



## **Addressing the Lack of Belonging among students in Hamburg Through Activity-based Spatial Design**

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### **Abstract**

Large cities with several universities often promise diversity and connection, but in practice student life is frequently shaped by institutional boundaries. In Hamburg, even though universities are geographically close and student populations are diverse, meaningful interaction across institutions remains limited. This situation can be particularly challenging for international students, many of whom experience social isolation and difficulties forming connections beyond their own university. This research explores the idea of a cross-university Student Hub as a shared space and service designed to support social integration and strengthen students' sense of belonging. The study uses a mixed-methods approach, combining environmental observation, an online survey (n = 30), and semi-structured interviews with three international students. Together, these methods helped identify barriers to cross-university interaction and revealed how existing student spaces are experienced. The findings show that current spaces are often seen as fragmented, restricted to single institutions, and lacking activities that encourage social interaction. Students consistently highlighted the importance of structured activities, low-pressure social settings, and inclusive environments that make it easier to engage without feeling overwhelmed. Drawing on Student Integration Theory and Social Identity Theory, the research translates these insights into a service design proposal for a cross-institutional Student Hub that prioritizes accessibility, affordability, and regular social programming. The proposed intervention aims to support gradual engagement, foster cross-cultural connections, and make belonging something students can experience rather than abstractly define. While the study is limited by its sample size and context, it demonstrates how service design can respond to social isolation in higher education and offers a strong foundation for future pilot testing and long-term evaluation.

**Keywords:**Service design, spatial design, user-centered design, social belonging, student integration, third places

## **1. Introduction**

Large metropolitan cities that host multiple higher education institutions often experience a paradox: despite diverse student populations, meaningful interaction across universities remains limited. Hamburg reflects this dynamic, as it is home to several institutions, including Universität Hamburg (UHH), Hochschule für Angewandte Wissenschaften Hamburg (HAW), HafenCity University, and Berlin School of Business and Innovation (BSBI). Despite their geographic proximity, student life remains largely organised within institutional boundaries, resulting in a fragmented student experience.

Previous research highlights that social support plays a critical role in students' wellbeing, academic success, and overall integration into society (Wilcox, Winn and Fyvie-Gauld, 2005). International students often experience social isolation, limited interaction with local students, and difficulties forming social networks outside their academic programs (Sawir et al., 2008). At the same time, many existing university spaces are designed mainly for academic purposes and are accessible only to enrolled students of a specific institution. As a result, opportunities for informal interaction and cross-cultural exchange across universities remain limited.

This study explores the potential of a shared Student Hub that could connect students from different universities in Hamburg. The aim is to investigate whether such a cross-institutional initiative could strengthen students' sense of belonging and encourage more connected and inclusive forms of interaction.

This study begins with an introduction that includes the initial research framing, aims, objectives, and research questions. This is followed by a literature review and theoretical framework, then the methodology along with a refined problem statement. The paper then presents the findings, service intervention, prototype logic, and evaluation plan, and ends with limitations, reflection, references, and annexes.

## **2. Initial Research Framing**

### ***2.1 Initial Research Problem***

Although Hamburg has a large and diverse student population, there is currently no shared system that brings students from different universities together in a meaningful way. Most services and spaces are tied to individual institutions, which makes interaction across universities

uncommon. As a result, students often remain within their own academic environments, with limited opportunities to connect beyond them.

This situation raises an important question: *how could a cross-university Student Hub be designed to encourage a stronger sense of belonging, inclusion, and interaction among students across Hamburg?*

Initially, the research assumed that the absence of shared spaces might contribute to limited interaction between students from different universities.

## **2.2 Hypothesis**

This study assumes that creating a Student Hub in Hamburg City would enhance the social support for local and international students and contribute to a more connected student community.

## **3. Research Aim and Objectives**

The aim of this study is to explore the potential role of a cross-university Student Hub in improving social integration and community building among local and international students in Hamburg. To achieve this goal, I will be:

- Investigating the unmet social and integration needs among international and local students from different universities in Hamburg.
- Examining students' perceptions of existing university spaces and their limitations.
- Exploring how shared physical spaces influence interaction, belonging, and community formation.
- Identifying design features and activities that support inclusive and diverse student communities.

## **4. Research Questions**

1. To what extent can a designed shared physical space foster social integration among students from different institutions?
2. What types of activities contribute most to students' sense of belonging and community?
3. What social and integration-related barriers do local and international students in Hamburg currently experience?

## 5. Literature Review

### *5.1 Social Integration & Belonging*

Research on student integration and social support consistently highlights the central role of social belonging in supporting academic persistence, engagement, and overall well-being. Tinto's (1993) theory of student social integration argues that students' continuation in higher education is strongly influenced by their level of social engagement beyond formal academic environments, such as classrooms and assessments. These informal interactions contribute to students' sense of connection and satisfaction within the academic community. Existing research further indicates that international students are particularly vulnerable to social isolation, as cultural differences, language barriers, and limited opportunities for informal interaction with local peers can significantly hinder their integration and sense of belonging (Sawir et al., 2008; Brown and Holloway, 2008; Thomas, 2012).

### *5.2 International Students and Social Isolation*

The experiences of international students are often linked to limited informal interaction with host-country students, language barriers, and cultural unfamiliarity.

Research suggests that these experiences are often linked to limited informal interaction with host-country students, language barriers, and cultural unfamiliarity, which collectively restrict opportunities for social integration and meaningful peer relationships (Brown and Holloway, 2008; Thomas, 2012).

From a theoretical perspective, **Tinto's Student Integration Theory** highlights the importance of both academic and social integration for student persistence. When international students are excluded from informal social networks, their sense of belonging within the institution is weakened, increasing the risk of disengagement (Tinto, 1993). Similarly, **Social Identity Theory** suggests that individuals who perceive themselves as outsiders within a dominant group may withdraw socially, reinforcing isolation (Tajfel and Turner, 1979).

These findings highlight the importance of creating institutional strategies and spaces that encourage informal interactions between international and local students, helping to build inclusion and mutual cultural understanding.

### *5.3 Third Places and Community Spaces*

Oldenburg's concept of "third places" describes informal, welcoming environments separate from home and work or school, such as cafés, libraries, or student lounges. These spaces are accessible, comfortable, and easy to enter, and allow people to come together naturally, without pressure or obligation (Oldenburg & Christensen, 2025).

In higher education, communal areas and student hubs function as third places by encouraging informal social interactions and fostering a sense of belonging. They are particularly important for students who may struggle to engage through formal academic channels alone (Thorpe & Partridge, 2024). Thoughtfully designed third places support spontaneous encounters, peer connections, and emotional wellbeing, contributing to a vibrant and inclusive campus community (Camp, 2015).

By creating spaces where students feel comfortable to gather, universities can strengthen social ties, support integration, and enhance the overall student experience.

#### ***5.4 Service Design and Social Interaction***

Research in environmental psychology shows that the way a space is designed can have a big impact on how people interact. Elements like layout, visibility, accessibility, and flexibility influence not only how people move through a space but also how likely they are to connect with others (Gifford, 2014). Spaces that are open and multifunctional tend to encourage more social encounters and keep people engaged for longer. For example, movable furniture and open seating arrangements signal opportunities for collaboration and informal gathering. In educational environments, spaces that feel inviting and adaptable are more likely to foster social interaction and peer connections (Whyte, 1980).

Taken together, this research highlights that design is not neutral; our surroundings actively shape how we experience and relate to each other. Designing inclusive, flexible student spaces can therefore be understood as a strategic intervention to reduce isolation and promote community building within higher education institutions.

#### ***5.5 Theoretical Framework***

This study adopts **Student Integration Theory** as its primary theoretical framework. Student Integration Theory emphasizes the importance of both academic and social integration for fostering students' sense of belonging and engagement within the educational environment. It is particularly relevant for international students, who often face challenges in integrating socially and academically into a new university context.

Complementing this, **Social Identity Theory** provides insight into how group membership and social categorization influence students' interactions, relationships, and sense of identity within their university community. While **Student Integration Theory** focuses on the process of integration, **Social Identity Theory** helps explain the underlying social and identity-related dynamics that can affect international students' experiences.

Both theories are also relevant in exploring the role of third places and community spaces, as well as service design, in supporting social interaction and identity formation among international students.

## 6. Methodology

### 6.1 Research Design and Data Collection Methods

The research was conducted using a mixed-methods approach combining observation, quantitative data collection, and qualitative interviews.

- **Micro Sensory Walk Observation:** This involved systematically walking through student campus and other selected areas to examine how students physically and emotionally interact with campus spaces, and then documenting sensory impressions, spatial behavior, and patterns of use.
- **Online Survey:** To gather quantitative data on students' sense of belonging, social integration, and use of existing spaces.
- **Semi-Structured Interviews:** To explore students' experiences, challenges, and expectations in greater depth.

This combination allowed triangulation of findings across behavioural, numerical, and narrative data.

### 6.2 Participants

Participants included both local and international students studying at universities in Hamburg. Recruitment was conducted through student social media groups (LinkedIn and Survey Circle). In total, 30 students participated in the survey and 3 students took part in the semi-structured interviews.

### 6.3 Data Analysis and Insight Development

#### 6.3.1. Environmental and Sensory Analysis

Location: Student Lounge

Type: Campus (HTK Academy)

Time: 17:05 – 17:20

Duration: 15 minutes

#### Sensory Notes:

- Smell of food near the kitchen area with a light sweet scent. The smell remains in the background.
- Lighting is soft and slightly dim in some corners. No natural light visible at all in the student lounge. In some areas the lights transfer from warm lighting to strong white lighting. The transition between light tones is visible when moving between the lounge and the corridor.

- The temperature feels slightly cool when sitting for some time. The space feels different while walking compared to sitting. Some seating areas appear more enclosed than others.
- The air felt still.
- Surfaces are mostly hard, with limited soft textures.
- Footsteps are more noticeable while walking across the hard floor. The overall sensory input is low and subdued.

### **Movement & Behaviour Notes:**

- Movement is generally quiet and not fast. The majority of students are sitting in pairs or small groups of 2–3. They were most likely in their classes more than in the student lounge. There is no rushing. The flow of movement is smooth and mostly around the entrances and main walking paths.
- Movement speed remains slow to moderate throughout the observation period. No active participation is visible in the lounge area. The lounge is mostly used for resting, sitting, or studying. Limited body movement among seated individuals. Most people remain in the same position for extended periods. No visible group activities or dynamic interaction observed. No congestion is visible.
- Some individuals pass through the Lounge quickly without stopping, likely going to the kitchen or the toilets. Others remain seated for longer periods.

### **Atmosphere Notes:**

- The space feels quiet. It is not crowded. There is a calm atmosphere. Lecturers and students who know each other greet briefly and continue walking.
- The tone of interaction is friendly, calm and low. Conversations are low in volume. The space feels socially open but not noisy.
- There is no visible tension. Energy level remains moderate to low.

### **Environmental Factors:**

- Colors appear consistent, mostly white, and not too bright but not warm as well.
- Lighting is relatively low throughout the space. In some areas, the darkness is more noticeable. Spaces that could be used for playing games remain empty during the observation period.
- Noise sources include low conversations, footsteps, and occasional kitchen sounds.
- The space is quiet overall, and footsteps can be clearly heard on the floor.
- The majority of students inside the lounge are wearing headphones.
- Circulation areas are not clear, and some of them are blocked.
- Lighting changes vary from warm white to bright white and some dark spaces like game rooms.

### *6.3.2 Environmental and Sensory Insights*

From my observations, the space felt underused socially and did not feel comfortable for socializing or collaborative activities. Students seemed to prefer staying in one spot for lengthy periods and appeared low-energy and somewhat detached, keeping to themselves or using headphones. No active participation or group activities were observed. Areas meant for engagement stayed empty. Overall, the lounge felt not very engaging, with little motivation for students to move, interact, or participate.

### *6.3.3 Behavioural Insights from Students' Interviews*

After clustering the interview data, several clear categories emerged across participants. First, all interviewees are **international students who are new to Hamburg**. This shared context strongly influences how they experience social life and integration. Although each participant expressed a desire to belong, they also described hesitation when engaging socially in unfamiliar environments.

A second category relates to **structured activities**. Participants consistently referred to events, workshops, or shared experiences as moments where interaction felt easier and more natural. Having a clear structure reduced social pressure and provided a reason to connect with others.

Another important category concerns **autonomy and personal comfort**. Participants preferred low-pressure environments, familiar groups, or gradual forms of engagement. They did not reject social interaction, but they needed time, reassurance, and a sense of safety before actively participating.

**Communication and support** also appeared as a recurring category. Language barriers, uncertainty about approaching others, and the need for guidance highlighted the importance of accessible support systems within the student environment.

Finally, there was noticeable ambiguity around the concept of “**community**.” While all participants expressed a desire to feel part of something, they struggled to clearly define what that meant. This suggests that belonging should not remain an abstract idea but should instead be made visible and experiential within the design of a shared space.

These clusters directly inform the development of an activity-oriented, inclusive student hub that supports structured engagement and visible peer support.

### *6.3.4 Behavioural Patterns*

- Hesitant Entry Pattern

When entering a new social environment, students tend to observe first before actively participating. They delay interaction because they feel uncertain and require emotional safety before engaging.

- Activity-Enabled Interaction Pattern

Once a structured activity is present, students become more willing to engage. Shared tasks reduce social pressure and provide a natural entry point for interaction.

- Gradual Comfort Pattern

As interaction becomes repeated and predictable, students begin to engage within familiar or low-pressure settings. They prefer environments that allow gradual participation rather than immediate or forced socialisation.

- Guided Support Pattern

During this process, students actively seek reassurance through guidance, peer support, or trusted individuals. Visible support systems increase confidence and stability within the space.

- Experiential Belonging Pattern

Over time, belonging becomes less abstract and more experiential. Through repeated interaction and supported engagement, students expand their social circle, feel more secure, and develop a stable sense.

### *6.3.5 Survey Insights*

#### **Summary of Key Insights**

- Students are open to a shared student hub. About 62% of those who answered said they'd use it.
- Current spaces feel fragmented. The main frustrations identified were that spaces are often "limited to one university" and that there is a "lack of social activities." About 47% of respondents highlighted the issue of spaces being restricted to a single university, while 40% reported a lack of available social activities.
- Social connection is still weak. Students continue to use shared spaces only occasionally, with most visiting rarely or a few times a week. The updated pattern (1 daily, 7 several times a week, 5 once a week, 7 rarely, 3 never) shows that current spaces still do not encourage strong cross-university interaction.

- Structured community beats empty rooms. The most attractive draws are social events (50%), affordable café/food (43%), networking (33%), outdoor activities (30%), language exchange (27%), regular workshops (23%), and sports (23%).
- The students who feel most isolated are the most eager to join events. Additionally, those who mentioned that the hub being “limited to one university” is a problem were more likely to say they would use it than students who didn’t raise this concern.

### Overview of the Survey Sample

- Total number of responses was 30 (collected via MS Forms and summary view exported on Mar 14, 2026).
- 70% of responders are based in Hamburg; 7% nearby; 23% not in Hamburg.
- The survey was designed to skip questions for participants who stated that their location was outside Hamburg or not in nearby city/town. As a result, 7 respondents were excluded from the final sample.
- The total number of participants included in the final sample was 23.
- Study level of those who answered this the survey was as follow (70% Master’s, 22% Bachelor’s, 9% PhD).
- Student status (of those who answered this item): 61% international (non-EU), 17% international (EU), 22% local (German).

### Current Levels of Social Integration and Perceived Social Barriers

Across the Likert-scale questions, responses suggest a cautious tone rather than a strong sense of connection, indicating that existing spaces do not yet effectively support interaction between students from different universities.

- **Feeling socially connected:** 9% strongly disagreed, 26% disagreed, 35% neutral, 30% agreed. Average score slightly negative.
- **Easy to meet students outside own university/batch:** Meeting students outside one’s own university or batch appears to be the most challenging aspect (48% disagreed, only 22% agreed).
- **Sense of belonging to Hamburg’s wider student community:** 43% disagreed, 21% agreed, 35% neutral.
- **Language and cultural differences:** 39% agreed that these challenges make interactions harder.

When we ask whether existing spaces help students mix across universities, 44% of students disagree or strongly disagree, with only 21% agreeing. In other words, the spaces in Hamburg aren’t doing the heavy lifting on cross-institutional community.

### Activity Preferences and Engagement Motivators

Students indicate that they would be open to using a Student Hub if it offers the right mix of activities and services. About 65% reported they would likely use the hub, while 26% felt neutral and only 8% said they were very unlikely to use it.

The findings suggest that students are not only looking for a physical space, but for meaningful programming and activities. The most attractive offerings include:

- Social events such as game nights, movie screenings, or cultural evenings (50%)
- A café or affordable food options (43%)
- Networking opportunities (33%)
- Outdoor activities, festivals, or events (30%)
- Language exchange activities (27%)
- Sports activities (23%)
- Regular workshops (23%)

Some students also expressed interest in smaller or more focused formats, such as:

- Single-session workshops (20%)
- Group study or discussion rooms (20%)
- Small talks or informal talks (10%)

A particularly important insight relates to cross-university access. Among students who identified the problem that activities are often “limited to one university,” around 73% said they would likely use the hub, compared with about 43% among those who did not mention this issue.

### **Students’ Quotations**

- “Structured organization, not just come and chill.”
- “E-sports tournaments and LAN gaming.”
- “A place which helps in every sense as a student.”
- “Everyone can find their place there.”
- “Connecting students.”

These comments echo the numbers: students don’t just want another room—they want a structured, welcoming hub that actively brings people together and lowers the social barriers.

**Link to the Online Survey:** [\*A Student Hub Project in Hamburg City – Fill in form\*](#)

**Link to the Results Overview:** [\*A Student Hub Project in Hamburg City – Results\*](#)

#### *6.3.6 Key Design Priorities Informed by Survey Findings*

- **The service would be a truly cross-university resource:** Students who currently feel excluded by single-university spaces are the ones most willing to participate, so making the Hub open and accessible across all institutions is essential.

- **The service would be driven by a structured calendar rather than simple access:** Regularly scheduled activities such as weekly social evenings, language exchanges, and low-cost mixers would generate much stronger engagement than an unstructured space alone.
- **The Student Hub would be intentionally affordable and welcoming:** A small café with student-friendly pricing, combined with inclusive hosting measures like peer greeters and multilingual signage, would directly address concerns about cost and unwelcoming environments. An example of this approach is offering an affordable breakfast during the early morning hours, especially during peak semester exam periods.
- **The Student Hub would support multiple modes of engagement:** Instead of relying on a single type of area, the Hub would combine open hangout zones, bookable group rooms, and a steady programme of workshops and outdoor events, helping it remain active and inclusive throughout the day.
- **Activities would be designed to bring local and international students together:** Events such as buddy nights, cultural exchanges, and collaborative project sessions would deliberately encourage integration aligning with the majority of students who believe the Hub can strengthen cross-cultural connection.

## 7. Findings

This section builds on the analysis and brings together the key insights from the observations, interviews, and survey.

What became clear early in the research is that the issue is not simply the lack of student spaces in Hamburg, but how these spaces are actually experienced. Most existing environments are used in a passive way. Students sit, study, or pass through, but they rarely interact. The spaces feel available, but not socially active.

Another important finding is that interaction does not happen naturally just because people share the same space. Across all methods, students were much more likely to engage when there was a clear activity or structure. Without that, many stayed in observation mode or kept to themselves. This suggests that interaction needs a trigger.

The research also shows that students approach new social environments carefully. Especially for international students, entering a new space comes with hesitation. People tend to observe first, understand the situation, and only then decide whether to engage. This makes first impressions and entry experiences very important.

Fragmentation between universities also came through strongly. Students are mostly exposed to their own university environment, and there are very limited opportunities to connect outside of it. This creates small, closed circles instead of a wider student community.

Another insight is that students prefer low-pressure environments. They are open to meeting others, but they do not want to feel pushed into interaction. Instead, they respond better to settings where they can engage gradually and on their own terms.

Finally, the idea of belonging itself was not clearly defined by students. While many said they wanted to feel part of a community, they struggled to explain what that means. What became visible instead is that belonging develops over time, through repeated interaction and familiar experiences, rather than from a single moment or space.

Overall, these findings suggest that the problem is less about space, and more about how interaction is supported within that space.

## 8. Refined Problem Statement

Based on the behavioural analysis and identified patterns of gradual engagement, hesitation, and the need for structured interaction, the research problem was refined as follows:

**How might we support a stronger sense of belonging among students in Hamburg by designing a shared space and service that encourages structured interaction, gradual engagement, and cross-university connection?**

## **9. Design Response Based on Findings**

The design of the Student Hub directly responds to the insights identified in the findings.

First, because existing spaces are used passively, the Student Hub is not designed as just a place to sit, but as a space supported by ongoing activity and programming. The goal is to shift the experience from passive use to active participation.

Second, since interaction does not happen automatically, the hub focuses on structured activities such as workshops, social events, and themed sessions. These act as entry points for interaction, making it easier for students to connect without needing to initiate conversations themselves.

The hesitation observed when entering new environments is addressed by designing for gradual engagement. The hub allows students to first explore, observe, and join at their own pace. This is supported through clear navigation (QR code entry, app onboarding) and low-pressure activities where participation feels optional rather than expected.

To respond to the fragmentation between universities, the Student Hub is intentionally designed as a cross-institutional service. It connects students from different universities through one shared platform and space, making interaction more visible and accessible.

The preference for low-pressure environments is reflected in the overall tone of the service. The hub combines social activities with informal spaces like cafés or open seating, allowing students to choose how they want to engage.

Finally, since belonging develops through repetition, the service is built around consistent and recurring experiences. Weekly events, regular interaction, and ongoing participation are key to helping students move from initial contact to a stronger sense of community over time.

Overall, the design shifts the focus from simply providing space to designing interactions, entry points, and experiences that support connection in a more natural and gradual way.

## **10. Service Intervention**

### ***10.1 Concept Development***

For students across Hamburg's universities, we will design a cross-institutional Student Hub that supports social activities, peer connections, and shared events, so that students can feel a stronger sense of belonging and their social interaction extend beyond institutional boundaries.

### ***10.2 Behavioural Change***

Currently, students mostly interact within their own university environment. Social activities, services, and communities are organised internally, which limits opportunities to meet students from other institutions. Many students, particularly international students, search independently

for social connections or events and often remain within small circles within their academic programmes or campus communities.

The Student Hub aims to shift this behaviour by encouraging students to engage with a shared Student Hub that connects them with peers from other universities. Instead of searching independently for social opportunities, students will be able to discover events and join activities through a central platform that connects with peers from multiple universities. This change aims to facilitate cross-university interaction and strengthen the sense of belonging to a broader community.

### ***10.3 Service Proposition***

The proposed service is a cross-university Student Hub designed to encourage interaction and community building among students in Hamburg. The service targets students from different higher education institutions who currently have limited opportunities to connect outside their own universities. The Student Hub aims to provide a shared platform where students can discover events, join interest-based groups, and interact with peers from other institutions. By creating a shared environment for communication and activities, the service seeks to strengthen students' sense of belonging and encourage social interaction across institutional boundaries.

### ***10.4 Service Journey Map***

The service journey begins with awareness, when students first learn about the Student Hub through university communication channels, QR codes inside campuses or libraries, social media, or student organisations. In the entry stage, students access the platform and create a profile where they can indicate their university and personal interests. During the participation stage, students explore available events, interest groups, or activities and connect with other students. Finally, ongoing engagement occurs as students continue to participate in activities, receive event recommendations, and develop social connections within the broader student community.

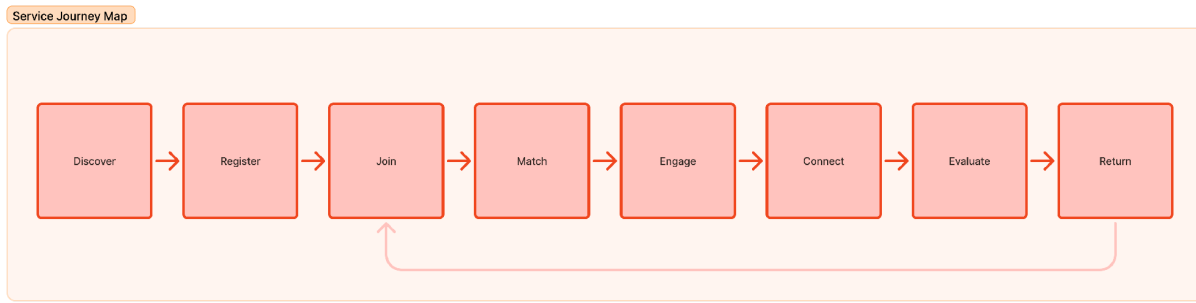


Figure 1: Service Journey Map Diagram – Created by the Author

### 10.5 Service Blueprint

To support the Student Hub service, several frontstage and backstage processes are required. On the frontstage level, students interact with the platform interface where they can register, browse events, and communicate with other participants. Behind the scenes, universities and student organisations collaborate to organise activities and maintain the platform. Administrative processes include event coordination, content moderation, and system maintenance. These combined processes ensure that the service remains accessible, organised, and responsive to students’ needs.

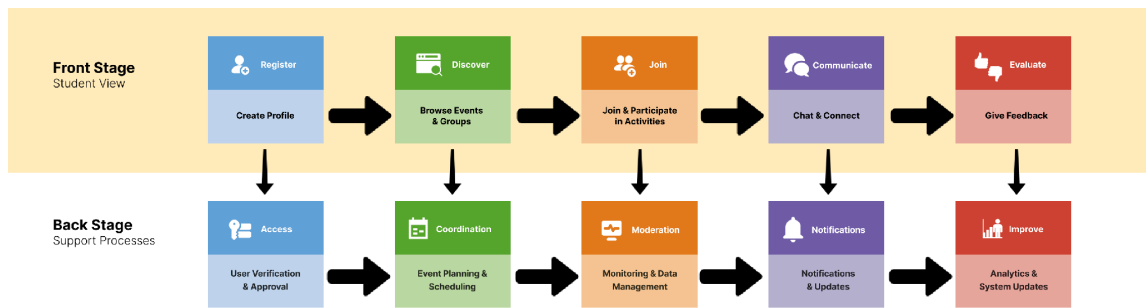


Figure 2: Student Service Blueprint with Swimlanes Diagram – Created by the Author

## 11. Prototype Logic

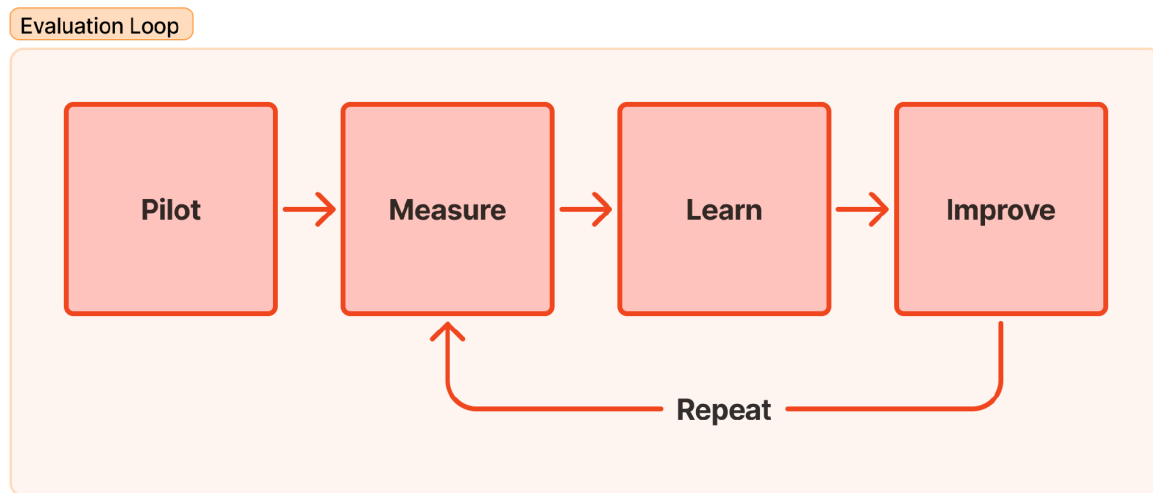
The prototype illustrates the interaction flow between students and the Student Hub Service. Students first encounter a QR code placed in university spaces such as libraries, cafeterias, student lounges or on distributed posters. After scanning the QR code, they are directed to the Student Hub platform (Mobile App) where they create a profile and select their interests. Based on these preferences, the app shows the weekly schedule and recommends events and activities involving students from different universities. Students can participate in workshops, one-time sessions, morning breakfasts, game nights, and cultural events. Once a student joins an event, they will complete a survey or a short 1–5 scale to evaluate their experience and assess their likelihood of attending future events.



Figure 3: Student Journey through the Student Hub – Created by Ai

## 12. Evaluation Plan

To ensure the Student Hub delivers on its intended outcomes, a structured evaluation process is proposed that tests both the logic and effectiveness of the service. The evaluation of the Student Hub follows an **iterative evaluation cycle**. Rather than relying on a single testing phase, the service is continuously refined through repeated cycles of testing, analysis, and improvement.



*Figure 4: Agile Evaluation Loop – Created by the Author*

### ***12.1 The Pilot Phase***

The process begins with a **pilot phase**, where the service is introduced to a limited group of students from multiple universities in Hamburg. The pilot would run over a period of 3-4 months, providing sufficient time to observe patterns of engagement, adoption, and social interaction.

### ***12.2 The Measurement Phase***

The **measurement phase** collects both quantitative and qualitative data. Platform analytics track user behaviour, participation rates, and engagement levels, while surveys and feedback forms capture students' perceptions of belonging and usefulness.

### ***12.3 The Learning Phase***

The **learning stage** focuses on analysing this data to identify patterns, challenges, and opportunities for improvement. Insights from this stage help determine which features support meaningful interaction and which aspects require adjustment.

### ***12.4 The Improvement Phase***

Finally, the **improvement phase** applies these insights to refine the service. Adjustments may include improving event planning, enhancing the onboarding or the awareness process, or expanding communication features. This cycle is then repeated, allowing the Student Hub to evolve through continuous feedback and iterative design.

## 12.5 Evaluation Indicators

To understand whether the Student Hub supports social interaction and belonging, the evaluation would focus on several key quantitative and qualitative indicators.

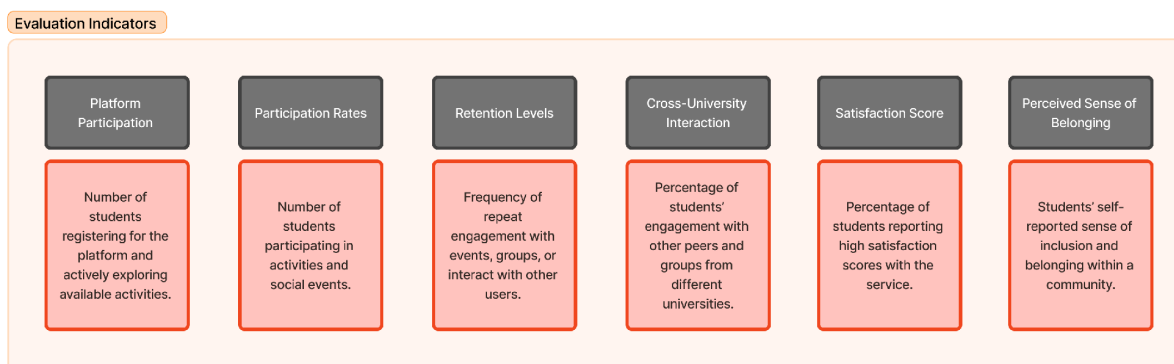


Figure 5: Evaluation Indicators – Created by the Author

## 12.6 Success Metrics

These indicators would be measured using a combination of behavioural data and user feedback.

Indicator	Success Metric
Platform Participation	<ul style="list-style-type: none"> <li>● 80% of students who download the app or scan the QR code sign up or create an account.</li> <li>● 60% of registered students log in at least once per week.</li> <li>● 70% of registered students explore at least one feature (events, groups, or weekly schedule) per week.</li> <li>● 60% of students log in weekly for 4 consecutive weeks.</li> <li>● 30% of students who participated in an event, repeat event sign-ups over 3 months.</li> </ul>
Participation Rates	<ul style="list-style-type: none"> <li>● 50% of registered students attend at least one event per week.</li> <li>● 30% of registered students attend two or more events per week.</li> </ul>
Retention Levels	<ul style="list-style-type: none"> <li>● 50% of students who participate in an event go on to attend at least one additional event within the following 3 to 4 weeks.</li> <li>● 20% of students attend events every week for at least 4 consecutive weeks.</li> </ul>
Cross-University Interaction	<ul style="list-style-type: none"> <li>● 60% of student interactions (in-person or digital chat, group participation, event collaboration) are with students from a different university or different batches.</li> </ul>

	<ul style="list-style-type: none"> <li>● 30% of participants report forming at least one new connection outside their own university.</li> </ul>
Satisfaction Score	<ul style="list-style-type: none"> <li>● Average satisfaction rating <math>\geq 4/5</math> on post-event and post-platform surveys.</li> <li>● 80% of students report being “satisfied” or “very satisfied” with the student hub experience.</li> </ul>
Perceived Sense of Belonging	<ul style="list-style-type: none"> <li>● 70% of students agree or strongly agree they feel connected to a community.</li> <li>● Increase baseline sense of belonging by 20% from pre-survey to post-survey.</li> </ul>

*Table 1: Success Metrics – Created by the Author*

**12.7 Evaluation Methods and Tools**

The below methods and tools will be used to assess the effectiveness of the Student Hub and track its impact on student engagement and social integration.

*12.7.1 Digital Analytics*

Digital analytics will track quantitative engagement metrics on the platform, including registrations or sign-ups, platform logins, and event participation or cancellations. In-app evaluations will also be implemented, such as short rating scales (1–5) following registration or event participation. In addition, perceived usefulness will be assessed to understand how well the platform supports students in discovering and joining activities.

*12.7.2 Semi-Structured Interviews*

A small number of interviews will be conducted with selected students to explore qualitative insights, such as their experiences, motivations, and barriers, in greater depth. The sample should include both local and international students. Focus areas include:

- Challenges or barriers to participation.
- Motivations for joining activities.
- Suggestions for improving the platform, events, and overall hub experience.
- Perceptions of cross-university interaction and sense of community.

*12.7.3 Surveys and Feedback Forms*

Short online surveys will be distributed to participating students via QR codes on posters or displayed on walls after events to assess their subjective experiences. Key areas include:

- **Perceived Sense of Belonging:** Surveys will include a short scale measuring participants' sense of belonging to the community, for example: "I feel more connected to the student community in Hamburg."
- **Satisfaction with Activities and Events:** This will assess the level of enjoyment and perceived usefulness of participating in activities and events.
- **Willingness to Continue Using the Service:** Participants will be asked about their intention to use the service again in the future.

### 13. Limitations

Despite the structured research process, several limitations should be acknowledged.

- **Limited Sample Size:** The survey and interviews involved a small number of participants, which may not fully represent the diversity of students across all universities in Hamburg.
- **Time Constraints:** The research and evaluation period was limited, which restricted the possibility of conducting long-term observation.
- **Context-Specific Findings:** The research focuses specifically on the student environment in Hamburg, which may limit the transferability of the results to other cities or university systems.

### 14. Critical Reflection

This project grew slowly and naturally, beginning with a very broad problem. It then developed through several rounds of brainstorming and reflection, simple observations, and interviews that focused on understanding what students actually do rather than what they say. Those choices shaped everything that followed. Paying attention to behaviour made the insights feel grounded in reality, and it helped me avoid designing from assumptions. After gathering the interviews and observation notes, I moved into translating these findings into insights and then into behavioural patterns. Those patterns gave the project direction. They helped me see which needs kept repeating and which ideas were strong enough to build on.

The development of the Student Hub concept demonstrates how service design approaches can help translate research insights into practical solutions. By combining observation, surveys, and interviews, the study identified key challenges related to social isolation and limited cross-institutional interaction. These insights informed the design of a service that aims to facilitate connections, shared activities, and a stronger sense of belonging among students.

My role throughout this research moved between being a researcher and being a designer. I prepared the research questions, conducted the interviews, analysed what I found and eventually made decisions about the design concept. Because this was my first time creating a service from the ground up, the experience felt both challenging and exciting. I became more aware of my

own positionality and how my perspective shaped what I noticed and prioritised. To stay balanced, I kept returning to the behavioural evidence instead of personal assumptions. One important moment was when I started designing the user journey. Thinking through how a student would first encounter the service, scan a QR code, find an event, join in and stay engaged made the idea feel real. It also forced me to think about how to make engagement smooth and meaningful rather than something that happens only once.

There were clear challenges along the way. Synthesising the research took much more time than expected, and reaching a wider mix of students across different universities proved difficult within the available timeframe. Still, these challenges taught me a lot. The biggest learning was realising how differently people describe their needs when the focus is on behaviour instead of general opinions. Asking about routines, triggers and barriers revealed insights that a more traditional survey could have easily missed.

Ethically and socially, I tried to keep the project respectful and accessible. Participation was voluntary, privacy was maintained, and I aimed to design something that felt safe, inclusive and easy to use. Practical choices mattered as well. For example, using a QR code as an entry point felt like a small but important decision that could help make the service more approachable. Throughout the process, I kept thinking about how the service could support community building and make student life in Hamburg feel more connected.

Looking back, the project shows how design-led research can be used to address real social challenges in higher education. Moving from observation to insights, then from insights to patterns and finally to a concept and journey taught me how research can be translated into something practical and meaningful. It gave me a clearer sense of what it means to design with intention and to base decisions on real needs rather than assumptions. On the other hand, the project also revealed that designing a service concept is only the first step. Successful implementation would require collaboration between universities, sustained communication strategies, and continuous evaluation of student engagement. Future research could therefore focus on testing the Student Hub through a pilot program and examining its long-term effects on student wellbeing, social integration, and community building.

## References

- Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and International Students: An Australian Study. *Journal of Studies in International Education*, 12(2), 148-180. <https://doi.org/10.1177/1028315307299699> (Original work published 2008) (Accessed: 10 Feb 2026).
- Wilcox, P., Winn, S. and Fyvie-Gauld, M. (2005) “It was nothing to do with the university, it was just the people’: the role of social support in the first-year experience of higher education’, *Studies in Higher Education*, 30(6), pp. 707–722. Available at: <https://doi.org/10.1080/03075070500340036> (Accessed: 08 Feb 2026).

- Brown, L. & Holloway, I., 2008. *The Initial Stage of the International Sojourn: Excitement or Culture Shock?* **British Journal of Guidance & Counselling**, 36(1), pp.33-49. Available at: <https://doi.org/10.1080/03069880701715689>. (Accessed: 05 Feb 2026).
- Thomas, L., 2012. *Building student engagement and belonging in higher education at a time of change: Final report from the What Works? Student Retention & Success programme*. York: Higher Education Academy.  
Available \_\_\_\_\_ at: <https://www.advance-he.ac.uk/knowledge-hub/building-student-engagement-and-belonging-higher-education-time-change-final-report>. (Accessed: 07 Feb 2026).
- Tajfel, H. and Turner, J.C. (1979) *An integrative theory of intergroup conflict*, in Austin, W.G. and Worchel, S. (eds.) *The social psychology of intergroup relations*. Monterey, CA: Brooks/Cole, pp. 33–47.  
Available \_\_\_\_\_ at: [https://pdfhost.io/v/yUCe4GrDjL\\_kupdf\\_net\\_tajfel\\_turner\\_1979\\_an\\_integrative\\_theory\\_of\\_intergroup\\_conflict](https://pdfhost.io/v/yUCe4GrDjL_kupdf_net_tajfel_turner_1979_an_integrative_theory_of_intergroup_conflict) (Accessed: 01 Feb 2026).
- Tinto, V. (1993) *Leaving college: Rethinking the causes and cures of student attrition*. 2nd edn. Chicago: University of Chicago Press.
- Oldenburg, R. & Christensen, K., 2025. *Third places, true citizen spaces*. UNESCO. Available at: <unesco.org> (Accessed 10 Feb. 2026).
- Thorpe, C. & Partridge, H., 2024. *The Third Space in Higher Education: A Scoping Review. Higher Education Policy*. doi:10.1057/s41307-024-00374-z. Available at: <link.springer.com> (Accessed 08 Feb 2026).
- Camp, B. H., 2015. *A Study of Third Place: Benefits of Shared Leisure Practices in Public Gathering Places*. Middle Tennessee State University. Available at: <jewlscholar.mtsu.edu> (Accessed 10 Feb 2026).
- Whyte, W.H., 1980. *The Social Life of Small Urban Spaces*. Available at: [https://streetlifestudies.wordpress.com/wp-content/uploads/2017/06/1980\\_whyte\\_small\\_spaces\\_book.pdf](https://streetlifestudies.wordpress.com/wp-content/uploads/2017/06/1980_whyte_small_spaces_book.pdf) (Accessed 10 Feb 2026).
- Gifford, R., 2014. *Environmental Psychology Matters. Annual Review of Psychology*, 65:541-579. Available at: <https://doi.org/10.1146/annurev-psych-010213-115048> (Accessed 3 Feb 2026).

## Annexes

### *Interview Questions*

1. Would you like to tell me about yourself and what do you study?
2. Would you please describe what your social life as a student in Hamburg currently looks like?
3. Would you tell me where you usually spend time outside of classes, and how do these places shape your experience as a student?
4. How do you usually meet new students here, and what challenges you face?
5. Would you please describe what does “to be connected to a community” mean to you as a student?
6. If there were a shared Student Hub open to all universities in Hamburg, what would make it meaningful or useful for you?

### *Online Survey Questions*

#### **Section 1: Background Information**

(Select one option)

1. **Which university are you currently enrolled in?**
  - Public University. Name of the University: \_\_\_\_\_
  - Private University. Name of the University: \_\_\_\_\_
  - Other: \_\_\_\_\_
2. **What is your student status?**
  - Local (German) student
  - International student (EU)
  - International student (non-EU)
3. **What is your level of study?**
  - Bachelor
  - Master
  - PhD
  - Other: \_\_\_\_\_

#### **Section 2: Social Integration & Belonging**

(5-point Likert scale)

4. **I feel socially connected to other students in Hamburg.**
  - Strongly disagree  Disagree  Neutral  Agree  Strongly agree
5. **I find it easy to meet students outside my own batch or university.**
  - Strongly disagree  Disagree  Neutral  Agree  Strongly agree
6. **I feel a sense of belonging to the wider student community in Hamburg.**
  - Strongly disagree  Disagree  Neutral  Agree  Strongly agree

### Section 3: Existing Spaces

(Select one option)

7. **How often do you use university or public spaces (libraries, cafés, study spaces) to socialize, meet new students or study?**  
 Daily  Several times a week  Once a week  Rarely  Never
8. **Existing student spaces support interaction between students from different universities.**  
 Strongly disagree  Disagree  Neutral  Agree  Strongly agree
9. **What is the main limitation of existing student spaces? (Select one)**  
 Overcrowded  
 Too expensive  
 Limited to one university  
 Not welcoming / uncomfortable  
 Lack of social activities  
 Other: \_\_\_\_\_

### Section 4: Local & International Students

(5-point Likert scale)

10. **I regularly interact with students from different cultural or national backgrounds.**  
 Strongly disagree  Disagree  Neutral  Agree  Strongly agree
11. **Language or cultural differences make social interaction challenging.**  
 Strongly disagree  Disagree  Neutral  Agree  Strongly agree

### Section 5: Student Hub Concept

12. **A shared Student Hub open to students from all universities would be useful.**  
 Strongly disagree  Disagree  Neutral  Agree  Strongly agree
13. **How likely would you be to use such a Student Hub?**  
 Very unlikely  Unlikely  Neutral  Likely  Very likely
14. **Which activities would encourage you to use a Student Hub? (Select up to )**  
 Quiet study areas  
 Group study rooms  
 Social events (game nights, movies, cultural events)  
 Workshops / talks  
 Café / affordable food  
 Language exchange  
 Outside activities, festivals, and events  
 Sports  
 Networking opportunities  
 Other: \_\_\_\_\_

**15. A shared Student Hub could improve integration between local and international students.**

Strongly disagree  Disagree  Neutral  Agree  Strongly agree

**Section 6: Open Question**

(Open text – optional)

**16. In your opinion, what is the most important feature a shared Student Hub should offer?**