

Combating Racism in the Built Environment Through Re-Thinking Education Design



Tristan Costanzo - Thesis 2022

**Combating
Racism in the
Built Environment
Through
Re-Thinking
Education Design**

Tristan Costanzo

Thesis 2022

Advised by Sequoyah Hunter-Cuyjet

Table of Contents



Table of Contents

Literacy Review

The Built Environment

Precedant

Case Study

Eastiwck

Site

Transportation

Re-Thinking Education

AIA Racial Demographics

The Problem with Classrooms

Not Enough Art

Finical Barriers

Design Agenda

This Project

Classes

Parti

Bubble Diagram

Student Stations

Project

Ground Floor

First Floor

Third Floor

Fourth Floor

Reflected Ceiling Plans

Sections

Bibliography

Literacy Review



Combating Racism in the Built Environment

Introduction

Power dynamics exist in every interaction within the built environment. These dynamics provide organization, safety, and order, but also lead to inequities through segregation practices¹. The result is a built environment that is often unwelcoming or inaccessible for a large demographic of people². The literature review will discuss ways in which the current built environment is marginalizing for Black Americans, and what possibilities or alternatives may exist.

¹ Alexander, Michelle. 2010 "The New Jim Crow: Mass Incarceration in the Age of Colorblindness," *New Press*

² Cooke, Sekou. 2021. "We Outchea: Hip-Hop Fabrications and Public Space," Excerpt from *Reconstructions: Architecture and Blackness in America*

Institutional Racism in the Built Environment

The built environment's intentions can interact with marginalized peoples in unpredictable ways unintended by the original architect or designer³. There is a clear disconnect between who is making the environment and who is inhabiting it⁴. A membership demographic report by the American Institute of Architects (AIA) in 2019 reported that only 12.6% of their members identify as an underrepresented racial and/or ethnic group, and

³ Gooden, Mario. 2021. "The Refusal of Space," Excerpt from *Reconstructions: Architecture and Blackness in America*

⁴ AIA. 2020, "Membership Demographics Report 2019." <https://content.aia.org/sites/default/files/2021-01/2019-Membership-Demographics-Report.pdf>

only 2% identified as Black or African American⁵. There are not nearly enough Black architects and interior designers in the profession and the built environment created by designers can often be hostile and unlivable for Black Americans.

Marginalization in the built environment, and a lack of ownership and belonging, have arisen because of the substantial difference between the creation of White America and Black America- white privilege⁶. The forced removal of Africans from their homes to transport them to the United States forced them into an environment and culture they had no say in and no opportunity to create⁷. While Black culture was being stripped from them,

⁵ AIA, 10

⁶ McIntosh, Peggy. 1989. "White Privilege: Unpacking the Invisible Knapsack," from *Peace and Freedom Magazine*

⁷ Alexander, 20

European culture and heritage was being glorified in design⁸. The white man became the universal man, and the result was an emphasis on European design sensibilities while Black culture was considered to be not modern, and not reasonable. American embrace of European sensibility perpetuated the colonizing attitudes of many occupations in Africa⁹ and sets white men as the self-proclaimed glorified keepers of reason, race, and architecture within design.

Privilege and Oppression in Design

The white privilege that gave white colonial Americans the opportunity to make design decisions

⁸ Wilson, Mable O. 2020. "Notes on the Virginia Capital: Nation, Race, and Slavery in Jefferson's America," from *Race and Modern Architecture: A Critical History from the Enlightenment to the Present*

⁹ Wilson, 26

for Black Americans still exists¹⁰. White Americans have had centuries of privilege to obtain college education¹¹, achieve professional status, and own property. At the same time black Americans have been denied these opportunities and have faced various forms of oppression¹². Though it may be easier to see oppression today, it can be difficult to distinguish one's own role in it. White people often remain unable to recognize their own privilege, and have been taught to ignore the ways in which they oppress others. Famed white privilege scholar Peggy McIntosh eloquently describes the connected relationship of privilege and oppression: "In proportion as my racial group was being made

confident, comfortable, and oblivious, other groups were likely being made unconfident, uncomfortable, and alienated. Whiteness protected me from many kinds of hostility, distress, and violence, which I was being subtly trained to visit, in turn, upon people of color"¹³. This is the exact problem architects and designers face now: we rarely bridge the culture gap in design and as we design for our own demographic the gap just widens¹⁴. The white majority remains comfortable while minorities feel like outsiders in the spaces they inhabit. For this cycle to be fixed, white designers need to offer up their privilege and opportunity to

¹⁰ McIntosh, 1

¹¹ Alexander, 46

¹² McIntosh, 2

¹³ McIntosh, 1

¹⁴ Herscher, Andrew. 2021. "Black and Blight," from *Race and Modern Architecture: A Critical History from the Enlightenment to the Present*

non-white people to inspire greater diversity in design.

While there must be efforts to undo white privilege, there are also lessons to be learned from how Blacks have countered oppression. Due to the white filter of the built environment, there has been an active refusal of space by minorities¹⁵ and Black people have creatively altered the built environment for new uses¹⁶. These uses often show mobility and fluidity to adjust on the fly, and sometimes take the form of protest. The sit-in protests during the Civil Rights Movement are an example as Black students refused the space of a dining room and used it as a platform to protest injustice¹⁷. The

geography of the built environment can also propel protest in unintended ways. For example, cities with tight public spaces such as New York and Los Angeles have shown some of the most dangerous clashes between Black protesters and the police¹⁸. We need to design with an awareness for protesting in order to enable voices instead of muting them.

When change is impossible or denied, frustrations can lead to the destruction of the built environment¹⁹. This can be seen in the 2020 protests over the murder of George Floyd. As much as the looting was a response to the police force and the laws constricting minority civilians, it was also a direct rejection of the environment they inhabit²⁰.

¹⁵ Gooden, 39

¹⁶ Cooke, 121

¹⁷ Gooden, 42

¹⁸ Schwartzstein, Peter. 2020. "How Urban Design Can Make or Break Protests," from *Smithsonian Magazine*

¹⁹ Schwartzstein, Ibid.

²⁰ Schwartzstein, 2

These physical environmental changes have a history of carrying long term benefits, such as during the Cold War in 1989. When over half of a million Germans protested the existence of the Berlin Wall, the government eventually conceded and began dismantling the structure, reshaping politics in the region²¹. Designers need to be aware and considerate of the refusal of space. There is intention behind refusal as it often illustrates symbols of antagonistic forces²². In these cases, the environment proved to be hostile enough to be worth destroying. Designers must be aware of these hostilities to not fall into the same mistakes again.

²¹ Blakemore, Erin. 2021, "Why the Berlin Wall Rose-and How It Fell." from *History*, *National Geographic*

²² Gooden, 39

Systematic Denial of Black Community

Policies of oppression—both explicit and implicit—have a long history in the United States. One example is the effort to combat "blight" as a means to undermine and destroy Black communities²³. "Blight" has been a focus of urban renewal projects since the 1970s, often with questionable results²⁴. In a recent speech by Quicken Loans founder and real estate developer, Dan Gilbert, the billionaire verbally went to war against blight and described it as "a cancer destroying Detroit." He founded a Blight Task Force to eliminate "blight" in the city²⁵. However, blight is not a real term; it is a subjective analysis of what is

²³ Alexander, 57

²⁴ Alexander, 51

²⁵ Herscher, 293

acceptable and unacceptable that results in a racist attack against minority homes²⁶. Two significant impacts came out of this task force in Detroit: 1) extreme housing insecurity where homes can be foreclosed due to the unhappiness of visual appearance by a white man, 2) incentive structures twisted to supply more “blighted” property for the plan to function. It seems insane to think that right now Detroit is carrying out a systematic plan to use the built environment to destroy Black culture and ownership²⁷. The result is not a new Detroit, but rather an insecure population traumatized by the destruction of their built environment and denial of their community²⁸.

²⁶ Herscher, Ibid.

²⁷ Herscher 292

²⁸ Herscher, 294

The vindictive decision of what is and what is not blight goes hand and hand with zoning and redlining practices²⁹. These are systematic choices to move financially insecure people to less desirable places in the city and, literally, marginalizing them³⁰. This displacement leads to environmental racism where minorities are concentrated in locations where health risks are highest, and opportunities are undermined due to a lack of infrastructure. Rather than grocery stores, schools, and healthcare, the environment only affords space for payday loans, guns, liquor, and tobacco³¹. The built environment creates a hierarchy through methods like this to

²⁹ Herscher, 296

³⁰ Alexander, 190

³¹ Alexander, 150

praise for a place that intentionally removed any kind of hierarchy in the built environment. It is worth asking if this is possible, in America with our hyper-focus on historically white design and acceptance of inequality³⁶.

Possibilities for Constructing Community

The built environment has constricted Black Americans through redlining, “blight” removal, and a lack of infrastructure³⁷. Black Americans are displaced and lose agency in forming their own identity and place. Black communities are undermined and fragmented, leading to a more

hostile environment³⁸. A potential option to resolve this would be to give Black Americans resources and access to design the built environment themselves³⁹. Being able to own and manipulate space⁴⁰, produces a more beneficial environment and provides a true sense of belonging⁴¹. Looking at African design practices provides a way of thinking about how to build a fair and multicultural environment.

Architect Francis Kéré has spoken about how African architects need to change their methods of design to better support African citizens rather than try to apply Western design principles⁴². Western

³⁶ Wilson, 26

³⁷ Herscher, 297

³⁸ Alexander, 172

³⁹ DesignIndaba. 2011, “Francis Kéré: African Architecture Should Stop Copying the West,” from *YouTube, YouTube*, <https://www.youtube.com/watch?v=jAHeoh4TuCM&t=1106s>.

⁴⁰ Cooper-Marcus, Claire. 1992. “Environmental memories,” in *Place Attachment*. Altman, I. and Low, S. eds., New York: Plenum Press, pp. 87-112

⁴¹ Sharpe, 26

⁴² DesignIndaba, Ibid.

design has perpetuated racism,⁴³ Kéré explains, and designing without including the citizens who will inhabit the space creates barriers of power.

Designing a building as if in a vacuum creates a colonizing vice around the people within it, a claim to either assimilate or be pushed out⁴⁴. Kéré counters with an approach that allows occupants to be a part of the construction in all stages. He welcomes citizens to connect with the creation of the building. Examples include the neighborhood creating bricks for the roof or floor or interacting with the building's supports so they can see the strength of the structure for themselves. He creates a kind of spectacle, but one whose heartbeat is the citizens' bonding with the space⁴⁵. None of the people

needed degrees, or even formal education, and the community was able to shape itself and its environment.

Another example of the impact a community can have in the soul of a space is the interaction between the Great Mosque of Djenne in Mali and the neighborhood around it. The unique relationship the mosque has is due to its material, adobe. Adobe is only possible in arid climates as the material melts in wet weather, and it needs regular repair and maintenance. This need created the Crepissage Festival which is a major community holiday where citizens come together and replaster the mosque's

⁴³ Wilson, 26

⁴⁴ Herscher, 299

⁴⁵ DesignIndaba, Ibid.

adobe walls⁴⁶. Crepissage has become the cultural heart of the community. When there was a political attempt to move the date of the festival to have it align with tourist season, the citizens declared the holiday for themselves, not for outsiders, demonstrating the power a building can have with its community⁴⁷. The hands of its inhabitants literally shape the walls of the building, and they gain a wonderful emotional attachment as a result. This not only creates a community through action, but a culture that is inherently tied to the built environment itself⁴⁸.

Finding ways for communities to construct their own places and developing rituals that

⁴⁶ Prussin, Labelle. 1986. "Hatumere: Islamic Design in West Africa," Excerpt from *University of California Press*

⁴⁷ Dougnon, Lévy. 2006. "la rénovation contestée de la mosquée de Djenné : Un homme trouve la mort dans les émeutes," from *Afribone*

connect people to their environment are ways it may be possible to strengthen Black culture and architecture. Currently, this passion for the built environment is muted in the west due to efforts to diminish the agency of people, especially Black Americans, in the built environment⁴⁹. Through bringing community based methods into western design practices we can achieve a more inclusive interior, giving voice and agency to the marginalized.

Conclusion

The built environment has a massive power over its civilians, but this power is often used to

⁴⁸ DesignIndaba, Ibid.

⁴⁹ Herscher, 292

undermine and marginalize Black Americans⁵⁰. There is an incredible lack of diversity in the profession of architecture and design, which extends into the making of the built environment. Due to our history of design and construction, many Black Americans feel as though they wander an environment that was in no way built for them⁵¹. Black Americans are pushed to the margins and are forced to live around the built environment, twisting spaces for their own, unrecognized needs⁵². These spaces are later attacked, removed, and destroyed by the white majority leaving insecurity and apathy (or even antagonism) in its wake⁵³.

These issues will continue until action is taken against racially charged practices, and designers no longer take Black voices for granted. The community needs to shape its own built environment instead of being constrained into it. Spaces must begin to foster love and connection, rather than hate and destruction. We must start designing for respect and social justice, not pretend to be oblivious of inequality⁵⁴. Recognizing the marginalized is the start of combating racism in the built environment.

⁵⁰ Alexander, 146

⁵¹ California College of the Arts - CCA. 2020. "Dori Tunstall: Decolonizing Design Practices in Academia | Design division," *YouTube, YouTube*, <https://www.youtube.com/watch?v=HJmlSOZapUE&t=1183s>

⁵² Gooden, 39

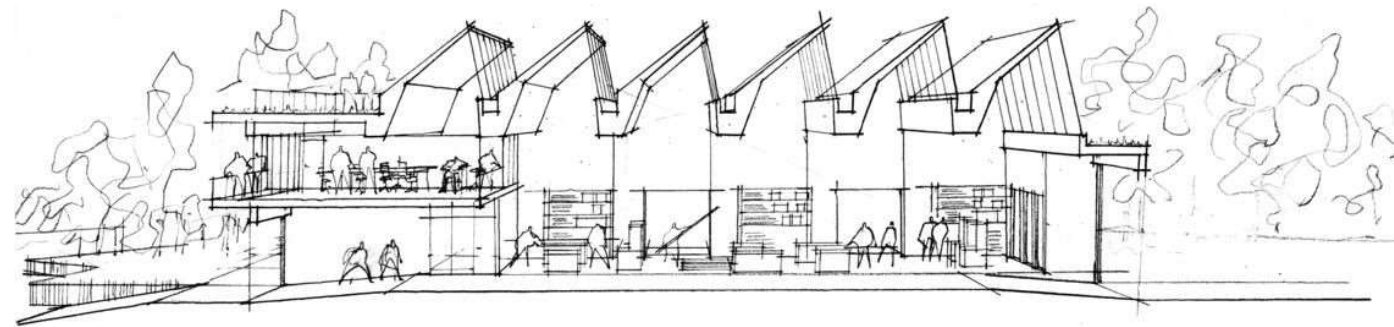
⁵³ Herscher, 295

⁵⁴ DesignIndaba, *Ibid.*

The Built Environment



PRECEDENT
THE CHALLENGE CENTER,
WILLMINGTON, DE



CASE STUDY

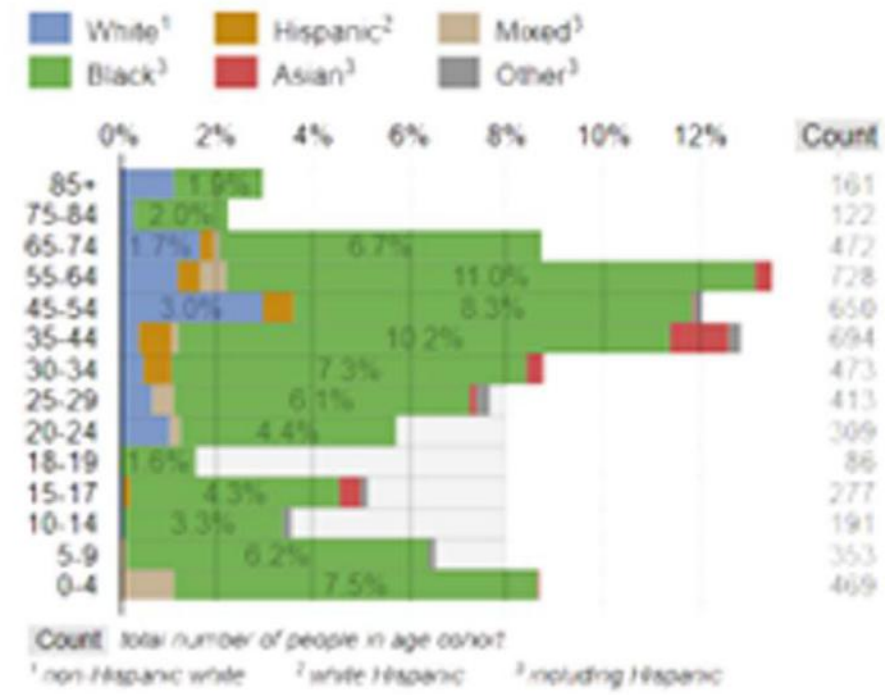
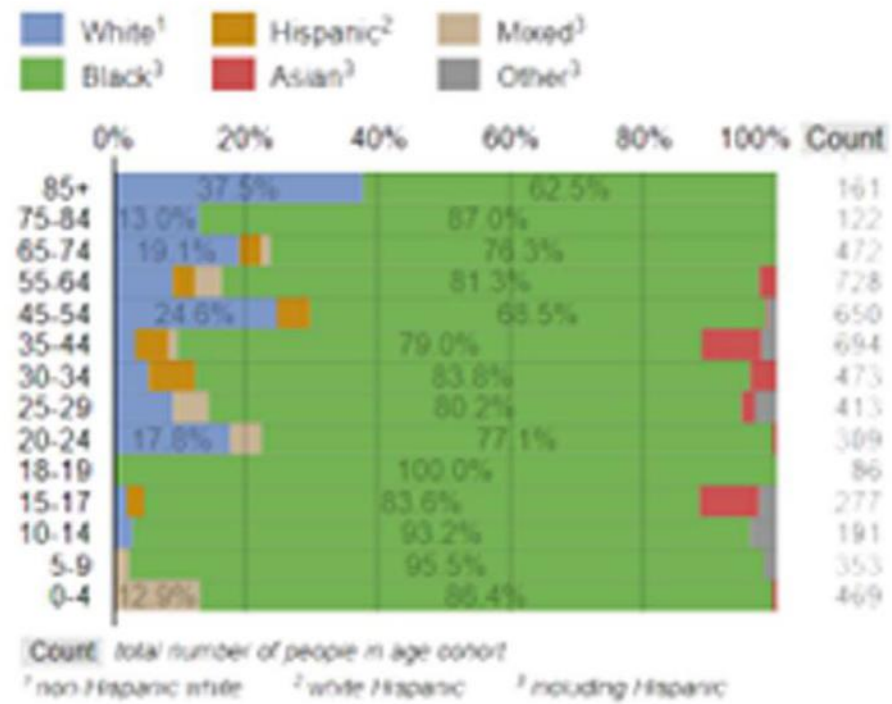
URBN CENTER, PHILADELPHIA



Room	Square Footage	Number of	Total
Lobby	2542	1	2542
Materials Lab	892	1	892
Offices	6076	60	101.2666667
Outcoves	1644	4	411
Studio	13582	12	1131.833333
Woodshop	1484	1	1484
Extra Small Clas	3340	11	303.6363636
Small Classroom	4680	8	585
Large Classroom	5158	6	859.6666667
Computer Lab	4832	9	536.8888889

- STUDIO SPACE
- MATERIALS SPACE
- CLASS SPACE
- COMPUTER SPACE
- OFFICE SPACE
- LOBBY SPACE
- north to annex
- atrium cut
- connection/collaboration
- #M new mezzanines
- # reconfigured floors

Eastwick Demographic Census Data





1945

WHAT WAS



1957

**WHAT WAS
SUPPOSED TO
HAPPEN**

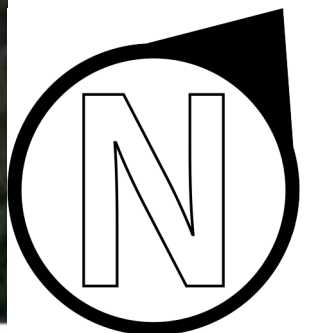


2017

**WHAT ACTUALLY
HAPPENED**

Interface Studio Eastwick Study

Site



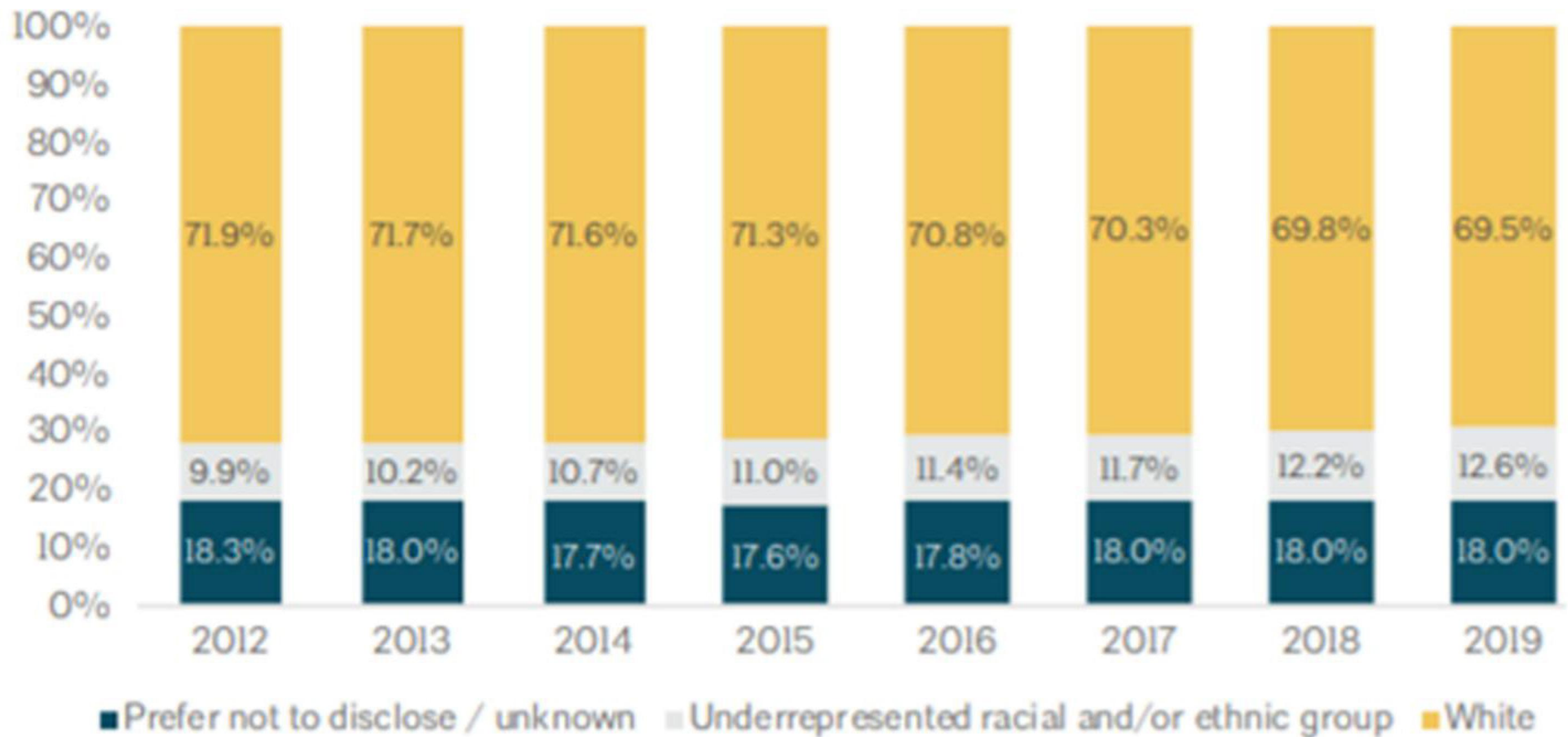


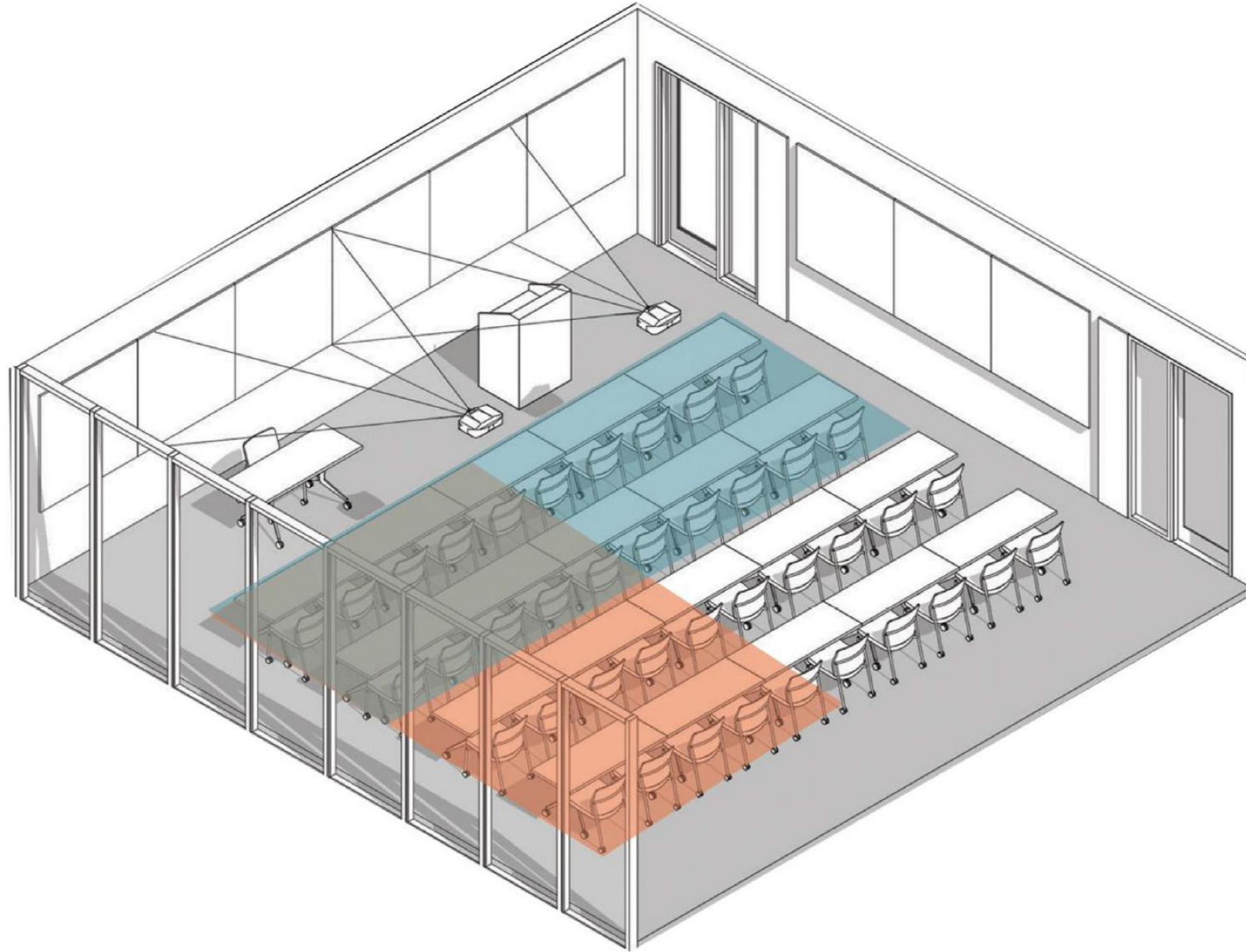
Education Reform



AIA Members Racial Demographics

> RACE AND/OR ETHNICITY: ARCHITECT MEMBERS

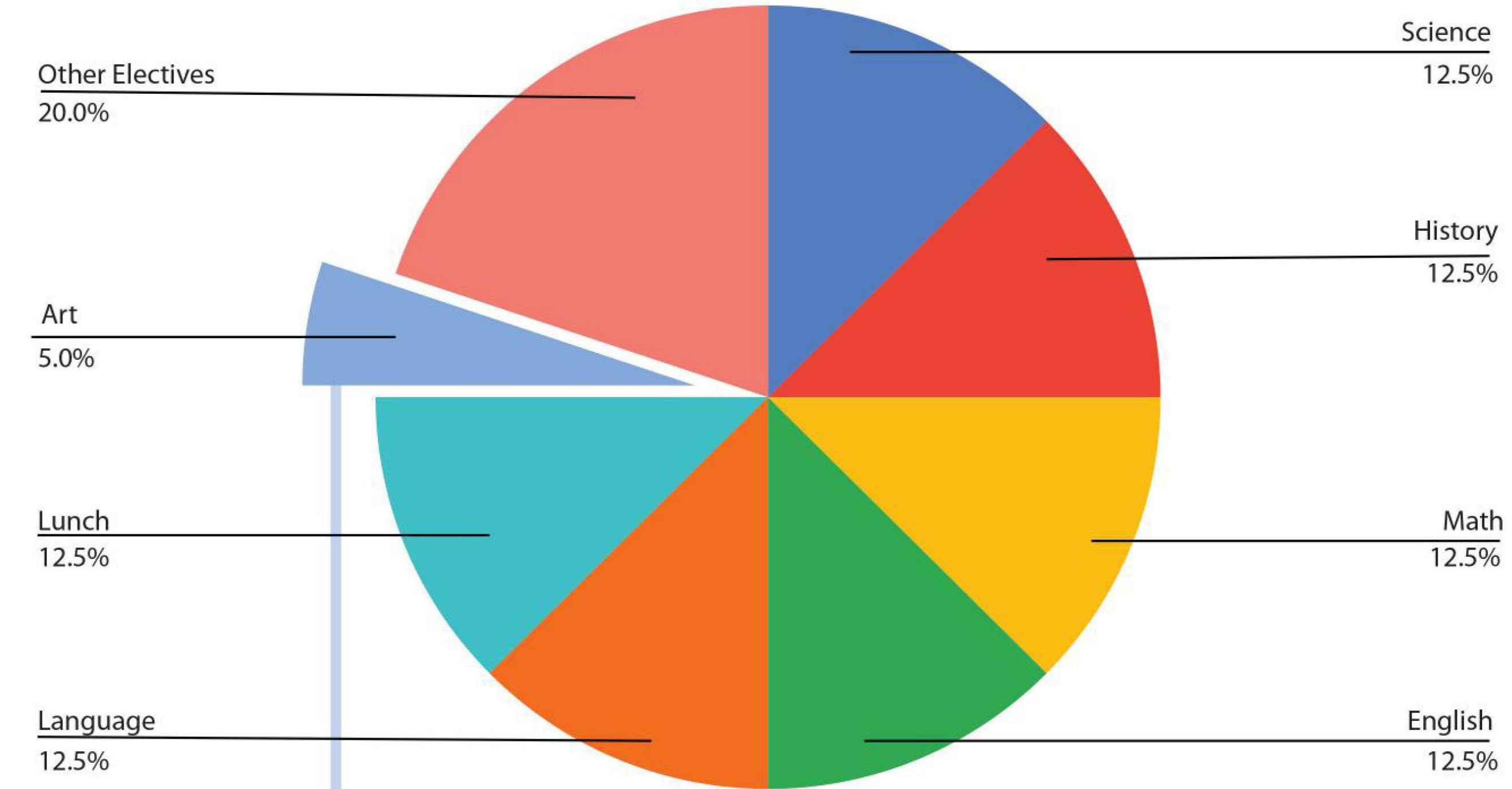




 **ENJOY THEIR CLASSES (52%)**

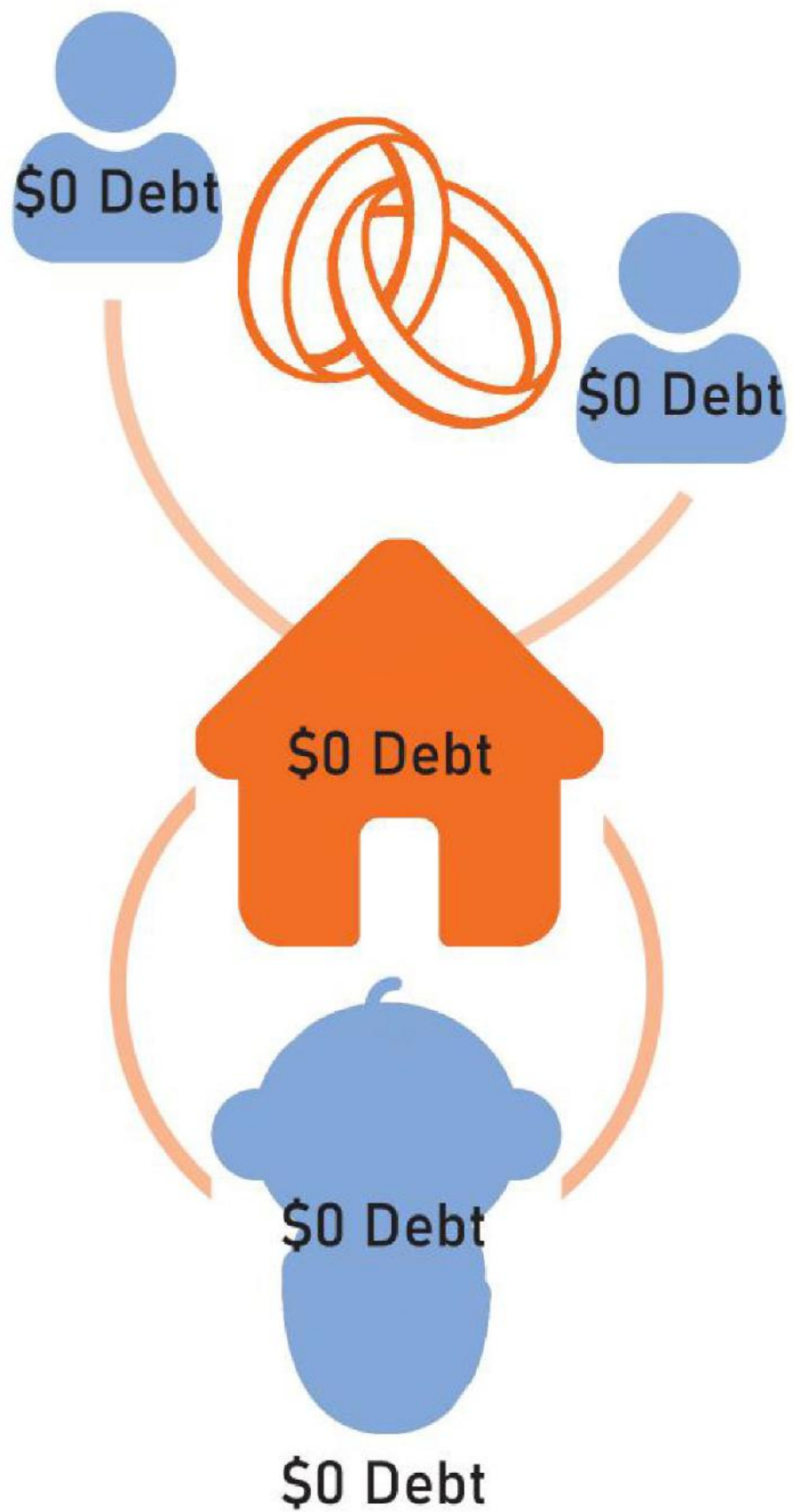
 **BLACK STUDENTS (48%)**

THE NUMBER OF BLACK STUDENTS WHO ENJOY THEIR CLASSES DROPS TO 24% IN A TRADITIONAL SCHOOL SETTING

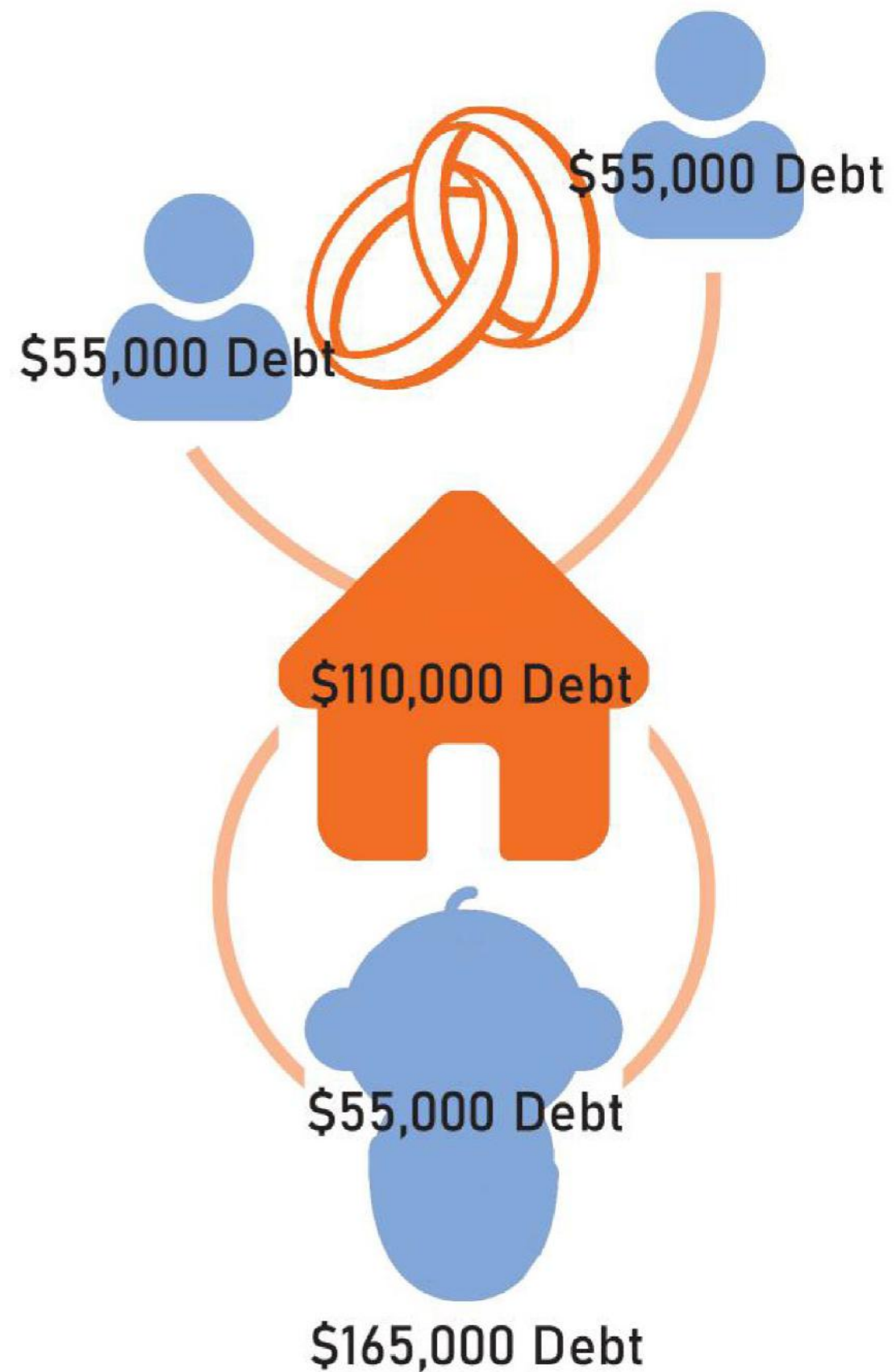


If art gave equal time to every art major in this project the average student would spend less than 1% of their time in school being exposed to them.

Student 1



Student 2



Design Agenda



Design fields have a shocking lack of diversity within the professions. In large part due to this lack of diversity, many design decisions within the built environment lack awareness and consideration for minorities. This leads to spaces that can be problematic and antagonistic for minorities in this country. This project looks to examine why there is such a racial divide within design fields through the lens of the education system. By analyzing the decision-making of the School District of Philadelphia and the American college system, my design proposes an alternative school to demolish the walls of privilege that surround design careers.

This school program is designed to re-think education systems to remove power dynamics that can feel hostile to students. Through creating student-oriented class and studio space, the school will build community and comfort for Black students.

FASHION

ARCHITECTURE

**MECHANICAL
ENGINEERING**

**CHEMISTRY
LABRETRY**

CULINARY

**PRODUCT
DEVELOPMENT**

**SOFTWARE
ENGINEERING**

LITERATURE

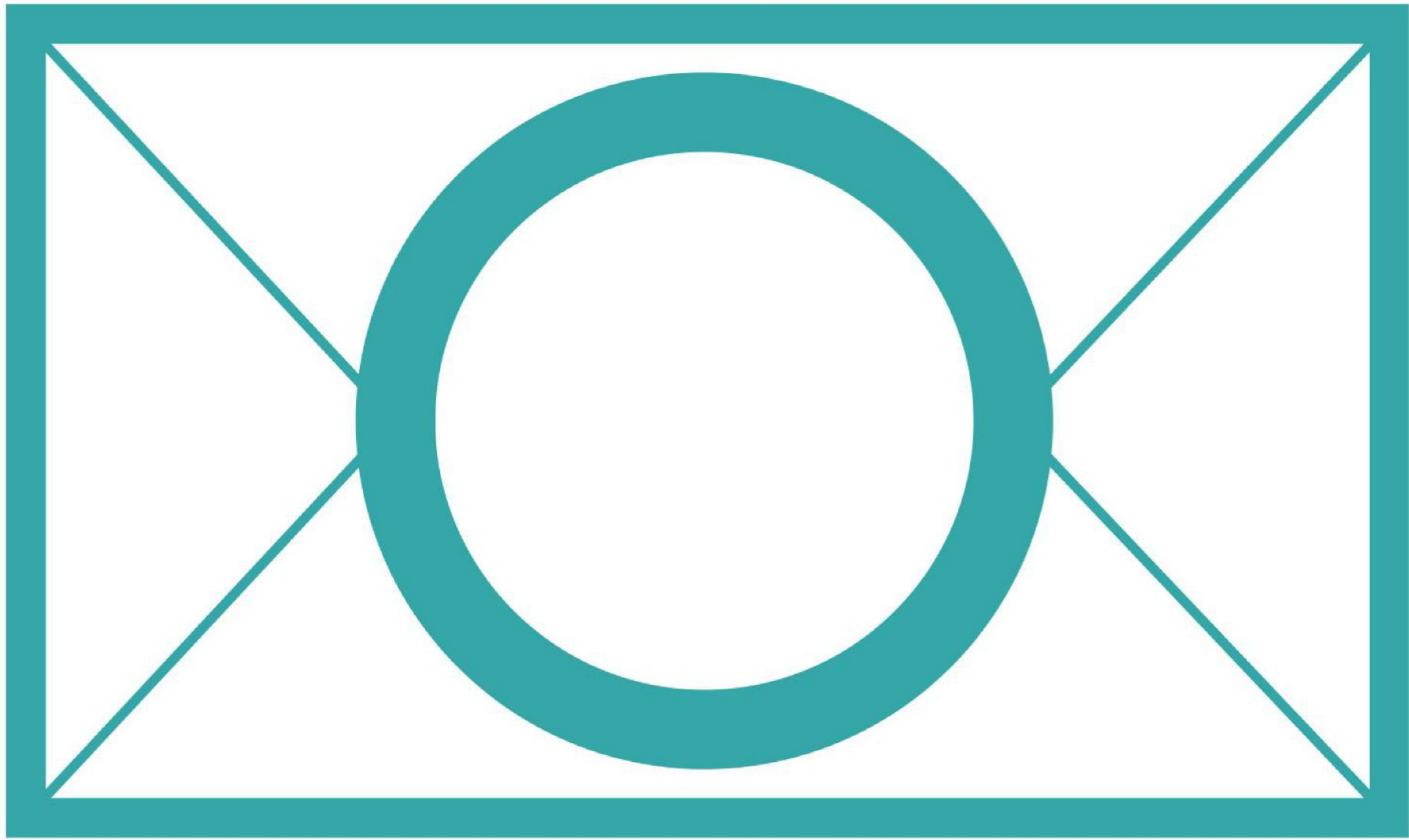
**MUSEUM
CURATION**

APP DEVELOPMENT

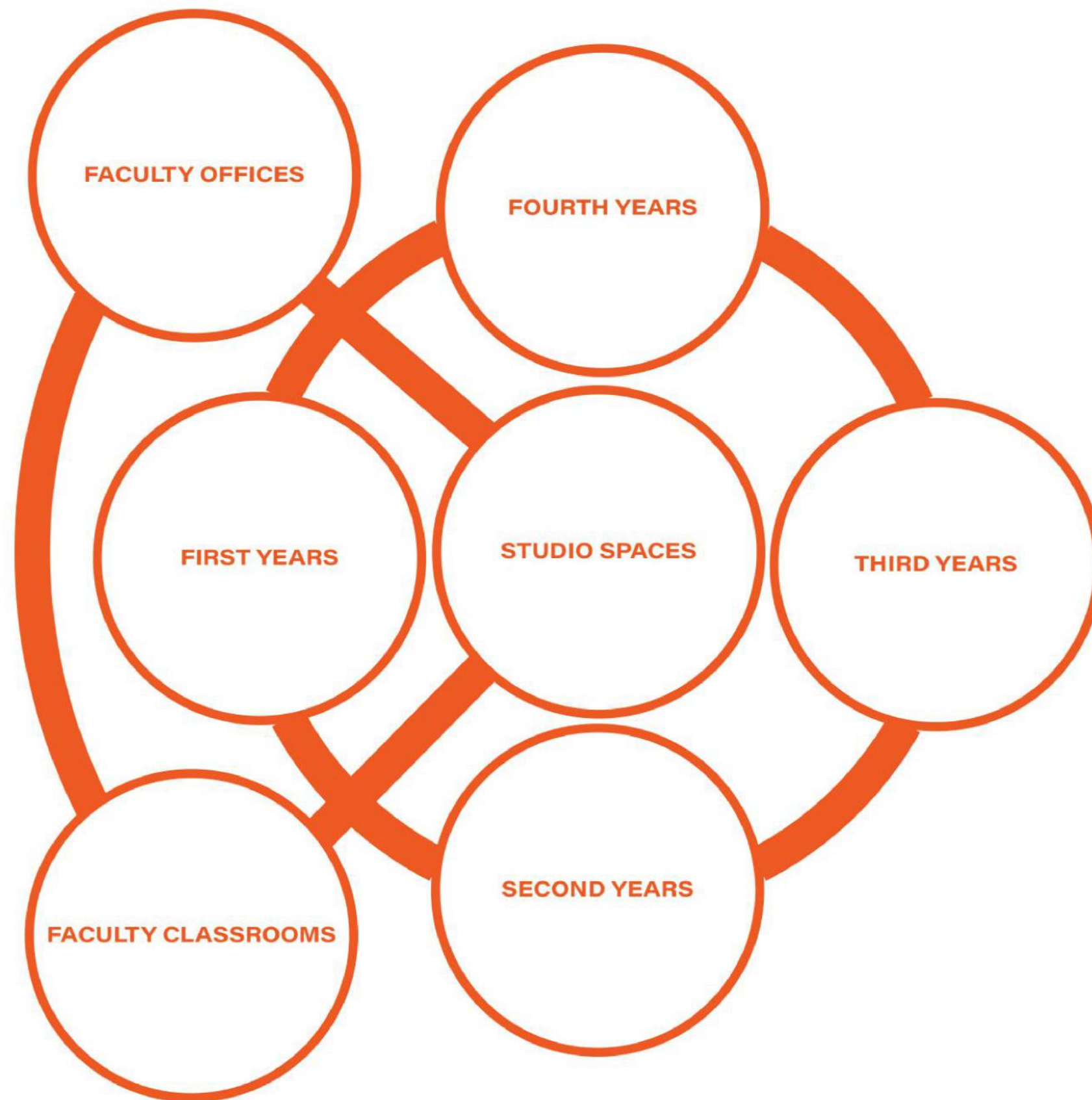
3D DESIGN

HISTORY

Curriculum Majors

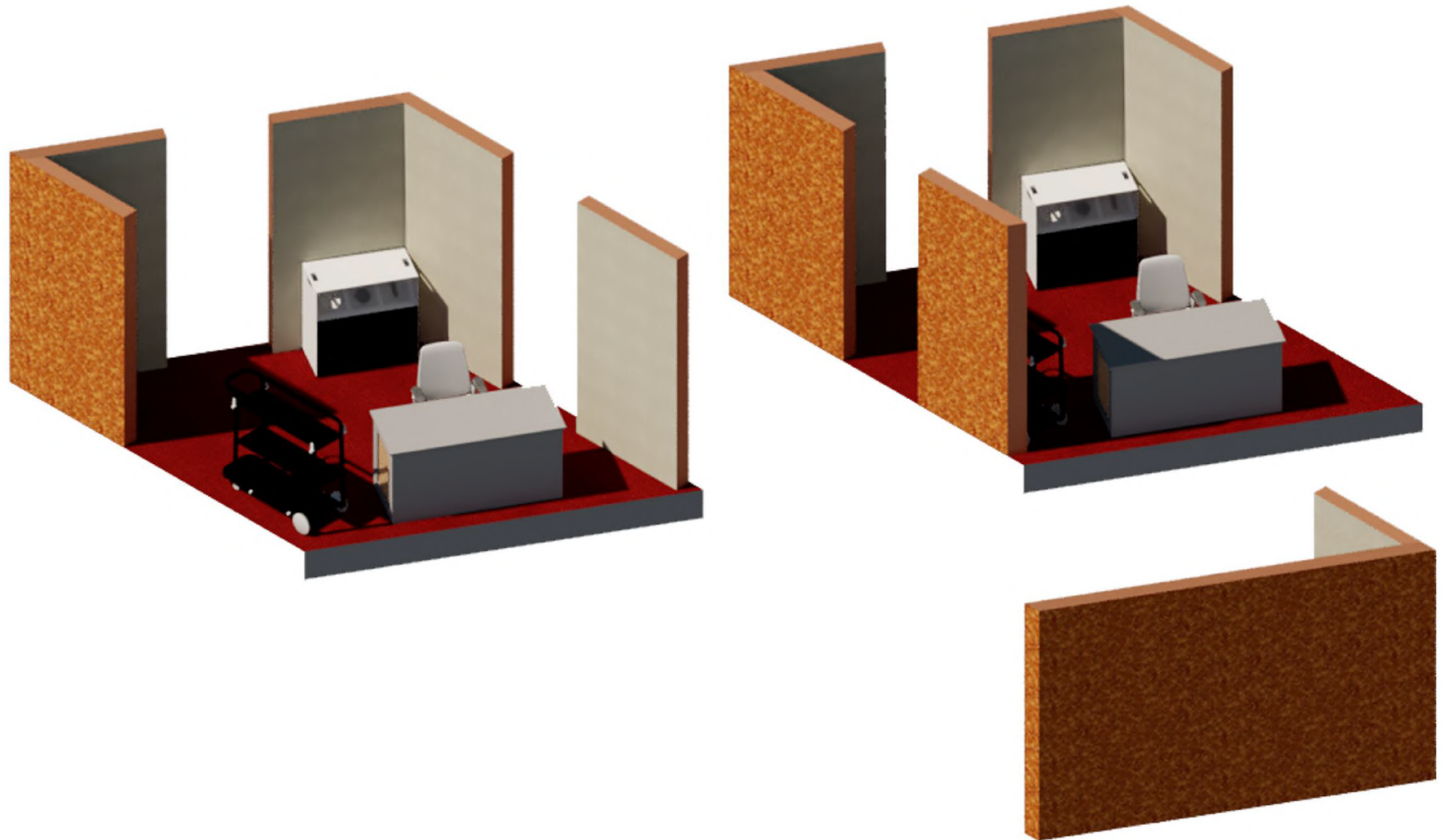


Parti



Bubble Diagram

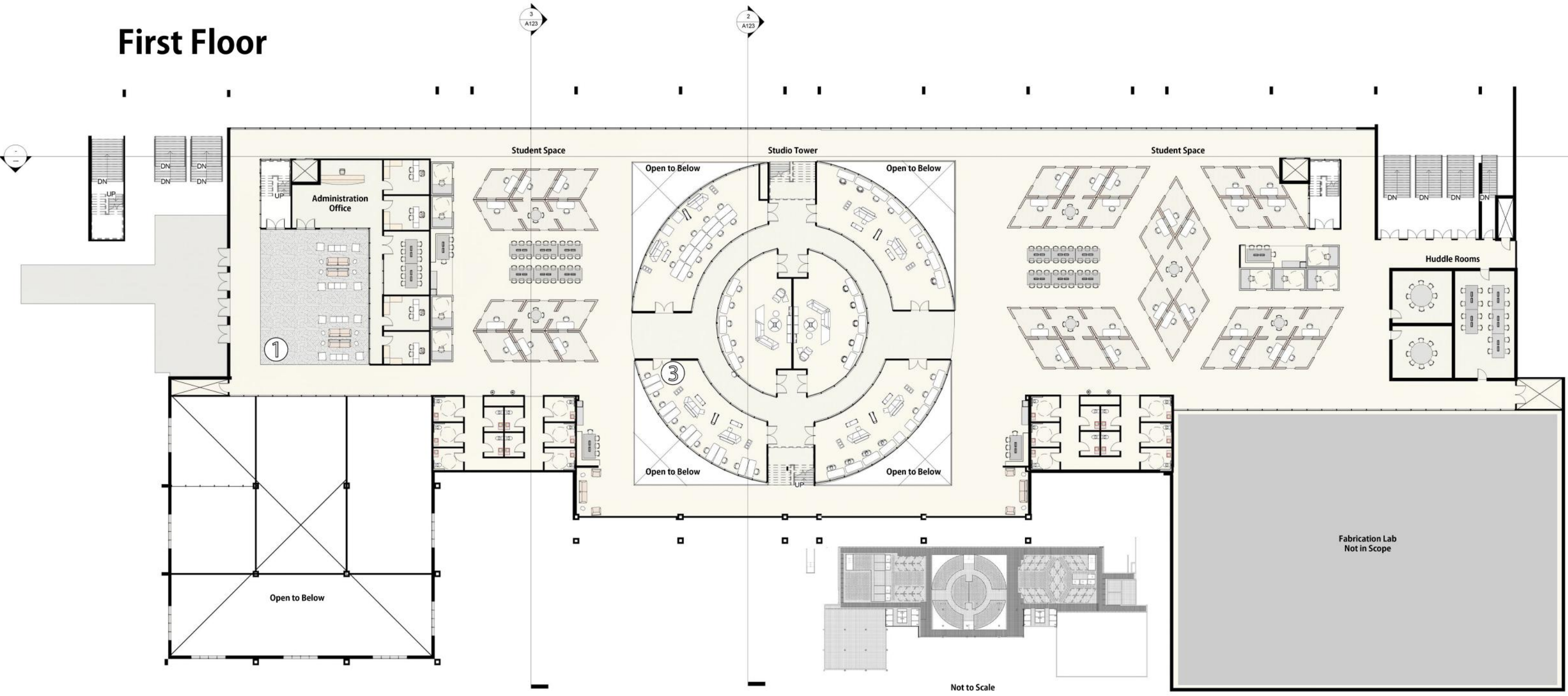
Student Work Pods



Project



First Floor





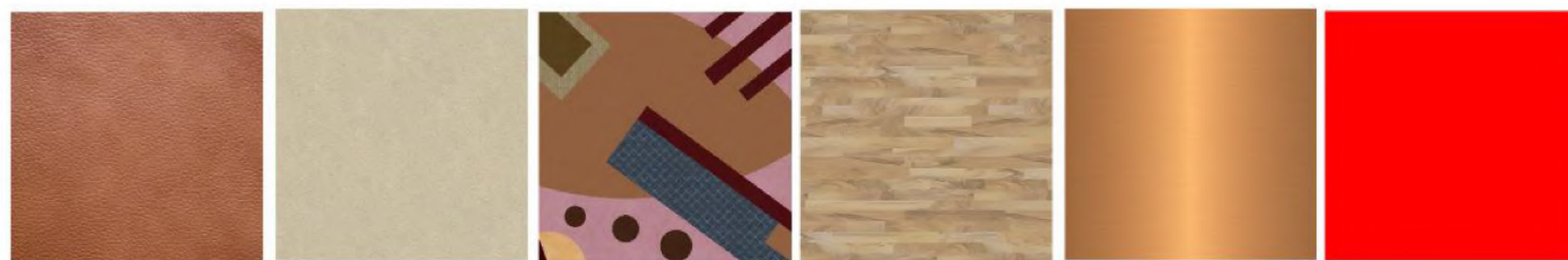
1



Lobby



2



Huddle Station

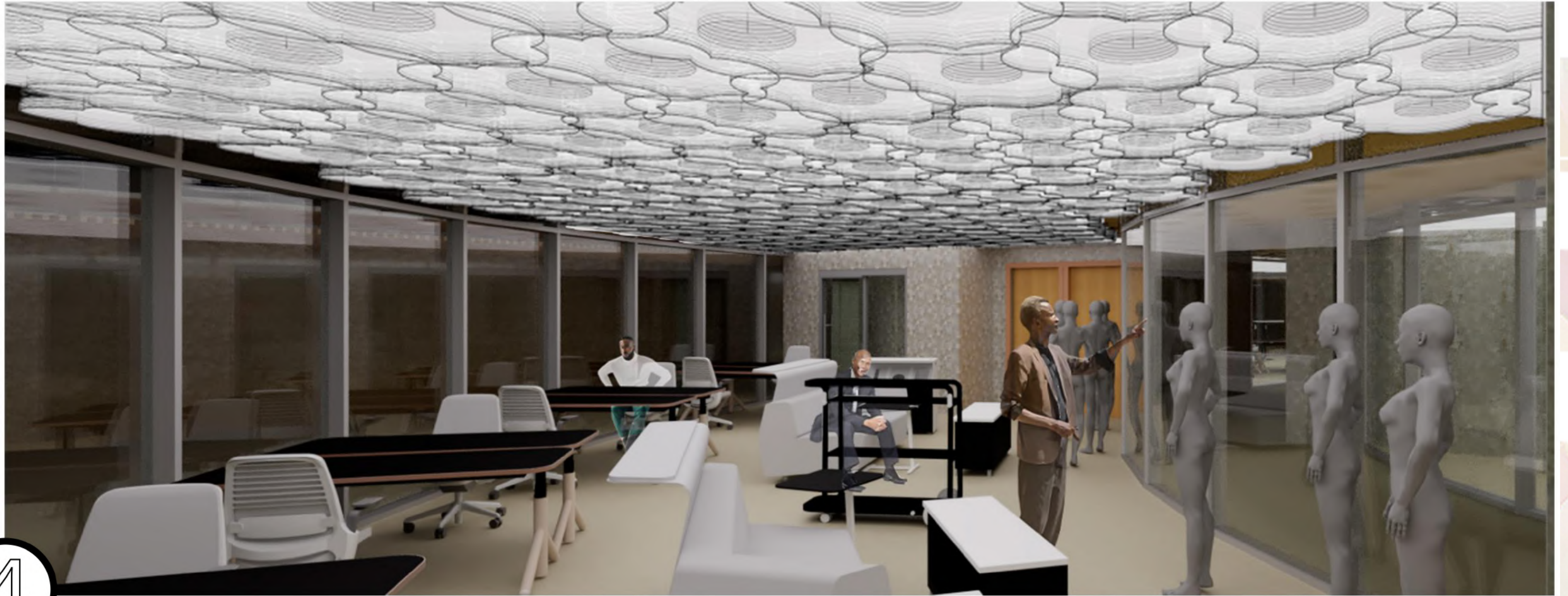
Studio Spaces



3



Animation Studio



4



Fashion Studio

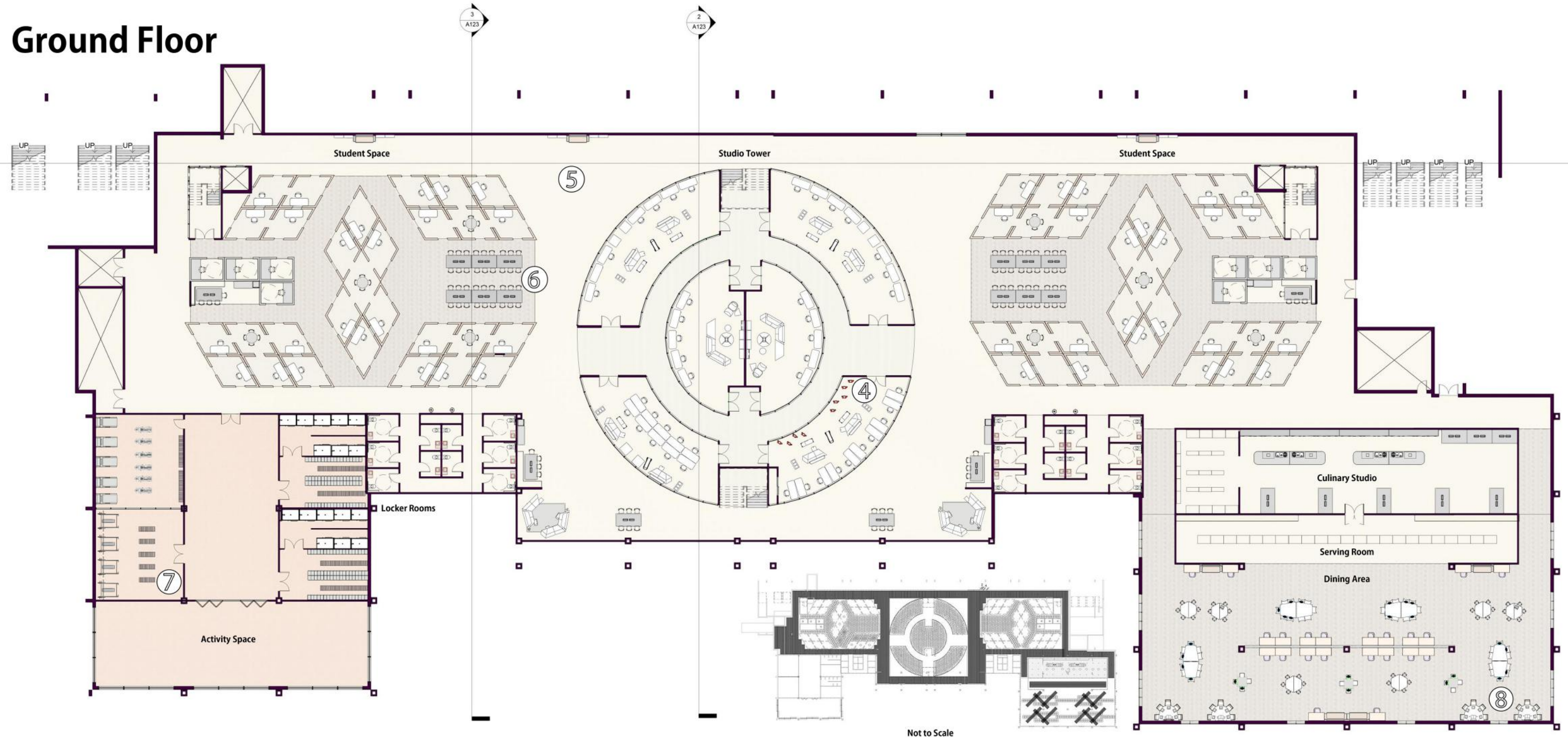


Studio Tower

5



Ground Floor





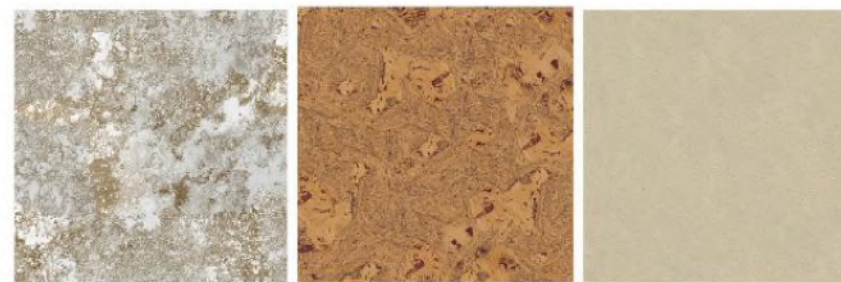
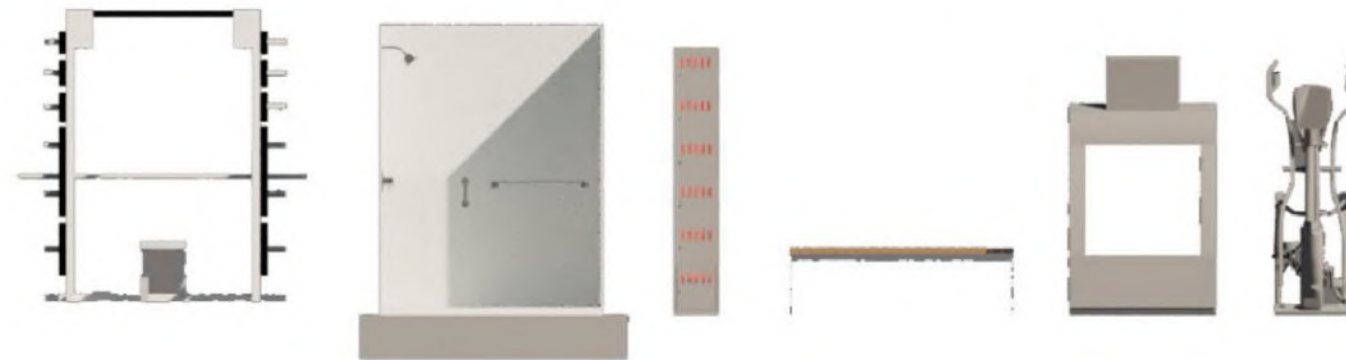
6



Student Space

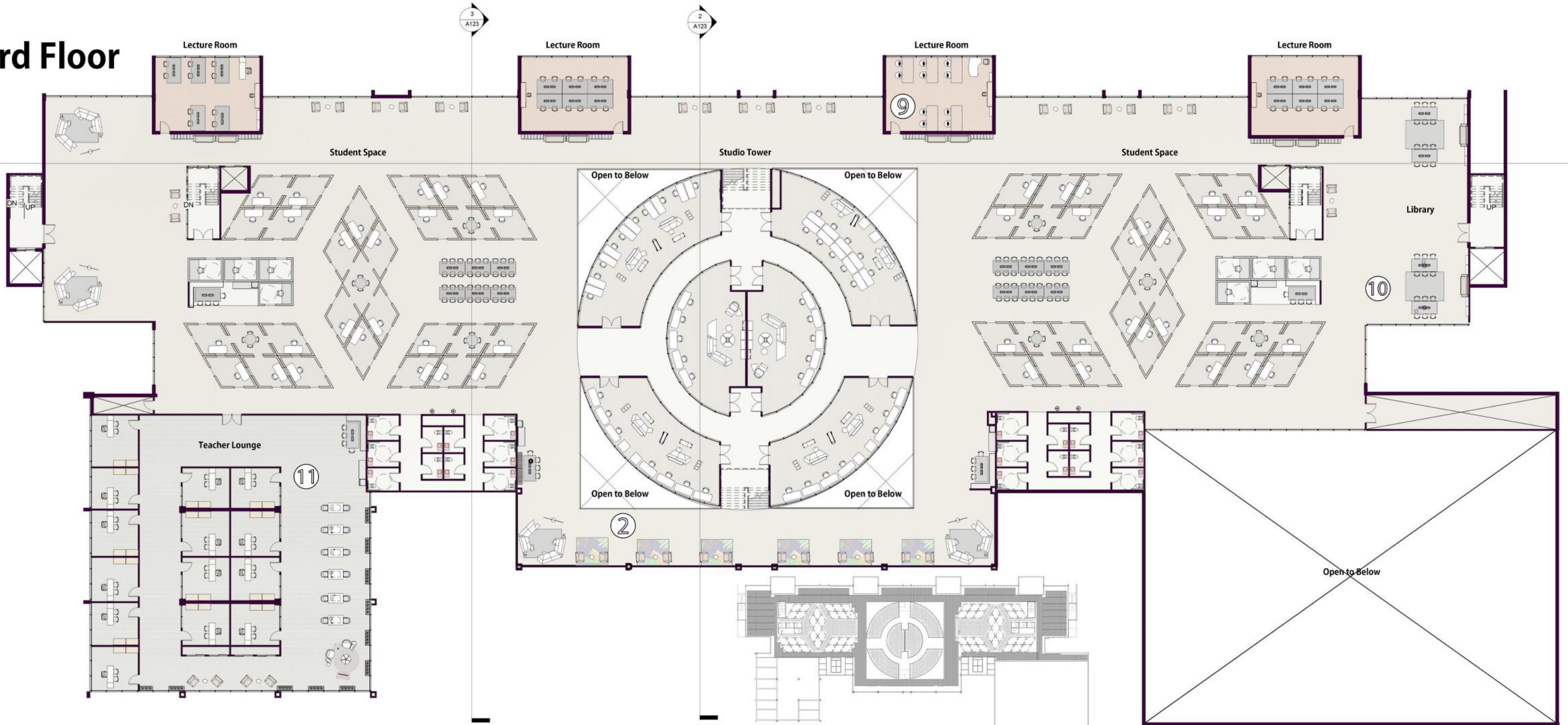
©

7



Activity Space

Third Floor



Not to Scale



9



Lecture Rooms

B



Library

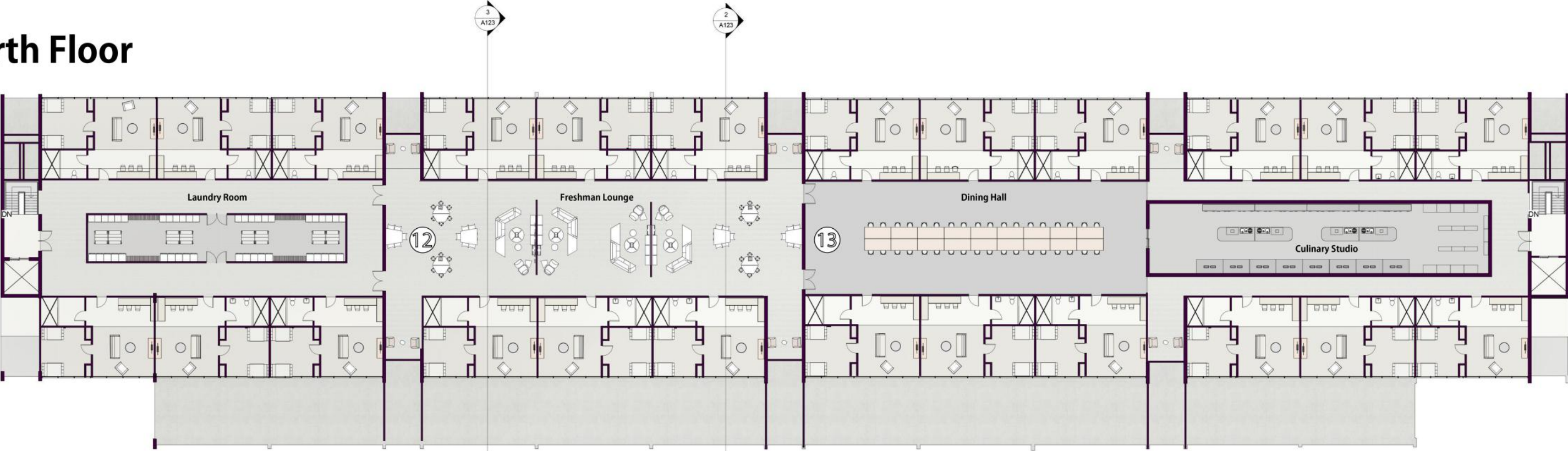


11

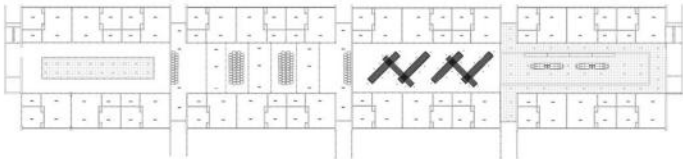


Teacher Lounge

Fourth Floor



1 Level 4
1/16" = 1'-0"



Not to Scale



12



Freshman Lounge

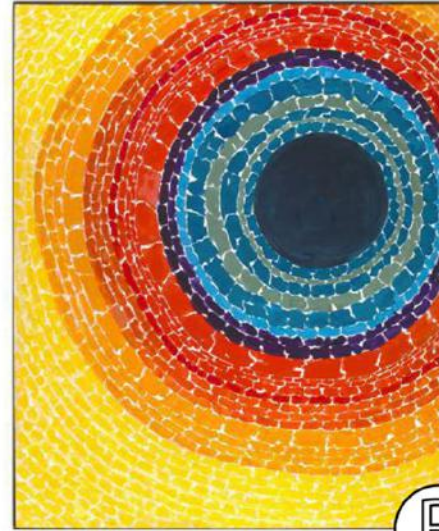


Dining Room



Astral Plane
Black Panther
2018

A



Alma Thomas
Resurrection
1966

B



Aaron Douglas
Aspects of Negro Life: An Idyll of the Deep South
1899

C



Georgie Nakima
Untitled
2017

D



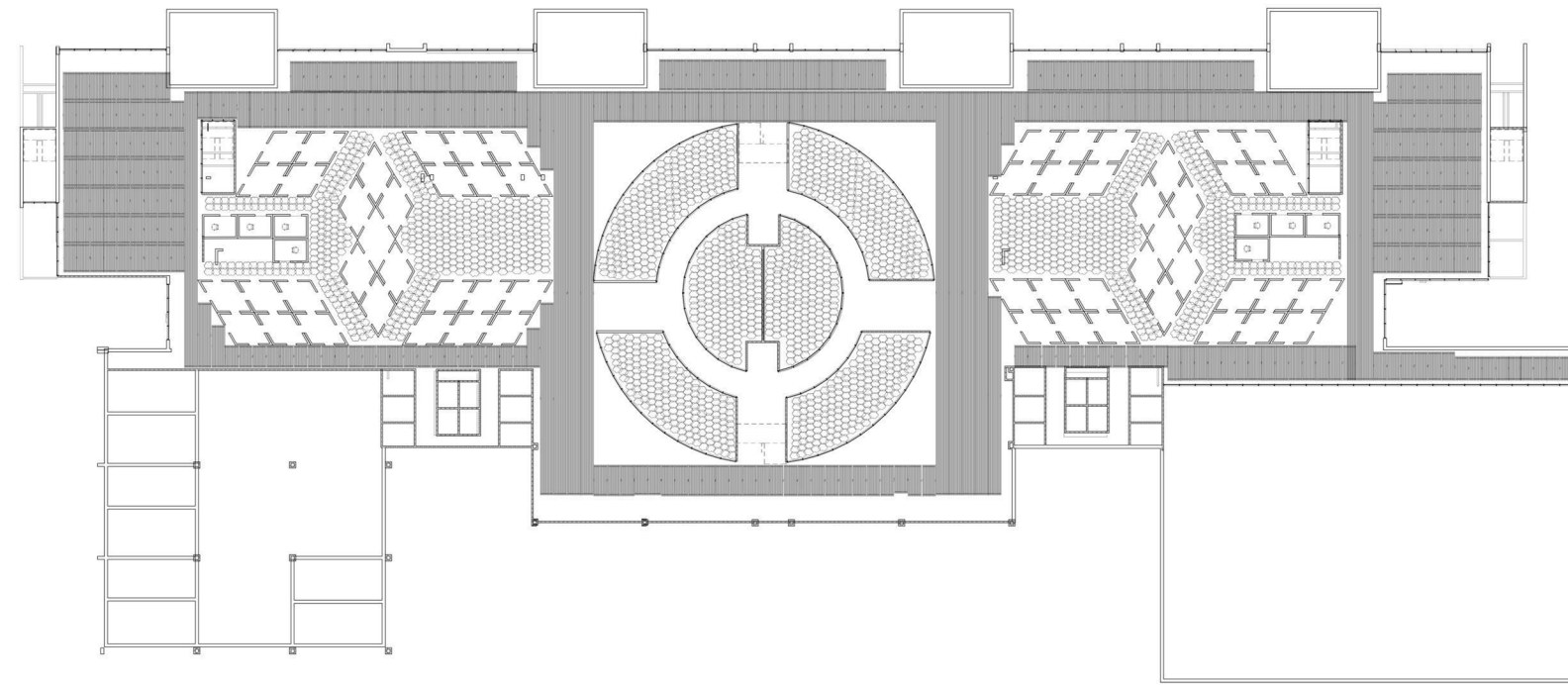
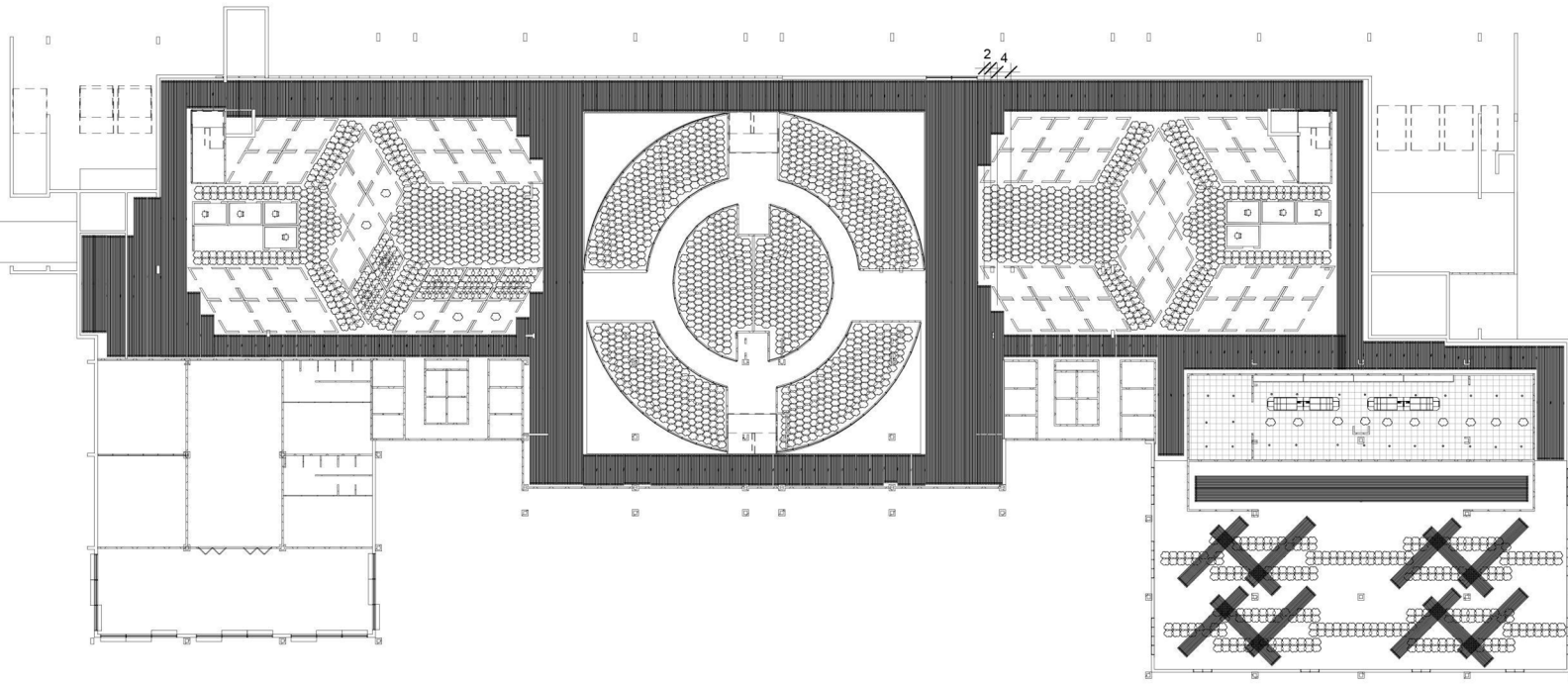
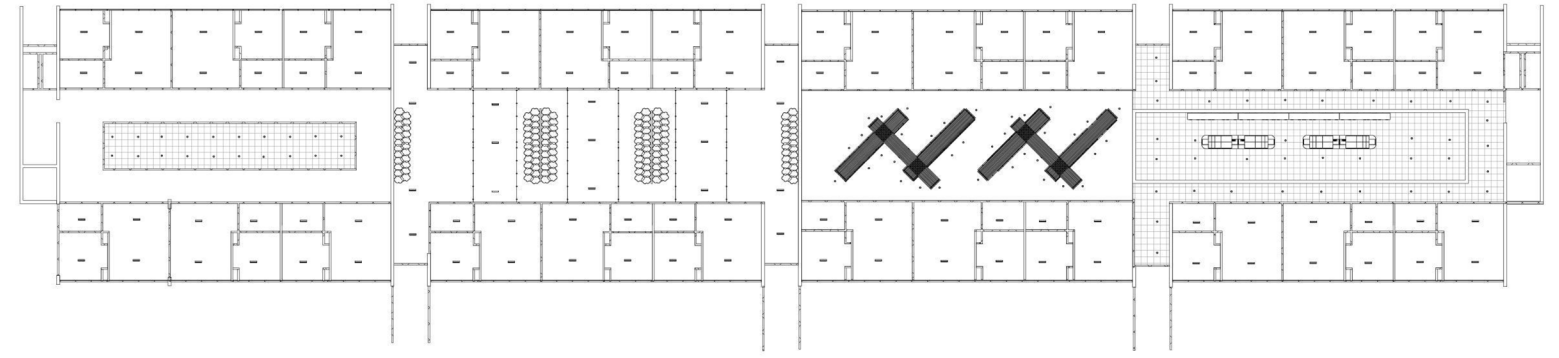
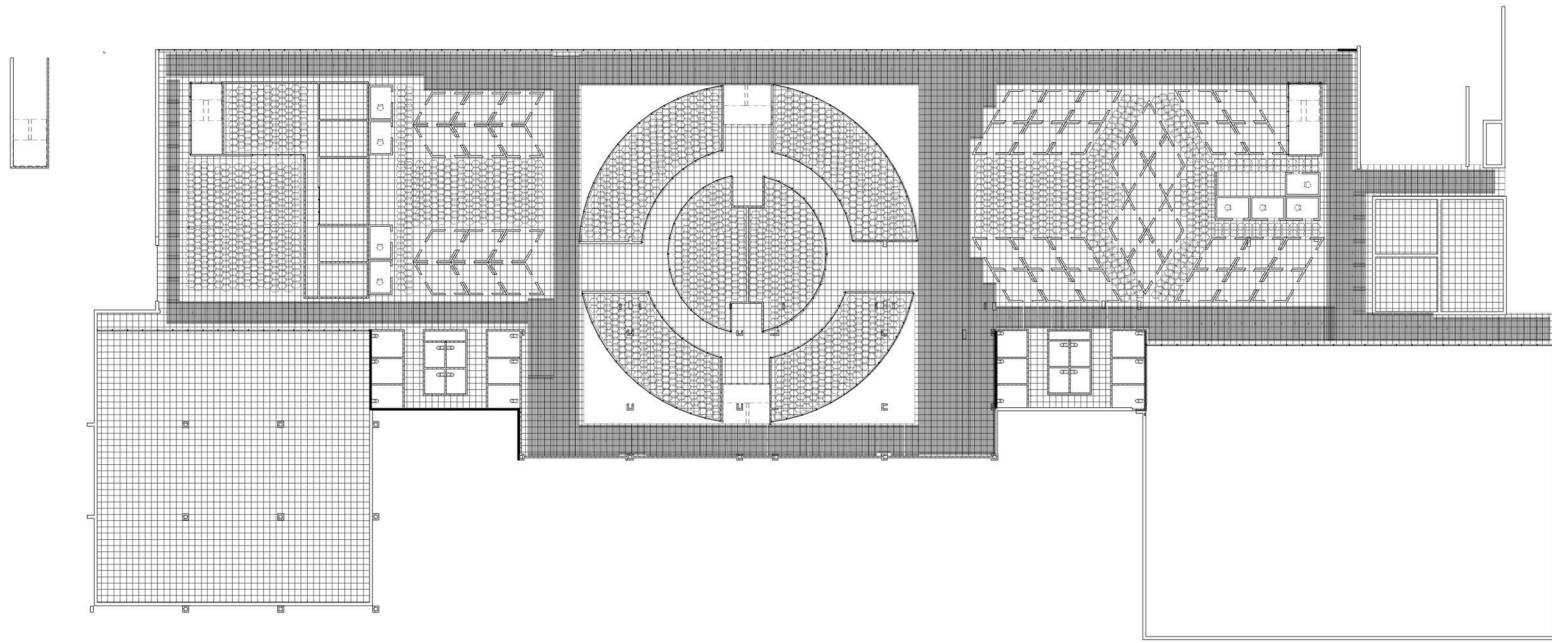
Joshua Mays
Untitled
2014

E

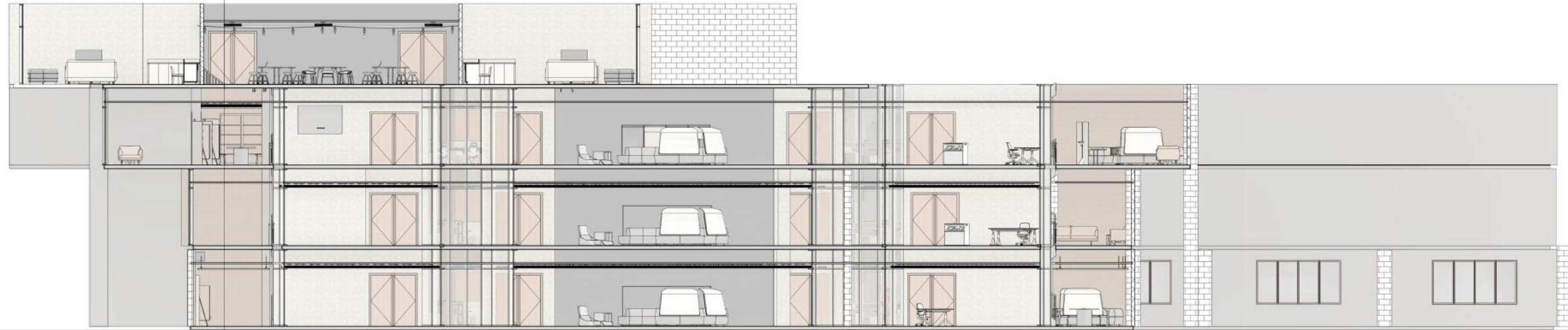


Joshua Mays
Frequency Reader
2013

F



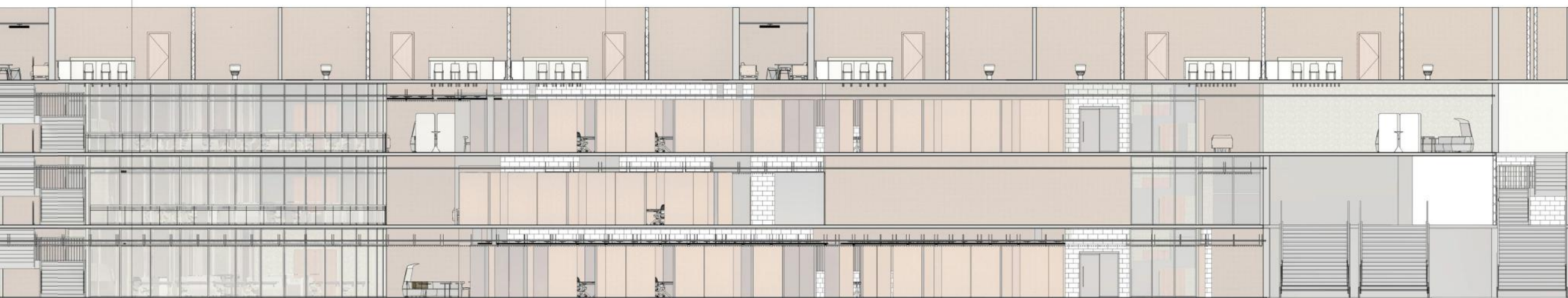
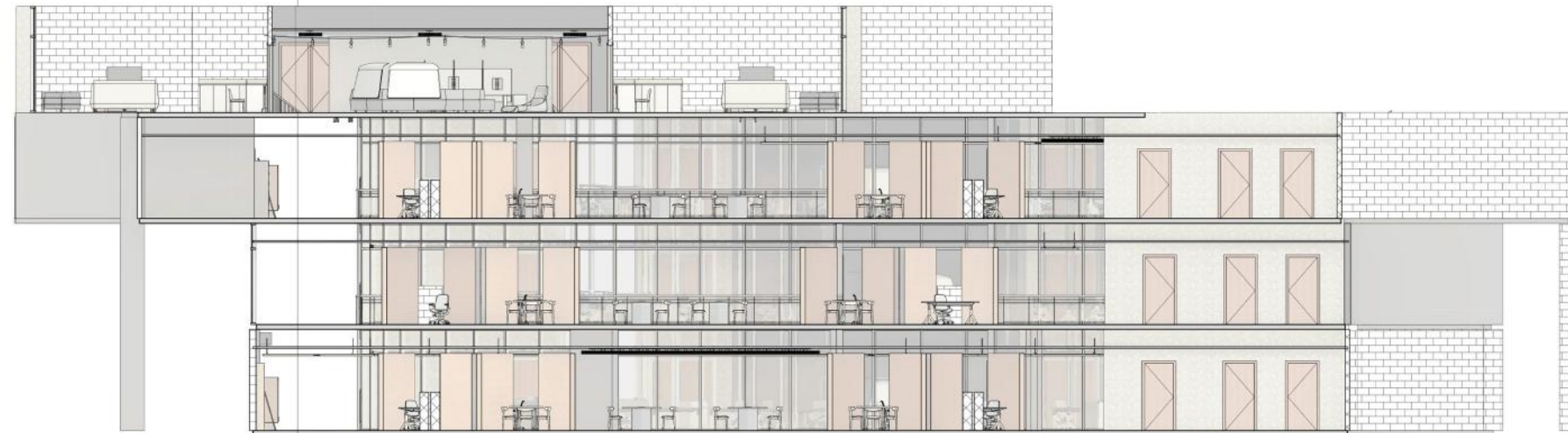
Section 2
1/8" = 1' - 0"



Section 1
1/8" = 1' - 0"



Section 3
1/8" = 1' - 0"



Bibliography



References

- Adjaye, David. 2016. "Adjaye Africa Architecture," from *Thames & Hudson Inc.*
- AIA. 2020, "Membership Demographics Report 2019." <https://content.aia.org/sites/default/files/2021-01/2019-Membership-Demographics-Report.pdf>
- Alexander, Michelle. 2010, "The New Jim Crow: Mass Incarceration in the Age of Colorblindness," *New Press*
- Blakemore, Erin. 2021, "Why the Berlin Wall Rose-and How It Fell." from *History, National Geographic*
<https://www.nationalgeographic.com/history/article/why-berlin-wall-built-fell>.
- California College of the Arts - CCA. 2020, "Dori Tunstall: Decolonizing Design Practices in Academia | Design division," from *YouTube, YouTube*, <https://www.youtube.com/watch?v=HJmlSOZapUE&t=1183s>
- Cooke, Sekou. 2021, "We Outchea: Hip-Hop Fabrications and Public Space," Excerpt from *Reconstructions: Architecture and Blackness in America*
- Cooper-Marcus, Claire. 1992, "Environmental memories," in *Place Attachment*. Altman, I. and Low, S. eds., *New York: Plenum Press, pp. 87-112*
- DesignIndaba. 2011, "Francis Kéré: African Architecture Should Stop Copying the West," from *YouTube, YouTube*, <https://www.youtube.com/watch?v=jAHeoh4TuCM&t=1106s>.

- Dougnon, Lévy. 2006, "la rénovation contestée de la mosquée de Djenné : Un homme trouve la mort dans les émeutes," from *Africone*
- Gooden, Mario. 2021, "The Refusal of Space," Excerpt from *Reconstructions: Architecture and Blackness in America*
- Herscher, Andrew. 2021, "Black and Blight," from *Race and Modern Architecture: A Critical History from the Enlightenment to the Present*
- McIntosh, Peggy. 1989, "White Privilege: Unpacking the Invisible Knapsack," from *Peace and Freedom Magazine*
- Naigzy, Gebrehedhin. 2016, "A Tale of Three Highland Cities: Personal Observations of an Octogenarian African Architect," Excerpt from *Adjaye Africa Architecture*
- Prussin, Labelle. 1986, "Hatumere: Islamic Design in West Africa," Excerpt from *University of California Press*
- Schwartzstein, Peter. 2020, "How Urban Design Can Make or Break Protests," from *Smithsonian Magazine*
- Sharpe, Christina. 2021, "Black Gathering: An Assembly in Three Parts," from *Reconstructions: Architecture and Blackness in America*
- Wilson, Mable O. 2020, "Notes on the Virginia Capital: Nation, Race, and Slavery in Jefferson's America," from *Race and Modern Architecture: A Critical History from the Enlightenment to the Present*