
3. Have you ever felt lonely on campus (at SCAD)? Can you describe it?
4. What usually triggers your feelings of loneliness?

5. How do you usually cope with these feelings?
6. When you are facing loneliness, do you seek help? (Follow up: Do you seek help through social media, text)
7. Have you joined clubs or events? Did that help? (Follow up: If not, why not?)
8. Do you think physical or technological communication is a better solution to your feelings of loneliness?
9. Do you think your college (SCAD) provides enough connection opportunities?
10. Have you heard of or used mental health services here?
11. Do you feel comfortable discussing loneliness or mental health with others?
12. What would make you feel more supported on campus?

Wrap-up Questions

1. If a new student came to you feeling lonely, what advice would you give?
2. Is there anything else you'd like to share?

APPENDIX

AI Contextual Rendering_Prompt



Phase 1

This space is a spacious, wooden, cube-shaped room designed for comfort and connection. It features two cozy single sofa and blanket, atmospheric lighting, and gentle background music, creating a private and welcoming environment where people can share their thoughts without being seen from the outside. The entrance is the only uncovered side, while the other three walls host interactive panels, each with a unique purpose: there is a person sitting on the sofa and writing



Phase 2

The space features two cozy single armchairs with soft cushions and a comfortable rug. Nearby, there's a stylish floor lamp and a small side table equipped with push pins, paper, and pens. The room is spacious and gives off a home-like feeling, even though there are no windows. A girl is sitting on one of the armchairs, writing something quietly. One wall in the space holds a large message board filled with interest-based topics, while another wall has a board where students can freely name and define their own interests. Both boards already have a number of handwritten notes pinned on them.



Phase 3

Using Adobe Photoshop, extend the background of the image and include a low cabinet with a speaker, a potted plant, and a small painting placed on top. Additionally, select specific areas that require adjustment—for example, the carpet should be modified to appear fluffier and more textured, resembling a soft shaggy rug. A plant should also be added next to the carpet to enhance the cozy and natural atmosphere of the space.

APPENDIX

AI Contextual Rendering_Prompt



Phase 1

The space features two cozy single armchairs and a soft, comfortable rug. Nearby, there's a stylish floor lamp and a small side table filled with colorful markers. The room feels spacious and home-like, even though it has no windows. A young male student is in the space, looking at what others have drawn, holding a marker in his hand, ready to start his own drawing.

One of the walls features a large collaborative drawing board with a winter theme. Several student drawings are already displayed on it. Another wall holds a creative board where students can start their own drawing topics—for example, collaboratively designing a chair. Both boards already contain various student illustrations and sketches.

Phase 2

The space includes two wooden high stools facing the wall with a soft rug beneath them. A stylish floor lamp and a side table with colorful markers sit nearby. Though windowless, the room feels spacious and homey.

One wall features a collaborative drawing board with a winter theme and student artwork. Another wall offers a free-topic board for new ideas, like designing a chair—both boards already display creative sketches.

A young male student stands in front of the winter board, holding a marker, ready to draw.

Phase 3

Using Adobe Photoshop, extend the background and create a space that feels warm and home-like, with soft natural sunlight and a fluffy, cozy rug.

APPENDIX

AI Contextual Rendering_Prompt



Phase 1

The space features a soft double floor cushion, almost like a bed, placed on a fluffy rug. Nearby, there's a stylish floor lamp and a small side table with push pins, paper, and pens. Sunlight streams in, plants add warmth, and the room feels spacious and home-like.

On the left wall, there's a large board where students can share personal challenges and ask for help, organized by different themes. The right wall invites students to post ideas for small group activities they'd like to organize.

A female college student is in the space, reading the posts and preparing to leave a note for someone else.

Phase 2

The space features a soft double floor cushion, almost like a bed, placed on a fluffy rug. A stylish floor lamp and a small side table with push pins, paper, and pens sit nearby. Sunlight streams in, greenery softens the atmosphere, and the room feels spacious and home-like.

On the left wall, there's a large board where students can share their struggles and ask for help, organized by different themes. The right wall invites students to post ideas for small group activities they'd like to initiate.

A female college student is reading what others have written and getting ready to leave a message in response.

Phase 3

Using Adobe Photoshop, extend the background and add a small side table with a few books to create a cozy, relaxing atmosphere.

APPENDIX

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