

Informal Learning Spaces:

Research, Design, and Advocacy on Urban Campuses

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Sara Grant Evie Klein Meghan Moore-Wilk







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Research, Design, and Advocacy on Urban Campuses



Sara Grant, AIA Partner MBB Architects



Meghan Moore-Wilk, PhD Acting Chief of Staff Queens College, CUNY

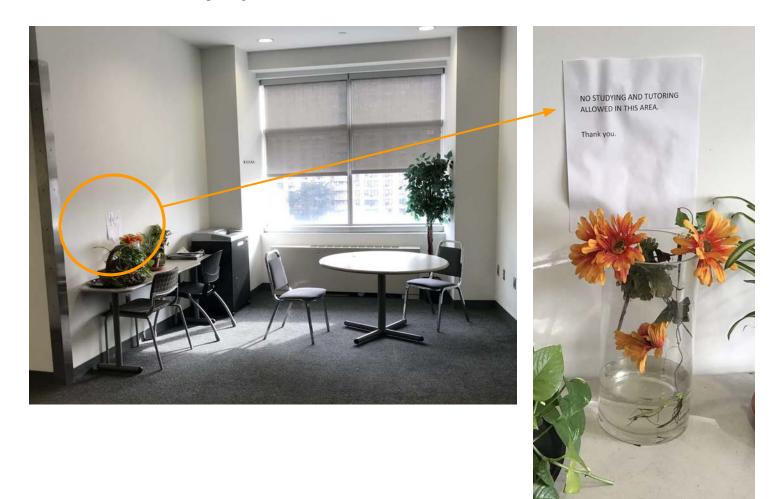


Evie Klein, Co-Founder User Design Information Group The Graduate Center, CUNY

Learning Outcomes:

- Summarize the role informal learning spaces play in meeting students' needs and how to use both academic literature and project-based research to advocate for these spaces.
- Recognize themes that are common to most campus informal learning spaces and identify the site-specific culture of each individual learning space.
- 3. Review a methodology for deploying and measuring a design intervention in an informal learning space.
- 4. Discover and evaluate the connection between informal learning spaces and equitable access to educational resources.

Problem: What Does Equity Look Like?



Relevant Literature

Research Design

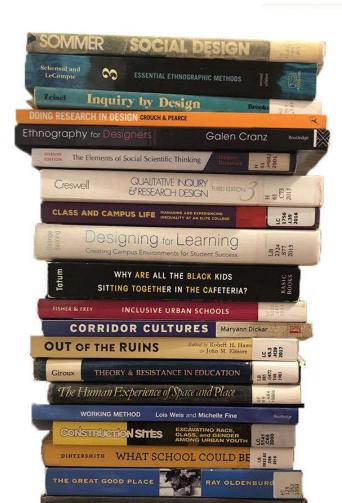
Sommer, Social Design, 1983 Zeisel, Inquiry by Design, 1984 Cranz, Ethnography for Designers, 2016 Crouch and Pearce, Doing Research in Design, 2015

Educational Spaces

Sanoff, School Building Assessment Methods, 2001
Temple, "Learning Spaces in Higher Education." 2008
Woolner, "A Sound Foundation? What We Know about the
Impact of Environments on Learning and the Implications
for Building Schools for the Future." 2007
Strange and Banning, Educating by Design, 2001

Equity and Ideology in Educational Space

Giroux, Theory and Resistance in Education, 1983



Three Objectives: Medgar Evers College Research Project



Advocacy: Sharing Knowledge Practice: Learn from Data

Recognition: Medgar Evers College Research Project



Research >> Faculty Resources Internal Funding >> Interdisciplinary Research Grant Program >> 2018 IRG Grant Winners

2018 IRG Grant Winners

Designing Academic Success at Medgar Evers College

Leigh Graham, John Jay College of Criminal Justice **Christopher Blaszczak-Boxe**, Medgar Evers College

THE AMERICAN INSTITUTE OF ARCHITECTS
New York Chapter

VICE PRESIDENT'S CITATION FOR DESIGN EXCELLENCE

ARCHITECTURE FOR EDUCATION & SOCIAL SCIENCE AND ARCHITECTURE COMMITTEES

The 2017 Vice President's Citation for Design Excellence recognizes the AIANY Architecture for Education and the Social Science and Architecture Committees for their outstanding work together on The Medgar Evers Collaborative Research Project.

This unique collaborative pilot program endeavors to provide insight into the effectiveness of implementing social science techniques to evaluate design intervention and to determine the best architectural design practices for social well-being. We applaud this strategic effort and recognize these committees for this remarkable program.

The Architecture for Education and the Social Science and Architecture Committees are leading the way in the importance of collaboration in professional growth and research.

5 December 2017

Jennifer Sage, FAIA, LEED AP

Benjamin Prosity

Executive Director, AIA New York / Center for Architecture



Research Team

SOCIAL SCIENTISTS



Evie Klein, MArch User Design Information Group Founding Member



Leigh Graham, PhD John Jay College Assistant Professor



Eleanor Luken, MS User Design Information Group Founding Member



Troy Simpson, MPhil User Design Information Group Founding Member

ARCHITECTS



Sara Grant, AIA, LEED AP Murphy Burnham and Buttrick Architects Partner



Luiza Otto
Murphy Burnham and Buttrick Architects
Designer



Temitayo Shonibare
Murphy Burnham and Buttrick Architects
Junior Interior Designer

STUDENT INTERNS



Patrick Gentles Medgar Evers College BS Biology Major



Allysha Nelson Medgar Evers College BS Biology Major



Kelly-Mae Smith John Jay College MPA Program



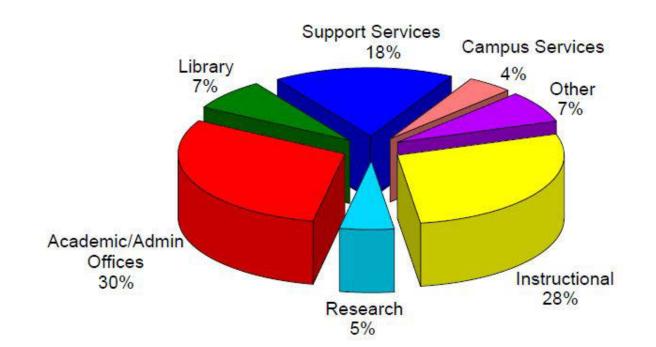
Maya Williams John Jay College MPA Program



CUNY "Significant Statistics"

As of Fall 2018

	Instructional NASF	Research NASF	Academic/ Admin. Offices NASF	120 A S 1 C	Support Services NASF	Campus Services NASF	Other NASF	Total NASF
Total University	4,535,470	818,583	4,899,737	1,202,578	2,869,619	711,676	1,218,481	16,256,144



CUNY Capital Budget

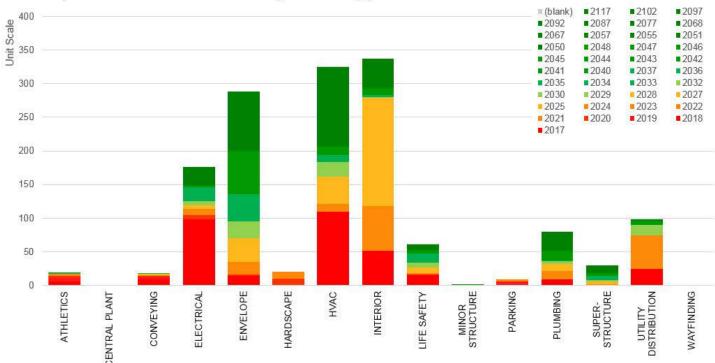
F	Y 19-20 State Enacted Budget Results	\$444,498
1	New Senior College Capital Infrastructure and Equipment	\$284,222
	A. Senior College-Specific Capital Infrastructure and Equipment	\$48,865
	B. CUNY-Wide Appropriations Senior College Capital Infrastructure and Equipment	\$179,222
	C. University-Wide Alterations and Improvements	\$56,135
2	New Capital Program Administrative Costs	\$36,983
	A. DASNY and CUCF Administrative Costs	\$36,983
3	New Community College Matching Appropriations	\$68,293
	A. Community College State Match to City-Funded Project	\$68,293
4	CUNY 2020 Challenge Grant	\$55,000
5	Re-appropriations of Existing State Capital Funds	\$2,664,853
6	FY 2019-20 City Budget	\$232,800



CUNY Capital Projects

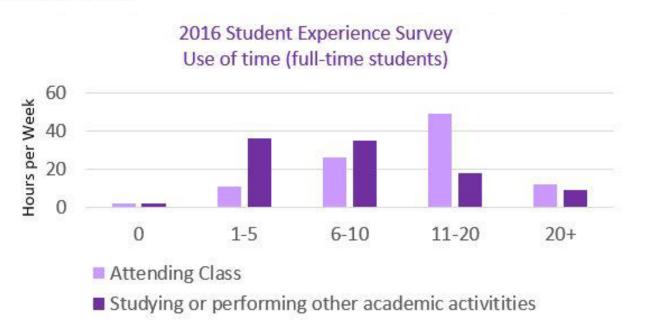
Using Life Cycle Data to Inform Priority





Importance of Informal Learning Spaces at CUNY

The majority of CUNY undergraduates, like college students nationally, are young and single. However, over 40% of CUNY students are among the first generation in their family to attend college and 60% report an annual household income of less than \$30,000.





Spatial Typology: Space Outside the Classroom







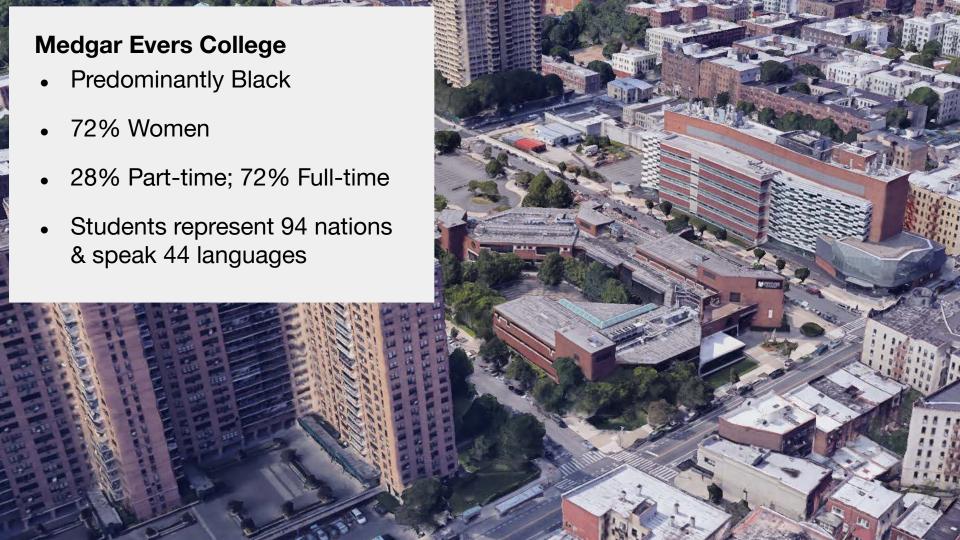
Library: 1.2 M NASF



Student / Faculty Services + Circulation: ?

Photography: Jeff Goldberg/Esto, Aislinn Weidele/Ennead Architects

Jeffrey Totaro Ikon.5 Architects



MEC Enrollment and Graduation Rates by Degree Type

Program type	Enrollment (Fall 2017)	Enrollment %	Graduation % for full-time first-time freshman, for cohort entering in 2011, after 6 years*
Baccalaureate	3,287	49.4%	27.6%
Associates	2,875	43.2%	10.9%
Non-degree	490	7.4%	n/a
Total	6,652		

Data from the CUNY and MEC Office of Institutional Research *does not include part-time or transfer students

MEC Campus Site Plan CARROLL STREET CROWN STREET CROWN STREET MONTGOMERY STREET MONTGOMERY STREET





Process: Project Phases

Phase 1: **Team formation**

Team formation
Campus selection + partnership
Research design
IRB submission
Team training

Phase 4: **Design**

Iterative intervention design Focus groups

Phase 2: ta collection

Data collection + site selection

Field observation
Semi-structured interviews
Student mobile survey
Phase 2 data analysis
Site selection
Presentation to AIANY+ Admin.

Phase 5:

Post-Intervention Data Collection + Analysis

Intervention implementation Field observations Interviews Phase 5 data analysis

Phase 3: design data collecti

Pre-design data collection + analysis

Field observations
Interviews
Phase 3 data analysis
Preliminary design
Coordination with administration

Phase 6: Collaborative Outputs

Final analysis
Paper writing
Presentation + outreach
Methodology recommendation

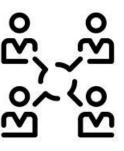
Research Design and Methods for Phase 2 and 3 Data Collection

Inductive, open-ended approach









Interviews

Observation

Survey

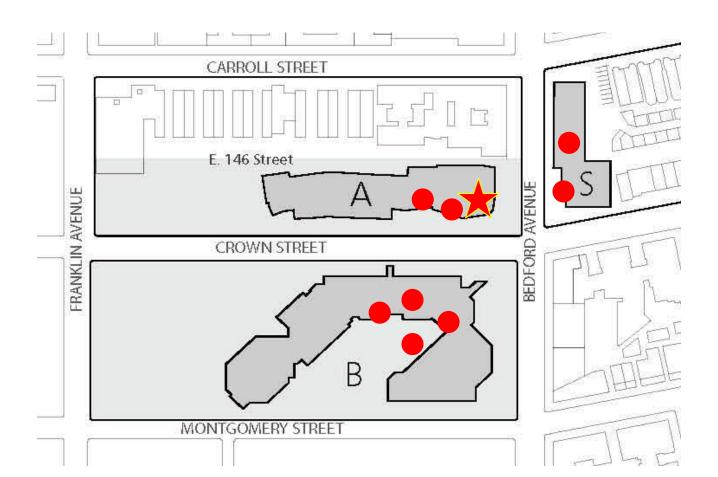
Focus Groups

Goals

Phase 2: Identify campus-wide themes and select a research site Phase 3: Identify how themes are spatialized to inform design



Nine Sites Identified for Phase 2 Observation



1. Conduct bottom-up coding of interviews and field notes

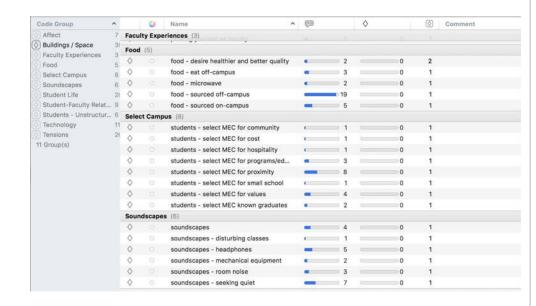
1a. Code each interview

INTERVIEWER: What do you feel about those different places, like the cafeteria versus the library, versus sitting out here. How do you feel about those spaces?

PART_TS001: I think they're pretty good. Cafeteria you can meet with people. Um library, strictly for studying, if you don't want to be disruptive you can come out here you can come out here with your friends and just do whatever without worrying about disrupting other people.

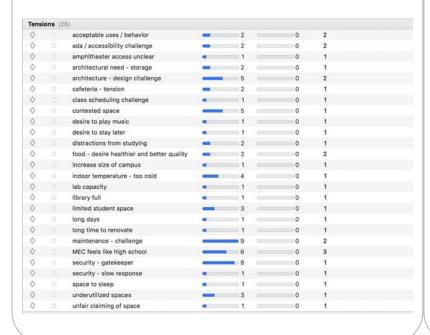
evaluative - "pretty good"
cafeteria - for socializing
non-class time - study
non-class time - socializing
library - strict use limits
soundscapes / disturbances
designated group socializing areas

1b. Merge codes into groups



2. Iteratively review codes and code groups to identify methodological and metatheoretical results

2a. Examine "tensions"



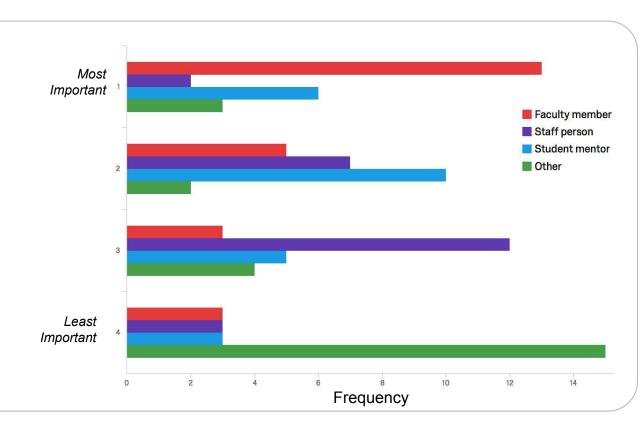
2b. Review codes by source type

This code document table shows each code identified through a first-pass bottom-up coding process and an indicator of how frequently each was expressed in three types of data: field observations, faculty/staff interviews, and student interviews. The values represent the percentage of all quotations associated with each document group type as represented by each code.

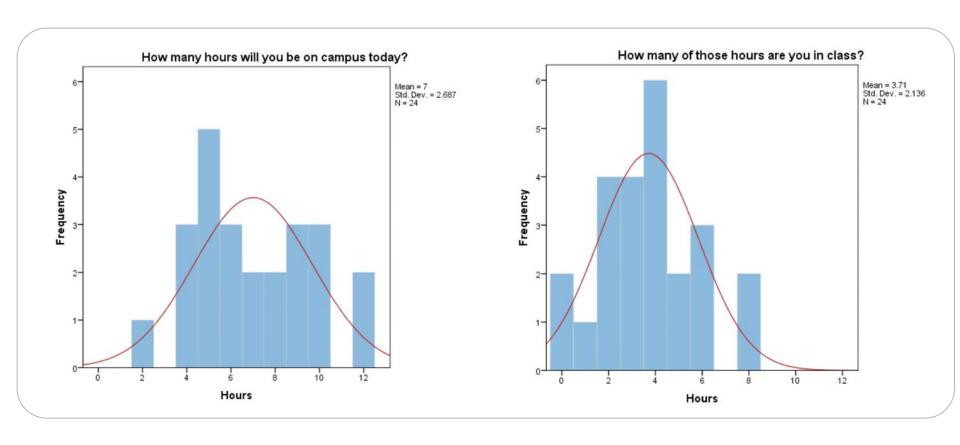
Code	Field Work	Interviews - Faculty/ Interviews - Student:		
signage - corporate	1.6%	0.0%	0.0%	
signage - gender identity	1.6%	0.0%	0.0%	
sitting	1.6%	0.0%	0.0%	
social events	0.0%	0.0%	0.5%	
socialize off-campus	0.0%	0.0%	0.5%	
soundscapes	0.0%	0.0%	1.9%	
soundscapes - disturbing classes	0.0%	0.9%	0.0%	
soundscapes - headphones	3.2%	0.0%	1.4%	
soundscapes - mechanical equipment	3.2%	0.0%	0.0%	
soundscapes - room noise	1.6%	0.9%	0.5%	
soundscapes - seeking quiet	0.0%	1.8%	2.4%	
space to sleep	0.0%	0.0%	0.5%	
specific uses	1.6%	0.0%	0.0%	
sports as pathway to friendships	0.0%	0.0%	0.5%	
steelcase sales	0.0%	0.9%	0.0%	
student - peer support	0.0%	0.0%	0.9%	
student - professor relationships difficult	0.0%	0.0%	0.5%	
student clubs and government	0.0%	0.0%	0.5%	
student employment	1.6%	0.0%	0.5%	
student financial struggles	1.6%	4.5%	0.0%	
student government space	0.0%	0.9%	0.0%	
student important place - AB-1 back stairs	0.0%	0.0%	0.5%	
student important place - amphitheater	0.0%	0.0%	0.9%	
student important place - athletic study hall	0.0%	0.0%	0.9%	

3. Review survey results

Rank the following members of the MEC community by how important they are to you (drag and drop, with the most important on the top)



3. Review survey results





High Stakes Student-Mentor Relationships

High Stakes Student-Mentor Relationships

"feels like high school" faculty mentorship non-class time contested spaces "feels like home" student access to faculty maintenance challenges soundscapes peer mentorship food proximity to home acceptable uses of space faculty privacy security / gatekeeping hours on campus student voices taken seriously personal and professional mentorship

High Stakes Student-Mentor Relationships

"feels like high school" non-class time faculty mentorship

"feels like home" contested spaces

student access to faculty

maintenance challenges soundscapes peer mentorship

food proximity to home

acceptable uses of space

security / gatekeeping faculty privacy

hours on campus

student voices taken seriously personal and professional mentorship

"I can eat, sleep, get work done, it's almost like a second home."

High Stakes Student-Mentor Relationships

"feels like high school"

non-class time

faculty mentorship

"feels like home"

student access to faculty

maintenance challenges

soundscapes

peer mentorship

food

proximity to home

acceptable uses of space

contested spaces

security / gatekeeping

faculty privacy

hours on campus

student voices taken seriously

personal and professional mentorship

"[The cafeteria] gives me the high school feeling. When you're in there, it doesn't feel like it's a college. It doesn't have that impact there, it just looks like a regular cafeteria ... We don't have a productive environment, it was really haphazardly done."

High Stakes Student-Mentor Relationships

"feels like high school" non-class time

faculty mentorship

"feels like home"

student access to faculty

maintenance challenges

soundscapes

peer mentorship

food proximity to home

acceptable uses of space

contested spaces

security / gatekeeping

faculty privacy

hours on campus

student voices taken seriously

personal and professional mentorship

FACULTY: "You have to be broader in your mindset to be able to teach here because you will encounter all kinds of students here and you should be equipped enough to be able to handle the challenges of teaching a broad range of students if you want to be a successful faculty at Medgar Evers."

High Stakes Student-Mentor Relationships

"feels like high school"

non-class time

faculty mentorship

"feels like home"

student access to faculty

maintenance challenges

soundscapes

peer mentorship

food proximity to home

acceptable uses of space

contested spaces

security / gatekeeping

faculty privacy

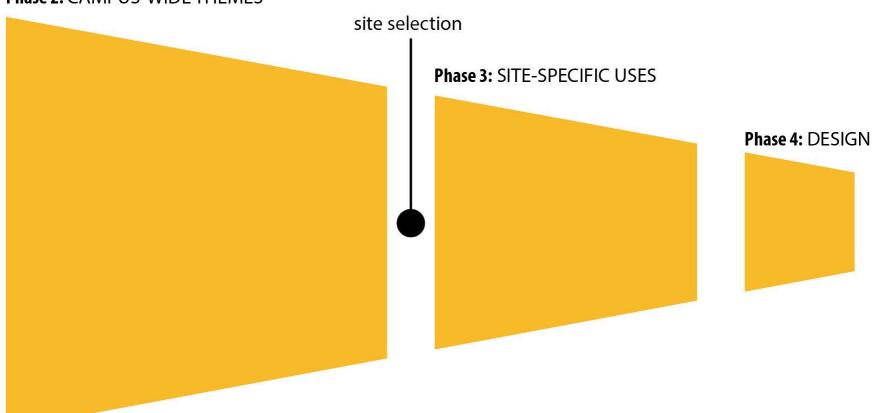
hours on campus

student voices taken seriously

personal and professional mentorship

ADMIN: "But the [students] that do stay, they are saying that they have faculty that are good mentors."

Phase 2: CAMPUS-WIDE THEMES

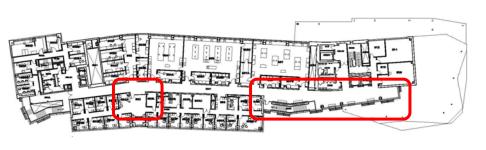




Study Site: Building AB-1 Fifth Floor

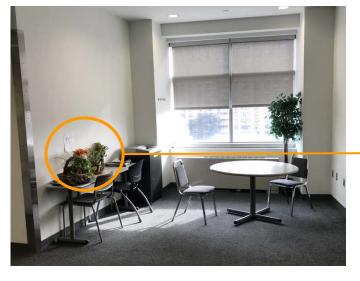


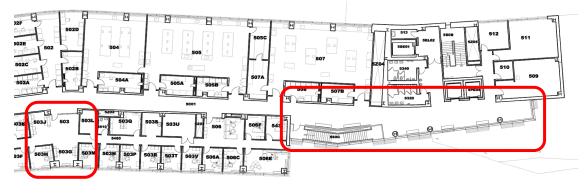






Study Site: Building AB-1 Fifth Floor







Study Site: Building AB-1 Fifth Floor





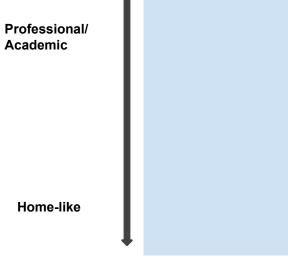
Study Site: Building AB-1 Fifth Floor









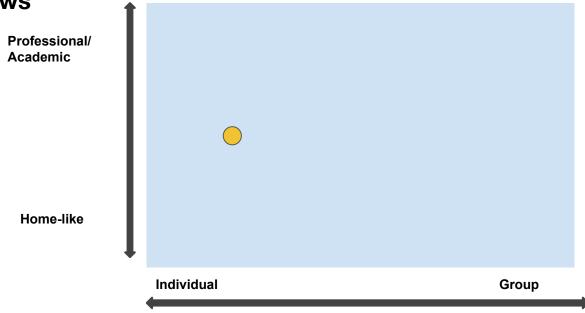


Individual

Group

AB-1 Fifth Floor: Interviews

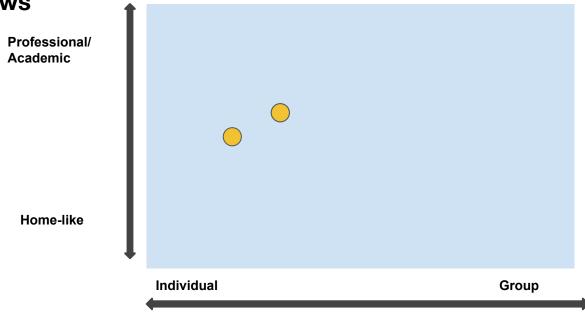
Professional / Home



"So, that's why I'm basically on this floor because this floor is the chemistry floor where most of the labs are. Mostly I hang out up here if I have homework and stuff because it's more quiet and the view is amazing. And also, people come up here, like, if they want to get food and they brought food from home you could warm your food up here because there's a microwave. Relaxation."

AB-1 Fifth Floor: Interviews

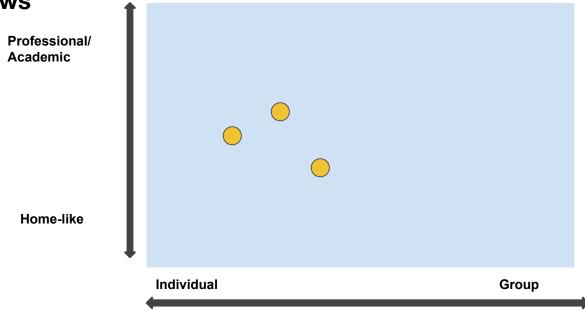
Professional / Home



"I mean, the smells of the food don't really bother me because I'm always so focused on something else. And it's not noisy up here because there's not a lot of people up here, so it's perfect, you know? It's a good environment for the studying because you can't study really with noise."

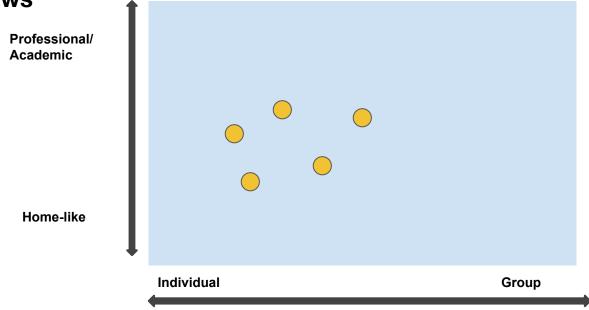
AB-1 Fifth Floor: Interviews

Professional / Home



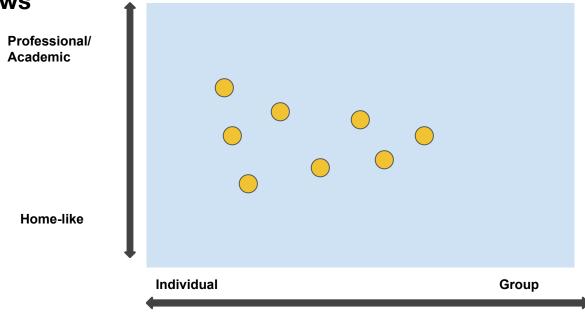
AB-1 Fifth Floor: Interviews

Professional / Home



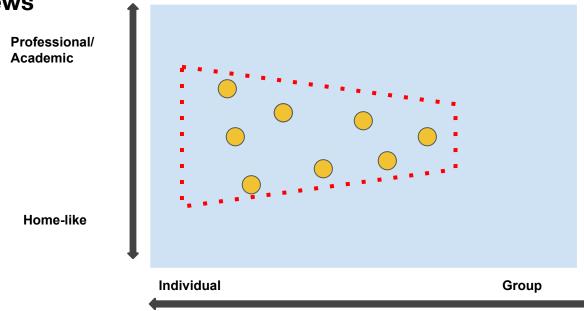
AB-1 Fifth Floor: Interviews

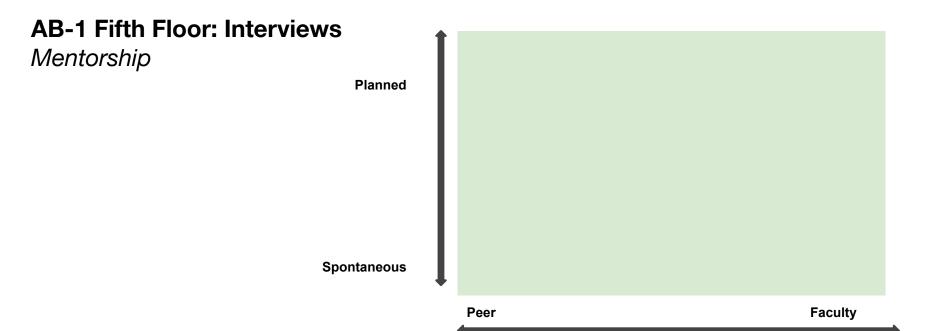
Professional / Home



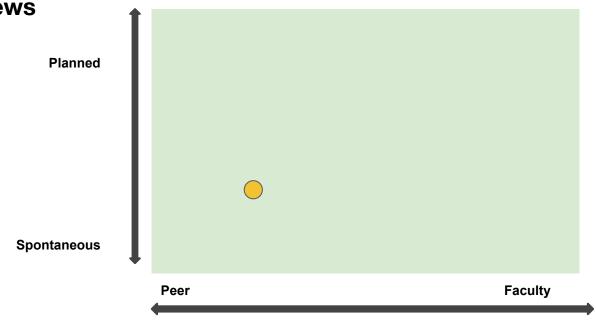
AB-1 Fifth Floor: Interviews

Professional / Home



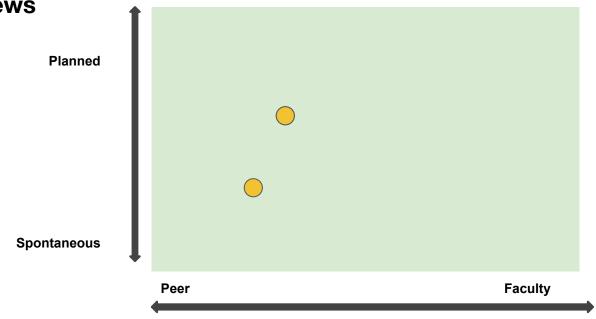


AB-1 Fifth Floor: Interviews *Mentorship*



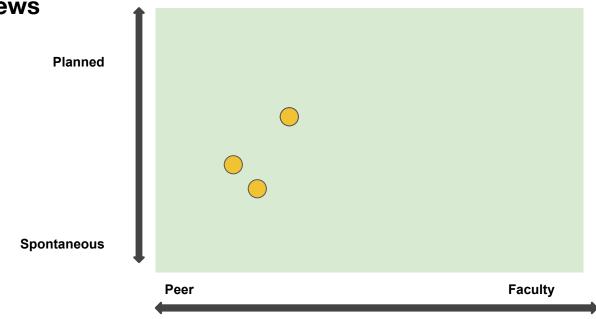
"I would say with faculty, I don't really have a relationship. With students, I do. And the way I've seen is because like we will gather and compare answers, things like that. This floor is one of those where I run into people. Maybe because I am in this floor, a lot of people are in this floor because of the same reason, so we've shared classes."

AB-1 Fifth Floor: Interviews *Mentorship*



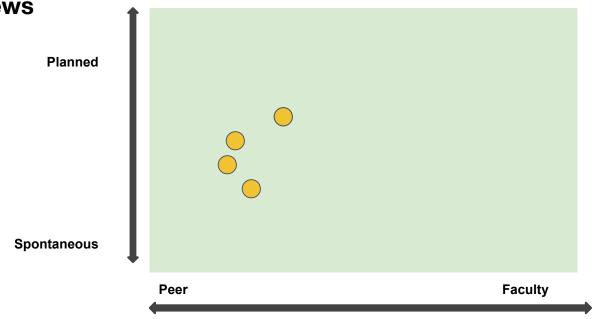
"For example, this semester I am taking language, so I have some students who already speak that language and they've helped me out here and there. **And it always happens while we're running into each other**."

AB-1 Fifth Floor: Interviews *Mentorship*



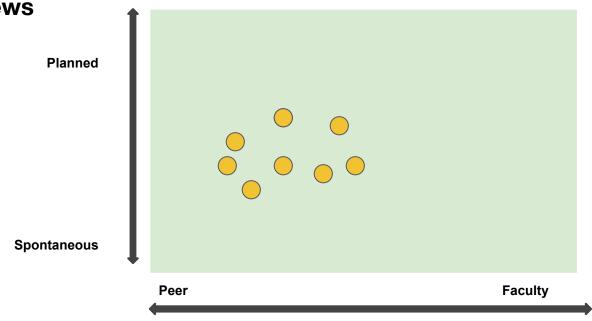
"I was up here really struggling with pre-cal problems. And there was a student, she came to warm her food and she was like, "Oh, what are you doing? Pre-cal?" I am a really shy and reserved person, but, like, if you approach me, I am approachable...She was able to explain different ways of doing it...It's a good thing I was up here, she was just warming her food."

AB-1 Fifth Floor: Interviews *Mentorship*



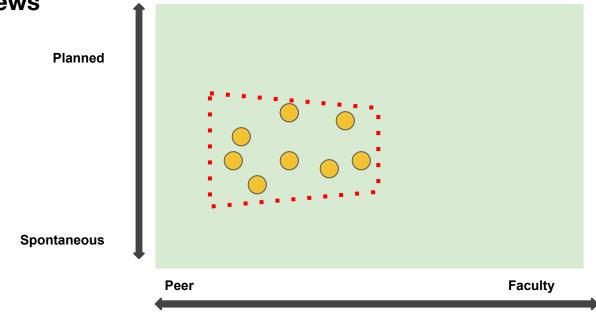
"Um, I think it's more of a personal thing, but I've always just, you know, my mind is like if you're a higher position, I don't know, it's a little. If it's not a personal thing, I don't. So unless I have questions, I'll go. Or if I have a question, I'll try to search another way before I reach out to a professor..."

AB-1 Fifth Floor: Interviews *Mentorship*



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AB-1 Fifth Floor: Interviews *Mentorship*

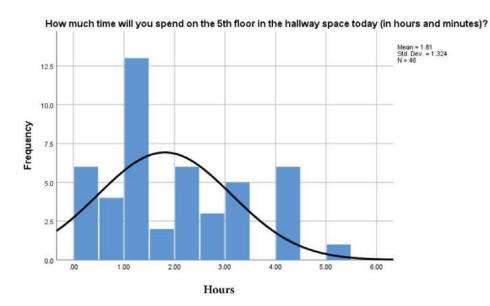


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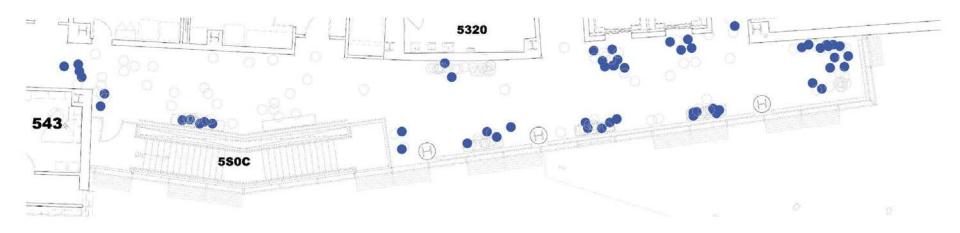
AB-1 Fifth Floor: User Mobile Survey Results

"What did you do on the 5th floor today? (check all that apply)" (N = 47)

Response Option	Percentage
Go to class	36
Meet with a teacher	11
Study	38
Meet with a friend or classmate	38
Use the microwave	34
Use the vending machines	21
Relax or sleep	32
Visit the chemistry, physics, or other offices	9

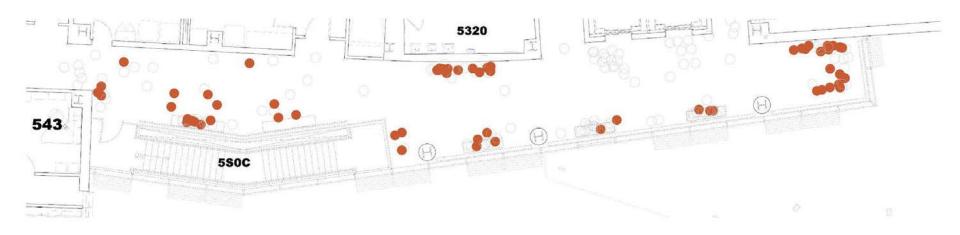


(29 observation periods, N = 204 observed users)



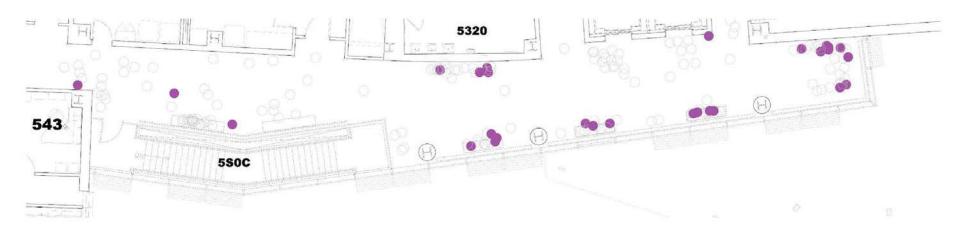
Socializing

(29 observation periods, N = 204 observed users)



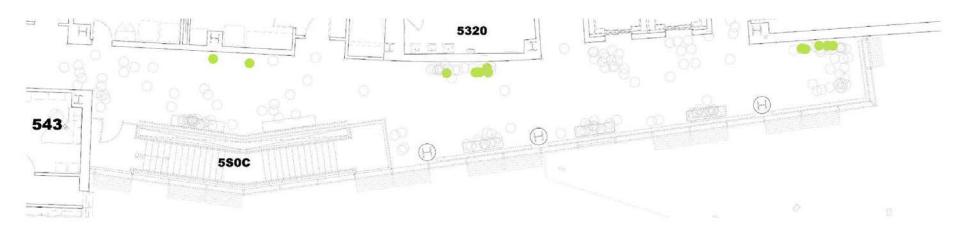
Studying

(29 observation periods, N = 204 observed users)



Eating

(29 observation periods, N = 204 observed users)



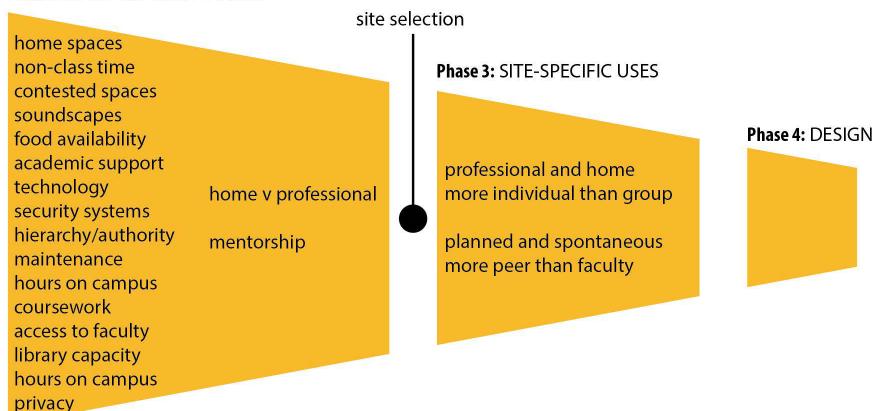
Device Charging

Phase 3: Linking Campus-Wide Dynamics to Site

Phase 2: Campus-wide challenges	Phase 3: Site specific spatial dynamics
Home vs. professional setting	 Both academic and home-like qualities Not adequate small group study space Strong link to classroom and department, in student control
High stakes mentorship	 Student-centered mentoring, planned and spontaneous student-to-student help Faculty meeting are not spontaneous/informal
Constraints of campus	 Hybrid space compensates for low resourced campus Tension around appropriate use by students in corridor spaces

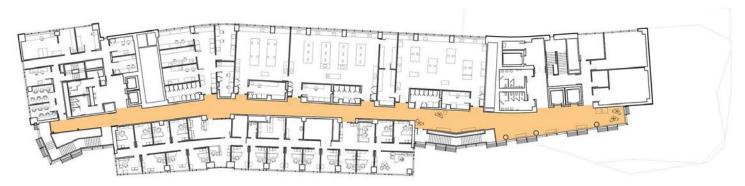
Phase 3: Linking Campus-Wide Dynamics to Site

Phase 2: CAMPUS-WIDE THEMES

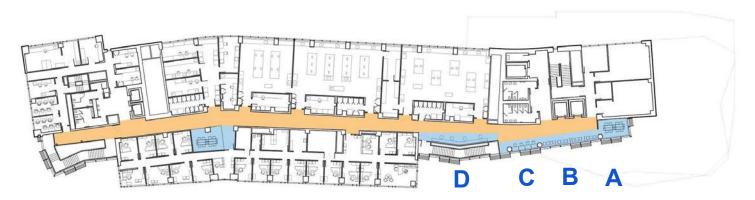




Floor Plans

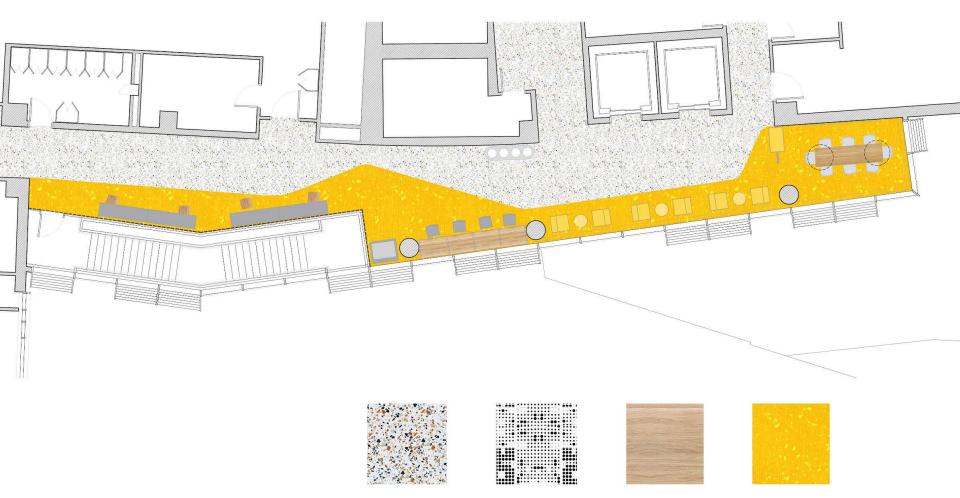


01 Existing Plan

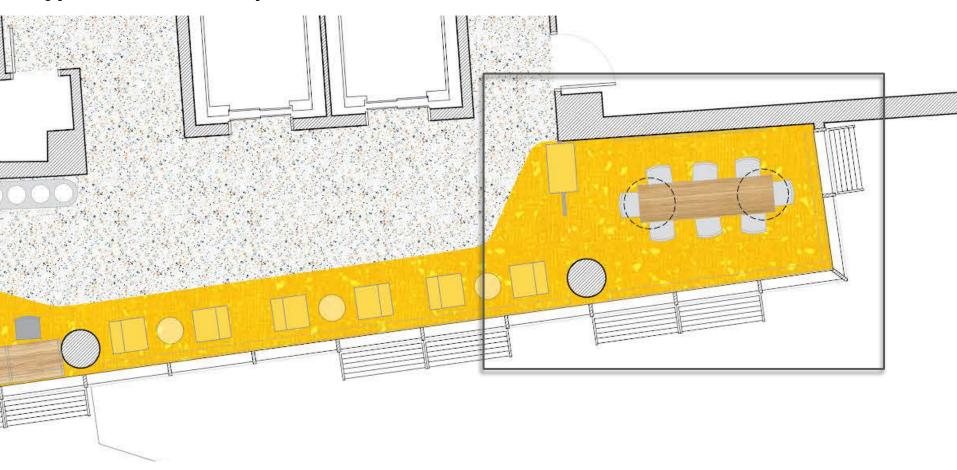


- A. Small Group Work
- B. One-on-One
- **C. Individual Study**
- **D. Informal Gathering**

Materiality

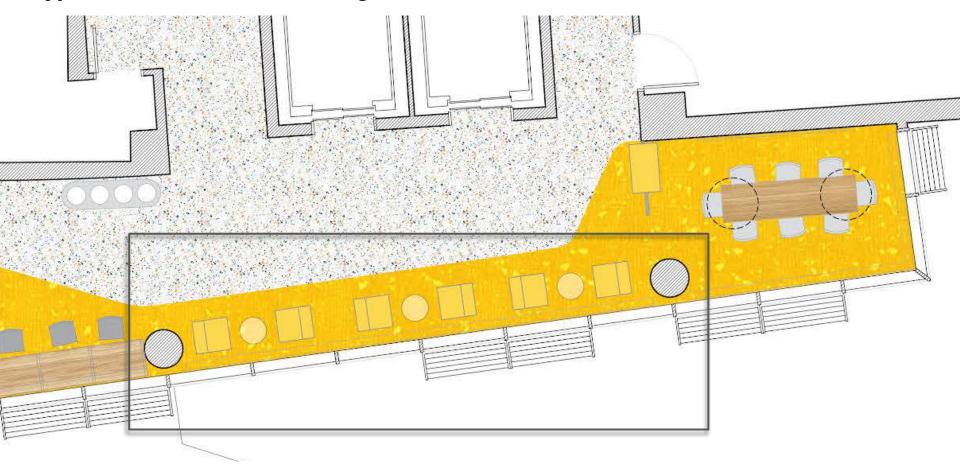


Type A: Small Group Work





Type B: One-on-One Meetings

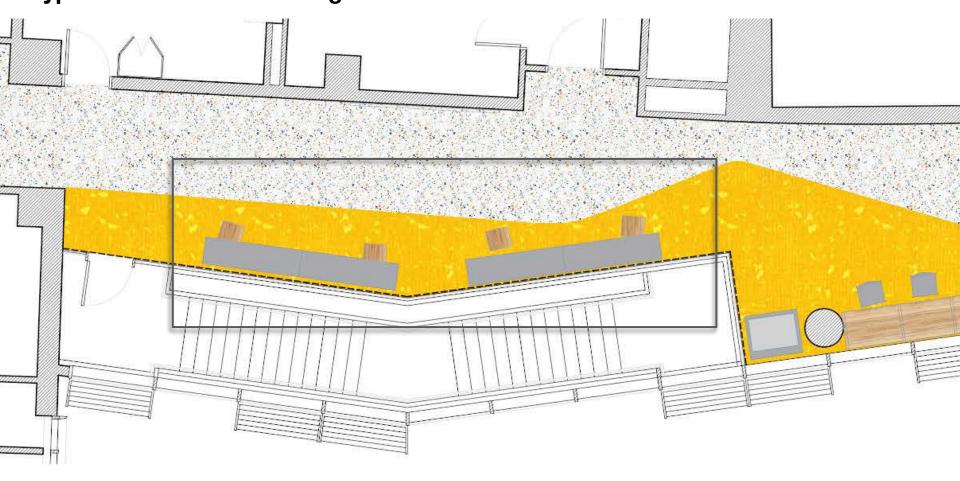




Type C: Individual Study



Type D: Informal Gathering









Recommended Process

Discovery Phase: Campus-wide

Spatialize Themes @ Site

Design

- Can be an aspect of Master Planning
- Form team of experts, including student informants and researchers
- Seek campus-wide themes through cross-stakeholder data collection and analysis
- Utilize Institutional
 Research data sets

- Connect campus-wide themes to sited microculture through interviews and surveys
- Create a design brief
 - This is a companion to the program document

- Hold **focus groups** for design review
 - Schematic Design through 30% Design Development
 - Conduct FGs with each stakeholder group separately

Students on research team, rather than subjects of study

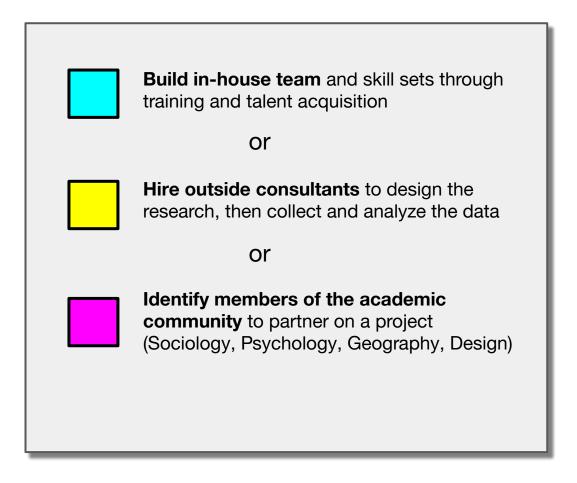
On the team as advisors, researchers, expert informants

Not just any student
Ideally a student enrolled at the school in a related field (geography, architecture, psychology, etc.).

2 Expectations and compensation
Compensation is a must, either for credit,
for pay, or both. Clear institutional support
through faculty or Students Services is a
requirement, along with clear time
commitment, 1-2 semesters.



Recommended Analytic Tools: Expertise Required



Discussion and Q & A

- Would you be interested in doing a workshop here at SCUP on qualitative analysis?
- What ways can you envision including research like this in your firm/school? What would the hurdles be? What would the benefits be?
- 3. How do you currently account for informal spaces like this one (that might not be formally categorized) in the program for a new project? Is there a formula or are there other means for justifying?

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