

August 2024

Space Utilization Study

Engagement Report

American River College

Steelcase

Applied Research + Consulting



Content

01 Executive Summary

02 Strategic Intent

- Central Question
- Critical Success Factors
- Foundational Pillars

03 Insights

04 Strategic Design Brief

- Experience Principles
- Experience Evolution
- Concept Map
- Work Settings and Attributes

05 Scenario Development

- Classroom Utilization Key Findings + Scenarios
- Work Mode Study Key Findings
- Scenario Definition + Details
- Foundational Pillars
- Scenarios Overview
- Overview: Davies Hall
- Overview: Welcome + Support Center

06 Appendix

- Classroom Utilization Key Findings
- Work Modes Study Key Findings
- Observation Key Findings
- Workshop Key Findings
- Space Utilization Survey Key Findings

01.

Executive Summary

Executive Summary

Context and Outcomes

Events over the past few years have led to an evolution in instructional modalities and an adjustment in Student perspective on the purpose of American River College (ARC) campus and its role in both learning and community. There has also been increased interest by Faculty and Classified Professionals for more choice and control in how and where they do their work.

The ARC Executive Team is interested in thoughtfully considering a range of hybrid options to create modern and compelling learning and work experiences that will support enhanced Student outcomes. Associated with this is interest in considering the impact the shift in modalities has on classroom scheduling, inventory, design and potential reuse of any excess space.

To explore a range of hybrid office and classroom solutions ARC has engaged the Applied Research + Consulting Team and launched the Space Utilization Study. The goals of this are to:

- Explore how ARC Faculty and Classified Professionals work, model a range of hybrid solutions and determine the appropriate direction for the future workplace for each group
- Explore classroom usage patterns and the associated demand, model a range of scenarios and provide input into current classroom design options
- Utilize the results of this study to update and evolve the Facilities Master Plan

The outcomes for this engagement include:

- Ensuring ARC's Executive Team understands hybrid, the continuum of hybrid solutions and key variables
- Understanding at a high-level Student perspective and aspirations for the campus experience
- Defining a range of hybrid scenarios (3 options) at varying points along a continuum and developing concept designs for both Faculty and Classified Professionals
- Documenting the advantages and disadvantages of each scenario and the implications for Employee and Student experience, organizational performance, and real estate requirements
- Supporting ARC Executive Team in determining scenarios that fit best with their culture
- Providing key information to support implementation of the chosen hybrid strategy (worker types, work modes, sharing ratios, I to We ratio, typology, settings, concept designs and impacts on behavior, process and technology)
- Defining a range of scenarios for classrooms across a spectrum of utilization targets and levels of Student demand
- Considering reuse and repurpose options for excess space
- Identifying change management implications of transitioning to a more defined hybrid strategy

Executive Summary

Engagement Approach Design Thinking + Wholistic

The Applied Research + Consulting approach is user-centered, research-based and comprehensive. Vital to this process is the utilization of the Work Experience Model. This model guides the engagement effort and focuses on ARC's ambitions. Through the lens of culture, process, tools and space, we are better able to understand the strategic needs of ARC.



This engagement employed various research methods and activities to more fully understand the organizational goals, cultural readiness, instructional/work patterns at a high level and implications of a hybrid strategy and shifting modalities across ARC. The research methods employed for ARC are outlined to the right.

- Direction setting and education work session with ARC Executive Team and Leaders
- Interviews with leaders from Academic and Classified Senates
- Work Experience Survey to Faculty, Classified Professionals and Students
- Work Modes Study to Classified Professionals
- Co-Design Workshops with Faculty, Classified Professionals and Students
- Workshop with Davies Hall replacement Project team
- Observation of approximately 17 buildings/portable villages including approx. 45 classrooms, 6 Faculty office areas, 7 Classified Professional work areas and the Natomas Center
- Review and analysis of classroom scheduling data
- Analysis, synthesis and initial scenario development
- Initial scenario review with ARC Executive Team and District Leaders
- Detailed development of scenarios
- Typology and Worksettings developed for the future workplace
- Detailed review of scenarios and all supporting information
- Scenarios adjusted as needed and final report prepared
- Final review with ARC Executive Team and District Leaders

Executive Summary

Overview of Contents + Usage

This report and the supporting appendices are intended to be a Playbook that informs the Facilities Master Plan through the lenses of Culture, Process, Tools & Technology and Space. The Strategic Intent section addresses the “why”; the Insight and Experience Principles provide insight to the current and future experience; the Strategic Design Brief provides the building blocks of the future design; and the Scenarios provide a range of options and supporting information for the potential solutions.

Strategic Intent

Defines the rationale for a new hybrid and classroom direction which support shifting modalities and includes the Central Question, Critical Success Factors and Foundational Pillars.

Strategic Design Brief

Defines the building blocks for all scenarios for Faculty, Classified Professionals and Classrooms. Key elements include the Concept Map, Work Settings and supporting information.

Insights + Experience Principles

Insights offer a deep understanding of what is happening at ARC today and are linked to the Experience Principles which broadly define the experience to be supported by the scenarios.

Scenarios

Scenarios represent a continuum of hybrid and Classroom solutions for ARC. Each has a differing impact on the Student, Faculty and Classified Professional experience, organizational performance and real estate requirements. The scenarios have been defined in a manner that will enable ARC to migrate among the scenarios over time.

Executive Summary

Scenarios – Future Alternatives

Three scenarios were developed each for Faculty areas, Classified Professional areas and Classroom utilization. These scenarios are unique to ARC and are based on the Strategic Direction, Foundational Pillars and their ranking, Work Mode data, how people work on a day-to-day basis and changing modality patterns and evolving Student preferences.

For Faculty and Classified Professionals each Scenario represents progression along the hybrid continuum, reflects increasing levels of change and is contrasted to the As-Is environment which represents a fourth scenario. Classroom Scenarios are based on varying levels of utilization and on-ground demand.

These Scenarios will aid the ARC Executive Team in understanding the range of alternatives and will support an effective discussion of the varying impacts on the experience of Students, Faculty, Classified Professionals and the effectiveness of the Organization.

The ultimate intent of this effort is to inform the long-term Facilities Master Plan and not necessarily drive an immediate change. Each of the Scenarios developed is viable, however transitioning to any Scenario will represent change requiring a focused and effective change management effort and sponsorship by Leaders of the various stakeholder groups.

An overview of the scenarios for Faculty and Classified Professionals is shown below; additional details including advantages, disadvantages, detailed concept designs and 3D images for each may be found later in this document. Classroom scenarios are defined later in this document and include the impact on the number of classrooms required along with updated designs.

Faculty

Scenario 01

- All Faculty are hybrid, with no office sharing and time on campus is as it is today
- Faculty offices will be redesigned to better accommodate Student and Faculty interaction
- Faculty communities will be created with offices located around a Department Hub
- Areas will be introduced where Students can congregate informally before and after class

Scenario 02

- Faculty offices are designed to accommodate the workstyle and artifacts of two Faculty members assigned to an office (shared on a 2:1 ratio)
- Community Zones will be designed with a wider range of unassigned drop-in spaces for Faculty to work when they don't need their private office
- Expanded areas where Students can congregate informally before and after class

Scenario 03

- Faculty offices are assigned to a department but unassigned to specific Faculty Members and are shared on a 3:1 ratio
- The use of offices can be determined and managed by the department
- Additional unassigned enclosed spaces will be included in Faculty Community Zone to support individual concentration and small group interaction

Classified Professionals

Scenario 01

- Hierarchical planning methodology (updated)
- Formal updated hybrid program for non-peak periods
- Office to workstation ratio will be unchanged
- Updated design in office areas with increase in collaborative space, if possible

Scenario 02

- Activity-based work planning methodology
- Formal updated hybrid program for non-peak periods
- Formal desk sharing introduced; sharing of desks and offices for hybrid and remote workers at 1.5:1 and 10:1 + Temporary Classified share at 3:1
- Quantity of group, collaborative and social spaces enhanced over scenario 1 with increased options for hybrid / remote workers

Scenario 03

- Activity-based work planning methodology
- Formal updated hybrid program for non-peak periods
- Desk sharing enhanced with 70% hybrid sharing at 2.5:1 + Temporary Classified share at 5:1
- Quantity of group, collaborative and social spaces significantly enhanced over scenario 2
- Front porches and transition zones for departments introduced

Executive Summary

Key Insights

The key Insights reflect the analysis and synthesis of multiple sources of data gathered during the Discovery Phase with ARC. The goal of inspiring Student success was evident throughout our interactions with all ARC constituents. These Insights reflect that goal and offer a deeper understanding of what is happening at ARC today. The Insights will inform and drive considerations and recommendations for the Facilities Master Plan. Details about the four Insights and the research findings that informed them are included later in this report.

A summary of the four Key Insights is below:

Insight 1

Cultivating the Optimal Experience

Modalities and work processes have evolved but buildings, processes and behaviors have not made appropriate adjustments. There is a wide range of experiences due to the diversity in many aspects of the Campus including building age, design and maintenance. In addition, the Portables, initially installed as temporary, have become a permanent fixture on the Campus.

Insight 3

Nurturing the Community

There are strong ties and bonds within Departments and with their associated Students. However, inter-departmental silos tend to exist based on campus geography, structure of Departments and the growth in online instruction and hybrid working. The many changes over recent years, have led to frustration, tensions and an associated impact on morale and organization affiliation.

Insight 2

Evolving the Instructional Experience

The shift in modalities has driven a change in many elements associated with instruction. While methods, processes, skillsets and technology for in-person instruction are well established, there are growing pains associated with online and hybrid instruction. The experience for students varies widely whether on ground or online, impacting overall success rates. In addition, the on-ground experience is inconsistent varying by building age and permanent vs. temporary.

Insight 4

Embracing New Opportunities

There are signs of innovation happening in a number of areas at ARC (e.g., HomeBases, HyFlex, online instruction). While this innovation has been generally well-received, consensus in workshops conducted was that further innovation holds significant promise in streamlining Student experience and supporting Instructional and other activities. However, in some instances there is an expectation of what appears to be a status quo (e.g., replacement of Davies Hall).

Executive Summary

Real Estate Savings

The results of the Space Utilization Study indicate excess space exists at ARC. There are also a broad number of processes and perspectives which are limiting the ability to realize additional real estate savings. These are typical across higher education and many corporate sectors. They include:

- A shift in instructional modality to an approximate equal split between on-ground and online courses has further increased excess classroom capacity
- Use of hierarchical planning methodology for Classified Professionals and Faculty tends to result in buildings and spaces being cellular, inflexible and expensive to adjust
- Space design is not matched to how people actually work; effective implementation of hybrid programs require an honest assessment of how work is currently done and matching the space solution to this reality
- Buildings expanding reactively over time has resulted in a range of constraints making it difficult to optimize and repurpose them in the future
- An incremental focus to facilities development and construction has resulted in new facilities which tend to mirror the historical space solution vs a “bottoms up approach” which would take into consideration changes in work, instruction and related aspects
- From a strategic level there appears to be limited measurement and pro-active management of space based on utilization; this is not surprising given laser like focus on Student success but means space opportunities are not readily realized and addressed

Addressing excess space generally has 3 typical alternatives. However, as a public institution located on a dedicated campus each of these options have their own unique set of opportunities and challenges.

Option 1

Eliminate Excess Space

This option consists of demolishing, selling or transferring ownership of the excess space. While this option is possible, it may be difficult to sell or transfer ownership of space located on a campus.

Option 2

Repurpose Excess Space

This option consists of adopting alternative uses for excess space that is consistent with the College’s permissions. Some Institutions have considered Co-Working or Innovation Hubs as options.

However, repurpose options require sufficient space to be available in a single location as small spaces scattered across the campus can be challenging to repurpose.

Option 3

Eliminate + Repurpose Excess Space

This option blends the other two options and probably represents the best potential for the College should there be interest in optimizing the space used.

Executive Summary

Real Estate Savings - Classrooms

The analysis of classroom utilization data and scenario modeling indicate the potential for reductions in classrooms and / or repurposing of the associated space. The savings opportunity documented on this page is based on:

- Analysis of Lecture, Combo and Lab rooms
- Focus on Monday through Thursday usage patterns – driving higher levels of utilization on Friday, Saturday and Sundays would further increase the savings opportunity
- Modality levels consistent with the current situation

Three scenarios were developed and considered (details provided later in this document). We believe scenario 3 represents the most viable representation of real estate savings related to classrooms as it has an appropriate balance between achievable scheduling levels and ability to accommodate growth. For Scenario 3 Peak utilization is set to 85% and Non-Peak is set to 40% of course demand hours specified which is slightly higher than was the case in Fall 2019. The real estate saving opportunity is:

- Approximately **28.8% of aggregate classrooms**

There is potential that a “**universal classroom**” could support higher levels of utilization but was not explored in this analysis.

Note: Davies Hall classrooms have been excluded from the numbers above. If they were included the savings would be increased.

Classroom Utilization Scenario 3

Monday - Thursday (4 days)

Peak @ 85% utilization, Non Peak @ 40%

	Lecture	Combo	Lab	Total
Current Hours Course Demand	1055	322	924	2301
Current # Rooms	44	16	35	95
Required # Rooms	31.0	9.5	27.2	67.7
Excess # Rooms	13.0	6.5	7.8	27.3
% Excess	29.5%	40.8%	22.4%	28.8%

The current average size of a classroom is approx. 753 sq ft, which results in potential real estate savings on Current Demand of 20,331 sq ft

Executive Summary

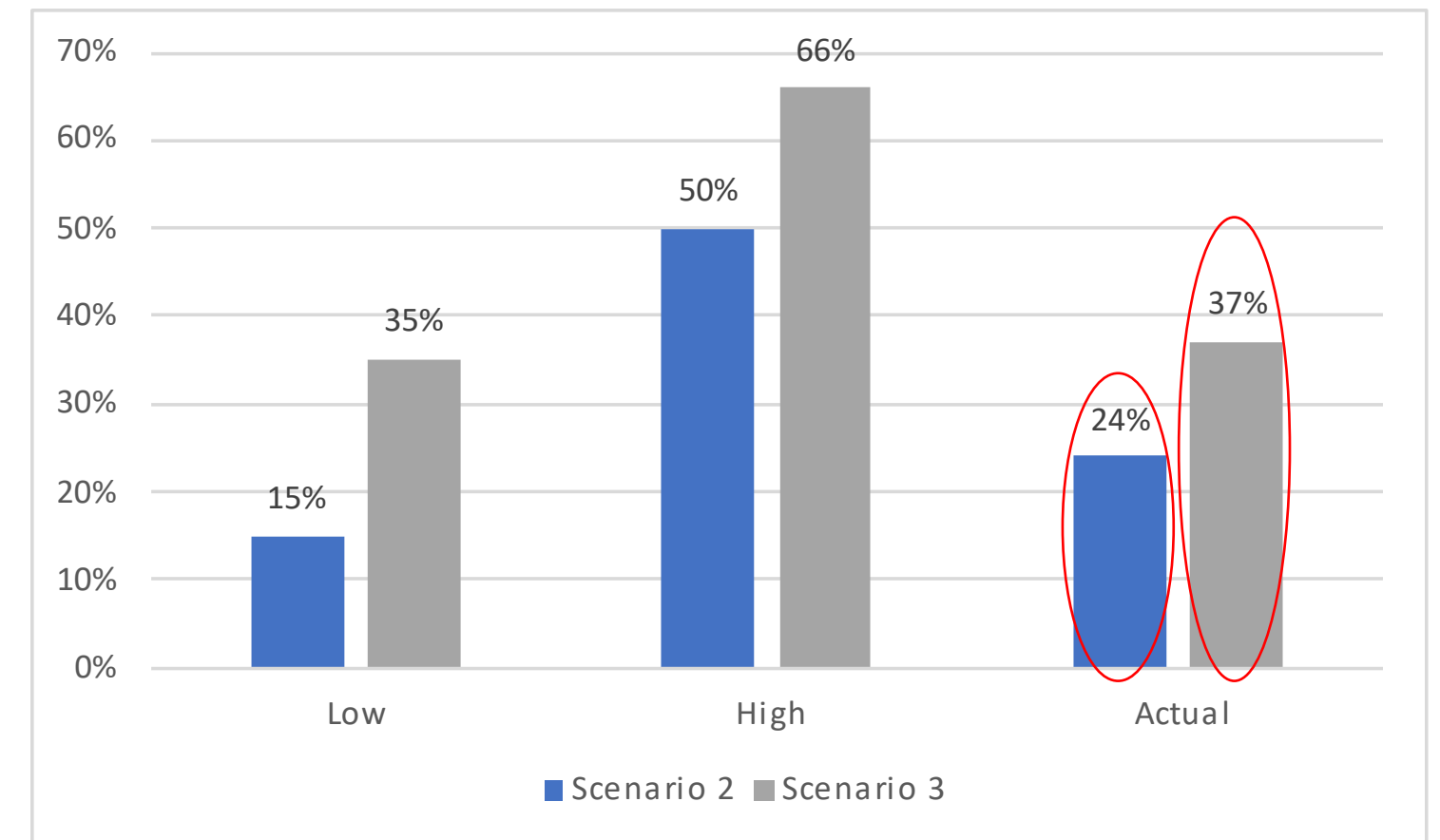
Real Estate Savings – Faculty Spaces

The analysis of Faculty work patterns, preferences, union agreements and shifts in modalities indicate the potential for a reduction in the volume of space dedicated to Faculty offices. The potential reduction varies by scenario and is discussed below.

Office sharing strategies use some portion of the excess space generated to provide an improved community experience which includes a range of open and enclosed group and individual spaces. This increased support for community enhances both effectiveness and experience.

- **Scenario 2** introduces a Faculty office sharing ratio of 2:1
 - ✓ The range of real estate savings for this sharing ratio typically varies between 15% - 50%. Scenario 2 achieves a 24% reduction in real estate or supports an approximate 43% increase in Faculty headcount.
- **Scenario 3** introduces a Faculty office sharing ratio of 3:1
 - ✓ The range of real estate savings for this sharing ratio typically varies between 35% - 66%. Scenario 3 achieves a 37% reduction in real estate or supports an approximate 64% increase in Faculty headcount.

Range of potential real estate savings from implementing varying scenarios and associated options



A well designed and executed pilot is advisable to better understand the potential usage patterns of community spaces and should guide selection of the most relevant option.

Executive Summary

Real Estate Savings – Classified Professional Spaces

Potential real estate savings at the Welcome and Student Center, as the building is currently structured, is challenging due to a number of factors which serve to constrain all potential scenarios. These include:

- Multiple small buildings integrated into one with many structural walls
- Building envelope designed with unique shapes which result in areas which are difficult to integrate and optimize
- Space divided into many generally small areas

Our analysis and scenario modeling take into considerations the constraints above plus evolving work patterns, preferences, union agreements, shifts in modalities and fluctuating periods of occupancy based on service demands related to Students and semester timing.

Our efforts explored 3 unique scenarios and while the Student and Employee experience generally increased from Scenario 1 to 2 and then to 3. However, only Scenario 3 offered a reduction in real estate. This savings is represented by the light tan areas in the plan to the right of this slide and is 11% of the total area or 2,712 sq ft.

We believe in the future a “bottoms up” new building would offer greater flexibility, better experiences and increased real estate savings.



Potential Real Estate Saving of 2,712 sq ft or 11% reduction (light tan areas)

Executive Summary

Next Steps

The key next steps for ARC's Executive Team are to align on the appropriate direction and scenarios for Classrooms, Faculty and Classified Professional areas and a point of view on addressing excess space. Based on these positions the Facilities Master Plan can be updated and an implementation approach can be developed. Typically for projects like this clients utilize a phased approach to implementing the new strategy which spreads the cost and change management effort over a number of years. Below are additional considerations for implementation. We encourage further discussions on this topic with ARC Executive Team and the Applied Research + Consulting team.

Pilot + Measure

Regardless of the scenario selected for Faculty, Classified Professionals or Classrooms, the result will be a significant shift in the experience for all audiences. Few organizations implement a shift of this type across all buildings and groups at one time. Generally, a phased approach to implementation is taken which spreads the transition over a number of years.

This phased approach offers the ability to spread the cost and effort of the new learning and work experience over time. It also provides the opportunity to use the first phase as a pilot to measure and evolve the various aspects of the selected scenario (behavior, process, technology and space) and the associated change management program.

Change Management

All scenarios in this document represent moderate to significant change. Transitioning people into a new experience without adequate preparation can result in limited success. Change management should be a key part of ARC's implementation efforts.

Ultimately, how change is managed matters tremendously. People will draw conclusions based on the actual changes made, and on how the change process is managed. When managed well, it has positive impacts on engagement, wellbeing and performance of all relevant audiences.

We encourage further discussions on this topic with ARC and the Applied Research + Consulting team.



02.

Strategic Intent

Central Question

A Central Question sets the intent and gives clarity to the goals of an initiative. It defines direction, assists with transition, and promotes a shared understanding of the opportunity. The Central Question for the Space Utilization Study was co-developed with ARC's Executive Team and Senior Leaders.

How might we evolve our college to inspire a diverse body of Students to achieve their goals, provide an elevated service experience, ensure inclusive, equitable education, support the evolving instructional modality mix, provide flexibility for learning and working while continuing to build a sense of belonging for all and enhancing the overall effectiveness of the College?

This Central Question was shared with participants of all Faculty and Classified Professional workshops. We recommend it continues to be shared and refined as the learning and work experience evolve.

Critical Success Factors

Critical Success Factors outline an organization's **key objectives** and **drivers over the next 3 to 5 years**. They provide context for strategic projects which are intended to impact people's experience and effectiveness.

The Critical Success Factors are based on the input derived from interviews with ARC Leaders and were validated in the Leadership Workshop.

These *Critical Success Factors* have anchored and guided the Space Utilization Project and the resulting scenarios.

Student Learning Experience

- Put Students first, actively seek to understand Student needs and expectations for on ground and online experiences
- Enhance and leverage HomeBases and experiences for Students (based on Guided Pathways)
- Retain students and effectively support Student success (onboarding and HomeBases)
- Ensure Students feel welcomed, valued and part of the College community
- Provide informal access and visibility to College Leaders (i.e., President, Deans)

Culture

- Grow empathy, respect and trust between all constituents
- Increase transparency among all audiences
- Increase speed of decision making and implementation efforts
- Adopt a mindset and willingness to reimagine the future and embrace change

Instructional Methodology

- Maintain and enhance excellence in on ground instruction capabilities
- Enhance online and hybrid teaching capabilities in an increasingly competitive arena
- Evolve technology to support effective online experiences for Students and Faculty
- Adapt in a timely manner to evolving Student needs and competitive environment

Communication

- Ensure the perspective of all constituents are heard regularly
- Address feelings of loss of control by employee groups
- Reduce silos and broaden understanding across the College
- Explore how to enhance communication methods for employees

Institution

- Understand changing needs of the community and respond quickly with course offerings
- Balance needs and interests of all employees with needs of Students and the College
- Bring community back into our College - public face, external partnerships, seeking funding
- Support professional development for employees
- Continue effort to ensure equity and inclusion
- Enhance ARC's marketing effort to high schools and expand dual enrollment

On Ground Experience

- Proactively address aging, sub-par facilities and buildings
- Provide improved experiences for Students, Faculty and Classified Professionals
- Ensure HomeBases provide great experiences and services for Students
- Leverage Davies Hall challenges to explore evolved experiences for Students and Faculty

Evolution

- Build on past strengths while embracing future opportunities
- Continue current strong planning methods and efforts
- Elevate processes, systems and capabilities to meet evolving needs
- Ensure regular reviews of progress to plan to support goal achievement

Foundational Pillars

Foundational Pillars have been developed for this project following our interviews and workshop with ARC's Executive Team, Administrators combined with Steelcase's global research. These Pillars played a key role in envisioning the appropriate scenarios for the future learning and work experience at ARC.

College Community

The College experience promotes a culture of equity, belonging and inclusion, linked to ARC values.

Success Rates

Successful course completion, graduation and transfer rates are evaluated, measured and prioritized.

Innovation

Processes, systems and capabilities are evolved to meet emerging Student needs

Flexibility + Balance

Faculty and Classified Professionals have choice and control over where work is done and how they connect with students.

Work Experience

The on-ground experience for Faculty and Classified Professionals is enhanced to entice and increase in-person presence.

Communication

Communication is strengthened to ensure regular two-way flow of information between all constituents.

Campus Experience

Classrooms, HomeBase communities, social and athletic amenities build connections and provide a supportive experience for Students.

Learning + Development Flexibility

Students have choice and control over where and when learning, access to mentors and networking occurs.

Ranking of Foundational Pillars

This page documents the ranking of Foundation Pillars from each Workshop conducted with ARC Leaders, Faculty and Classified Professionals. *The Foundational Pillars are ranked in ascending order from 1 to 8 (1 being the MOST important and 8 being the LEAST important).*

The results indicate alignment between all groups with the Foundational Pillars of Success Rates and College Community being ranked in the top three. This alignment is in keeping with the ARC Mission Statement and was evident in our interactions with all constituencies.

Flexibility and Balance over where work is done is ranked higher by Faculty and Classified Professionals than ARC Executive Team. This could be because the focus at this moment is on the desire to work from home more often and the perceived inequities around the hybrid policy.

The gaps represent opportunities for creating awareness of what is most important for the future ARC experience.

FOUNDATIONAL PILLARS	ARC Executive Team	Classified Group 1 In-person	Classified Group 2 In-person	Faculty Group 1 In-person	Faculty Group 2 Online	Davies Hall Project Team Online
Success Rates	1	1	4	2	3	3
College Community	2	2	1	1	1	1
Communication	3	5	2	7	5	2
Learning + Development Flexibility	4	6	8	5	7	7
Campus Experience	5	7	6	3	6	5
Innovation	6	4	7	6	2	6
Flexibility + Balance	7	3	3	4	4	4
Work Experience	8	8	5	8	8	8

03.

Insights

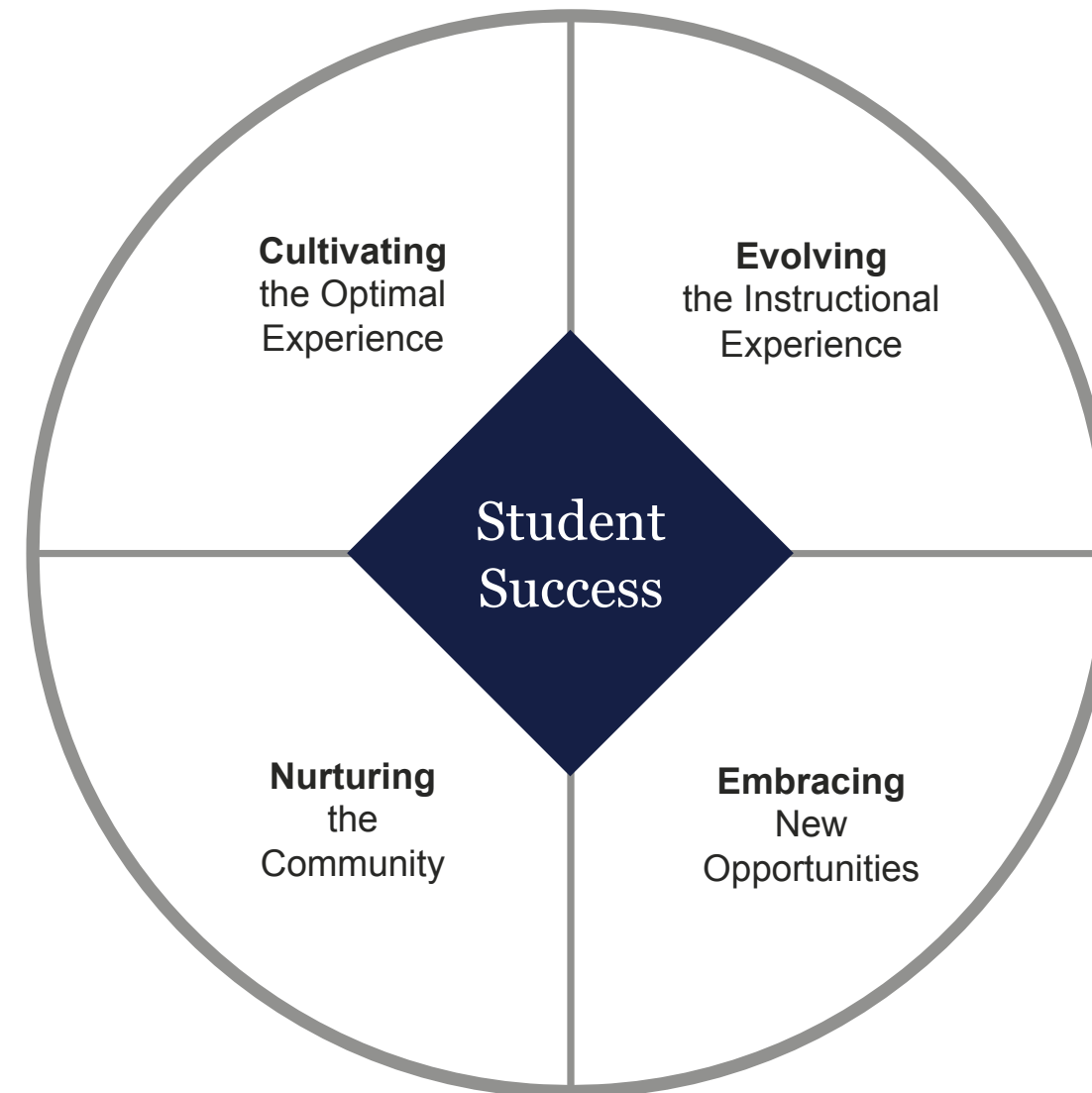
Insights

Overview

This section reflects the analysis and synthesis of multiple sources of data gathered during the Discovery Phase with ARC Leaders, Faculty, Classified Professionals and Students.

The goal of inspiring Student success was evident throughout our interactions with all ARC constituents. The Insights in this section reflect that goal and offer a deeper understanding of what is happening at ARC today.

These Insights will inform and drive considerations and recommendations for the Facilities Master Plan. Details about the four Insights and the research findings that informed them are included in this section.



Insights

This page identifies the four Key Insights identified for this engagement with ARC. Details about the four Insights and the research findings that informed them are included in the following pages.

Insight 1

Cultivating the Optimal Experience

Modalities and work processes have evolved but buildings, processes and behaviors have not made appropriate adjustments.

There is a wide range of experiences due to the diversity in many aspects of the Campus including building age, design and maintenance.

In addition, the Portable buildings, initially installed as temporary, have become a permanent fixture on the Campus.

Insight 2

Evolving the Instructional Experience

The shift in modalities has driven a change in many elements associated with instruction. While methods, processes, skillsets and technology for in-person instruction are well established, there are growing pains associated with online and hybrid instruction.

The experience for Students varies widely whether on ground or online, impacting overall success rates.

In addition, the on-ground experience is inconsistent varying by building age and whether permanent vs. temporary.

Insight 3

Nurturing the Community

There are strong ties and bonds within Departments and with their associated Students.

However, inter-departmental silos tend to exist based on campus geography, structure of Departments and the growth in online instruction and hybrid working.

The many changes over recent years, have led to frustration, tensions and an associated impact on morale and organization affiliation.

Insight 4

Embracing New Opportunities

Signs of innovation are happening in a number of areas at ARC (e.g., HomeBases, HyFlex, online instruction).

While this innovation has been generally well-received consensus in workshops conducted was that further innovation holds significant promise in streamlining Student experience and supporting Instructional and other activities.

However, in some instances there is an expectation of what appears to be a status quo (e.g., replacement of Davies Hall).

Insight 1

Cultivating the Optimal Campus Experience

In recent years, modalities and work processes have evolved but the buildings and processes have in some instances not made appropriate adjustments.

Contrasts in many aspects including building age, design, services, maintenance and infrastructure have resulted in disparity in the quality of experience both on ground and online.

In addition, the Portable buildings, initially installed as temporary, have become a permanent fixture on the Campus.

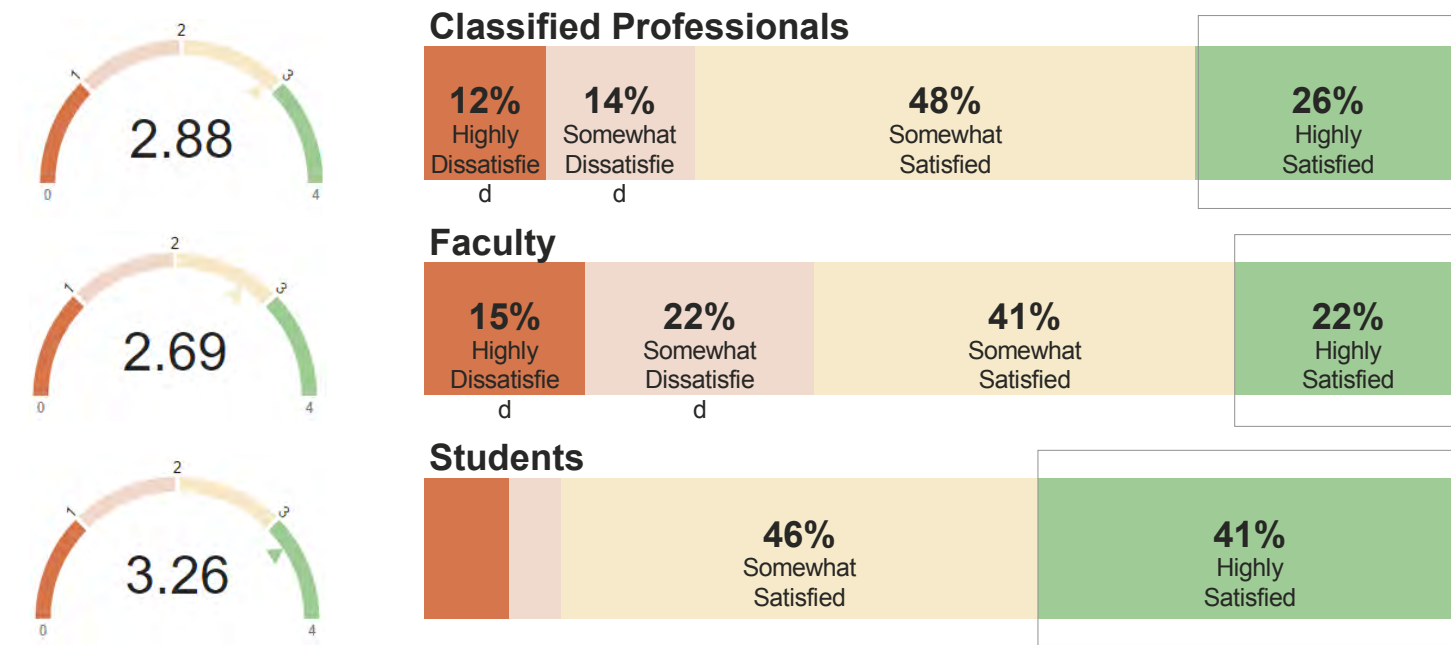
- The Campus is a mix of modern, old, and temporary e.g., buildings and processes, which impact the quality of experience
- Faculty and Classified Professionals expressed concern that temporary buildings (Portables) have become permanent, making the campus feel like a construction site
- All workshop participants commented on the difference in experience for Students and Employees who are on Campus for evening classes e.g., food / beverage services end earlier in the day
- Students, Faculty, and Classified Professionals commented about the lack of amenities on ground e.g., gym, prayer/meditation rooms
- Classified Professionals discussed the lack of work-life balance and expressed a desire for more focus on well-being
- Work areas are designed using a traditional hierarchical planning methodology and have limited ability to support collaboration, socialization, and rejuvenation
- Social and Student spaces exist but tend to be repetitive in design, lacking diversity
- Large-scale events are a draw and generate significant buzz in targeted areas however, much of the time, there is relatively low density and a lack of buzz and energy across the campus
- During the observation study, we saw many examples of inspiring artwork across the campus that provide visual interest and evoke feelings of inclusion as many of the pieces are Student or Instructor designed
- Once environments are implemented, there does not appear to be a process for updating them to provide a consistent experience and match evolving learning and work styles

Insight 1

Cultivating the Optimal Campus Experience

To what extent are you satisfied or dissatisfied with your **On Campus** experience?

- Experience Survey Results



The chart above indicates that the majority of survey respondents are not “highly satisfied” with the **On Campus** experience



Many large spaces on campus were unoccupied, creating a **sense of isolation** and a **lack of energy and buzz**

- Observation Study

“The College doesn’t look like a College anymore...just a bunch of **construction huts**”

- Faculty Workshop Participant

“The fear is that you are in them [Portables] for more than 5 years. The Portables at Athletics have **been there for 20 years...**”

- Faculty Workshop Participant

“The cafeteria closes early. Even if people want to stay [on campus] longer, you **have to leave** because you’re hungry”

- Student Workshop Participant

Supporting Research

Summaries of recent relevant literature

Insight 1

Cultivating the Optimal Campus Experience

In recent years, modalities and work processes have evolved but the buildings and processes have in some instances not made appropriate adjustments.

Contrasts in many aspects including building age, design, services, maintenance and infrastructure have resulted in disparity in the quality of experience both on ground and online.

In addition, the Portable buildings, initially installed as temporary, have become a permanent fixture on the Campus.

The Backlog That Could Threaten Higher Ed's Viability: A big bill for deferred maintenance is coming due

Deferred maintenance is a persistent problem for higher education. The backlog of needs on campuses now threatens the viability of many institutions.

The recent spike in inflation means building and maintenance costs have increased, while enrollment has been flat or declining. Questions about the value of a degree as well as a shift to hybrid and online courses point to a need to rethink construction on college campuses.

Carlson, Scott, (2023), *The Backlog that Could Threaten Higher Ed's Viability*, The Chronicle of Higher Education, March 31, 2023, <https://www.chronicle.com/article/the-backlog-that-could-threaten-higher-eds-viability?sra=true>

“There are short-term challenges of keeping our organizations thriving and at the same time, imagining for the long-term future”

Sukhwant Jhaj,
VP Academic Innovation and Student Achievement
Arizona State University

What We Now Know About Campus Space and Student Success

In the first episode of the podcast *The Evolving Campus*, Sukhwant Jhaj, VP for academic innovation and Student achievement at ASU discusses post-pandemic shifts in thinking.

Ways college campuses can better serve students and support learning:

- Rethink synchronous learning spaces
- Focus on building interactivity in online learning; create integrated experiences
- Design classrooms to facilitate new ways of working; bring people together
- Provide training for new technologies that will impact Students' future (e.g., AI, machine learning)

Carlson, Scott, (12-1-21), Designing for student success, *The Evolving Campus*, Learning Futures Project, Spotify, <https://open.spotify.com/episode/4P4gMmOKCmrAirSKUmZbIX>

Meeting Students Where They Are: colleges shift thinking and design to be more Student-ready

Community colleges are aware of the need to design for Student readiness and engagement. Becoming a more equity-focused college means identifying what Students need, then delivering solutions that create a feeling of belonging, and meet their current and future learning needs and goals.

Tarrant County College in Fort Worth, Texas (TCC) is a good example:

- Co-designing facilities (with Faculty and Students) to promote Student success
- Creating consistent design across colleges to enable equity of experience
- Meeting Students where they are; providing tools and resources

Finkel, Ed. 2023 *“Meeting Students Where They Are”*, Community College Journal 93(5): 12-19

Insight 2

Evolving the Instructional Experience

The shift in modalities has driven a change in many elements associated with instruction.

While methods, processes, skillsets, and technology for in-person instruction are well established, there are growing pains associated with online and hybrid instruction.

Students' experiences vary widely whether on ground or online, impacting overall success rates. In addition, the on-ground experience is inconsistent, varying by building age and whether permanent vs. temporary.

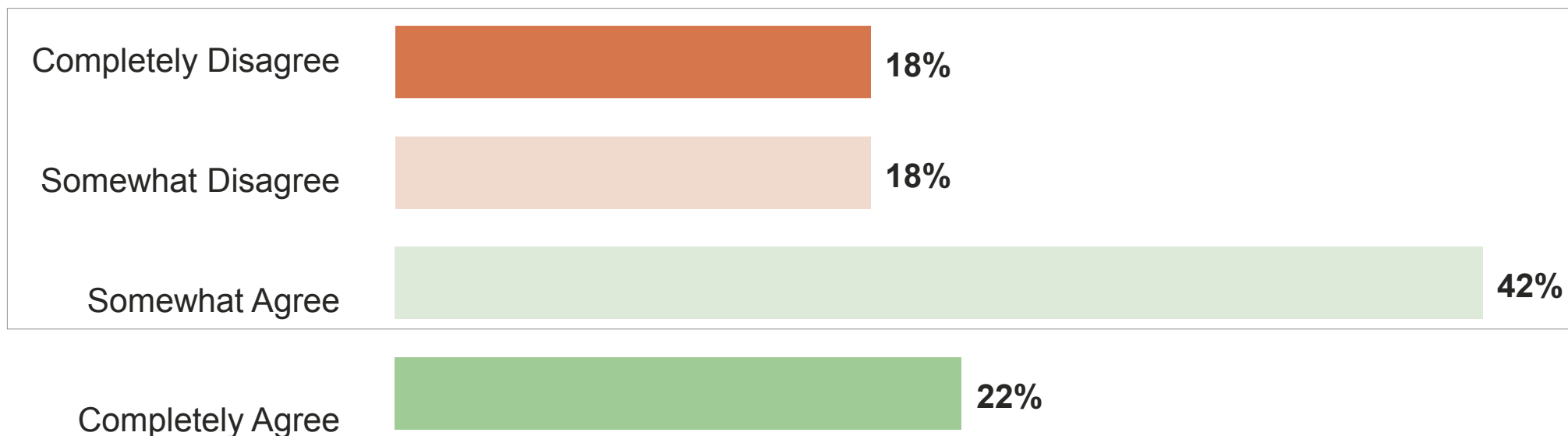
- The on-ground instructional experience for Students varies widely based on the age of the building and whether temporary versus permanent
- Classrooms are designed to support traditional lecture style instruction with limited ability to flex to support evolving instructional styles (e.g., active learning)
- Faculty commented that the ability to have visual and immediate feedback from Students is much stronger on ground than during classes online
- Both Faculty and Students value the informal interaction before and after classes, but these are not well supported in the current on ground environment or online
- HyFlex-enabled classrooms are evolving however, the experience for both Faculty and Students is not seamless or optimal
- There is a variety of in-between spaces in close proximity to classrooms being used by Students for homework, problem solving and connecting with Instructors but they are limited in number and inconsistent
- Student interest in online classes has changed dramatically since Covid, and during workshops with Leadership and Faculty, the belief is the current rate of online instruction will not vary significantly over the next five years (between 40-45% online)
- Faculty commented that Hybrid and online classes require different skill sets and training in the use of associated tools, techniques, and technology
- Faculty mentioned that developing an online course requires more effort than developing the same course for in-person instruction
- Faculty expressed the desire for support from online instructional experts in the development and implementation of online courses to ensure an optimal Student experience
- It is apparent that many Students choose online due to lifestyle, work and family constraints however, Faculty are concerned that this may not be the ideal method of instruction for all Students and this is supported by ARC success rate statistics for Fall 2023

Insight 2

Evolving the Instructional Experience

Do the **physical classrooms** support a blend of in-person and online participants at the same time?

- Student Experience Survey Results



The chart above indicates that the majority of Student respondents (78%) **do not “completely agree”** that the classrooms support a blend of in-person and online participants at the same time



“Typically, we have rows of chairs in classrooms, and people just hide out in the back, but I love the idea of a more active/engaged learning environment”

– Student Workshop Participant

ARC Success Rates by Modality – Fall 2023

	Overall	African American*	Hispanic Latino*
In-Person	74.0%	59.0%	70.0%
Online Asynchronous	71.0%	56.0%	67.0%
Online Synchronous	74.0%	52.0%	71.0%
Hybrid	71.0%	57.0%	66.0%

Success rates for ARC Students indicate that, in general, in-person has higher success rates than other modalities

Long-Term Modality exercise results

	ARC Leaders		Workshop
	Team 1	Team 2	Average
On ground	60.0%	60.0%	60.0%
Online	40.0%	40.0%	40.0%

The chart above reflects the Leadership perspective on long-term shifts in modalities

- Leadership Workshop

Supporting Research

Summaries of recent relevant literature

Insight 2

Evolving the Instructional Experience

The shift in modalities has driven a change in many elements associated with instruction.

While methods, processes, skillsets, and technology for in-person instruction are well established, there are growing pains associated with online and hybrid instruction.

Students' experiences vary widely whether on ground or online, impacting overall success rates. In addition, the on-ground experience is inconsistent, varying by building age and whether permanent vs. temporary.

How Can We Improve Online Learning at Community College?: voices from online Instructors and Students

Rapid growth of online learning in community college has exposed low course completion and performance scores. This study identifies effective practices that support learning from both Instructors' and Students' perspectives. The goal is to identify successful practices and methods that improve online courses.

Some themes from this research:

- Facilitate Instructor-Student interaction
- Proactive outreach, timely support
- Quality feedback on assignments
- Discussion and forum activities
- Varied materials, diverse media for content delivery

Li, Qiu Jie, Xuehan Zhou, Brad Bostian and Di Xu, 2021, *How can we Improve Online Learning at Community Colleges?*, Vol. 25, Online Learning Consortium

Equity Through Innovation in Teaching and Learning: A student-centered approach

The California Community Colleges (CCC) has adopted an equity-imperative approach to reform systems. This commentary describes the collaborative process used to move from vision to action based on guiding principles such as:

1. Maintain equity as a central goal and driver for change
2. Support college access, persistence, and completion
3. Prepare Students for college, career, and lifelong learning

This is a road map for putting equity at the center of everything, designed for Leaders and Educators at any Institution.

Lowe A, Leal-Carrillo N, Guiney C, Diaz A. Equity through innovation in teaching and learning: A student-centered approach to systemwide implementation of direct assessment CBE. *Competency-based Education*. 2021;6:e01237. <https://doi.org/10.1002/cbe2.1237>

“The focus should be on a big-picture question... is this a high-quality learning experience for students?”

Bethany Simunich
VP for innovation and Research, Quality Matters

As Colleges Focus on Quality in Online Learning, Advocates Ask: What about in-person courses?

Online and in-person courses are not interchangeable, but lines between them are beginning to blur. Many colleges offer hybrid courses with components of both. Higher Education must focus on inclusive quality course design and delivery by:

- Providing materials in formats accessible to all learners
- Fostering community outside of the classroom
- Measuring, documenting and use data to inform instruction

To achieve this goal, it is essential to prioritize resources and professional development; provide Faculty with digital fundamentals training for teaching and course design.

Swaak, Taylor, 2023, *As Colleges Focus on Quality in Online Learning, Advocates Ask: What about in-Person Courses*, *The Chronicle of Higher Education*, 3-2-23

Insight 3

Nurturing the Community

There are strong ties and bonds within Departments and with their associated Students.

However, inter-departmental silos tend to exist based on campus geography, structure of Departments and the growth in online instruction and hybrid working.

The many changes that have happened over recent years, have led to frustration, tensions and an associated impact on morale and organization affiliation.

- The size of the campus and the physical distribution of people and departments have played a role in developing and maintaining silos
- The closure of Davies Hall and the distribution of Faculty and departments across the Campus have impacted relationships, networks and the sense of community
- Students desire to connect with Instructors beyond the Classroom but there is a lack of spaces to appropriately enable this
- Students commented that they tend to remain in the areas nearest their classrooms and are not fully aware of all the amenities and networking opportunities available on other parts of the campus
- While in its' infancy, the HomeBase concept provides students with an overall sense of belonging and inclusion and is valued by Students, Faculty and Classified Professionals
- Students commented on the importance of the Student Programs to help build their support networks and access to spaces to get together with like-minded Students
- Classified Professionals recognize the importance of maintaining strong relationships both in person and online to support Student demand
- Classified Professionals hope for more opportunities to work with other departments, to build wider connections with colleagues and increase awareness of other services for Students
- Both Classified Professionals and Faculty commented that communication has suffered due to many changes over the years, multiple channels of communication and lack of clarity on how to find information as required
- The Foundational Pillar of College Community was ranked as one of the most important pillars for the ideal future work experience by participants in workshops with Leadership, Faculty and Classified Professionals

Insight 3

Nurturing the Community

All constituents consistently ranked **College Community** in the **Top 2** of the Foundational Pillars for the **ideal future experience**

FOUNDATIONAL PILLARS	ARC Executive Team	Classified Group 1 In-person	Classified Group 2 In-person	Faculty Group 1 In-person	Faculty Group 2 Online	Davies Hall Project Team Online
Success Rates	1	1	4	2	3	3
College Community	2	2	1	1	1	1

Foundational Pillars were developed following our interviews with ARC Leaders and Administrators and were ranked by workshop participants to indicate priorities for the ideal future learning and work experience. These Pillars will play a key role in envisioning the appropriate scenarios for the future learning and work experience at American River College.



Primary reasons to come to campus:

- Connection to Students
- Connection to my Professors
- To be a part of my College Community
- To connect + collaborate with peers

Connecting with Students, Faculty, and Peers and being part of the College Community rank highly among all survey respondents as reasons to come to Campus.

- Experience Survey

“If we are talking about facilities master plan, we need to build [classrooms] around the **HomeBases**...that would make a big scary campus feel **more welcoming**.”

- Faculty Workshop Participant

“Most students stay in their **designated areas**, so I learn by going to different areas of campus to see and hear what's going on... We should encourage students to explore the **entire campus**.”

- Student Workshop Participant

Supporting Research

Summaries of recent relevant literature

“Deeper connections that go beyond learning course content can make the ordinary [experience] extraordinary.”

Insight 3

Nurturing the Community

There are strong ties and bonds within Departments and with their associated Students.

However, inter-departmental silos tend to exist based on campus geography, structure of Departments and the growth in online instruction and hybrid working.

The many changes that have happened over recent years, have led to frustration, tensions and an associated impact on morale and organization affiliation.

Students Seek Stronger Connections With Professors but Rarely Take the Lead

Based on IHE “Student Voice” survey results, many Students do not realize their role in connecting with Faculty, and do not take advantage of office hours on campus.

Most Students report that they never visit with Professors during office hours. Those who do say they visit just once or twice a semester.

Some reasons why:

- Perceived faculty stress, overwork
- Bias, faculty of another race
- Fear of faculty pushback

Faculty offices may not be the best space for connecting, the classroom is better. Students and Faculty want to connect, but lack the tools and supporting space to do so.

Ezarik, Melissa and Chris Ryan, 2022, Survey, *Students Want Connections with Professors but May Not Initiate Them*, Inside Higher Ed, 5-19-22

Why One College is Hiring a “Vibrant-Campus-Community Coordinator”

Colleges are dealing with widespread Student disconnection since the pandemic. Investing in Student life is an effective antidote. University of Virginia’s College at Wise is trying to attract and retain Students and reinvigorate the campus by marketing Student clubs, hosting events and dealing with conflicts.

This article presents a case for jump starting Student engagement on campus by hiring a coordinator to facilitate these programs. Some are skeptical that this is enough to solve the engagement problem, others believe it will help Students stay connected.

Hatch, Brianna, 2022, Why One College is Hiring a “Vibrant-Campus-Community Coordinator,” *The Chronicle of Higher Education*, 8-2-22

Caring Campus: Faculty Leadership in Student Success

Caring Campus/Faculty is a program that brings together a group of college Faculty to develop behaviors to increase Students’ connection to the college.

Research suggests that Students who feel a sense of belonging in the college community have improved course completion and persistence in college. This may be most important for racial minorities, first-gen and international Students. Participating Faculty and the College Community also benefit from this program.

CC/F is an example of an equity initiative designed to influence college culture and support underserved Students, as well as engage Faculty.

Barnett, Elisabeth A. and Cho, Selena (January 2023), *Caring Campus: Faculty Leadership in Student Success*, CCRC Community College Research Center, Teachers College, Columbia University

Insight 4

Embracing

New Opportunities

Signs of innovation are happening in a number of areas at ARC (e.g., HomeBase, HyFlex, online instruction).

While this innovation has been generally well-received consensus in workshops conducted was that further innovation holds significant promise in streamlining Student experience and supporting Instructional and other activities.

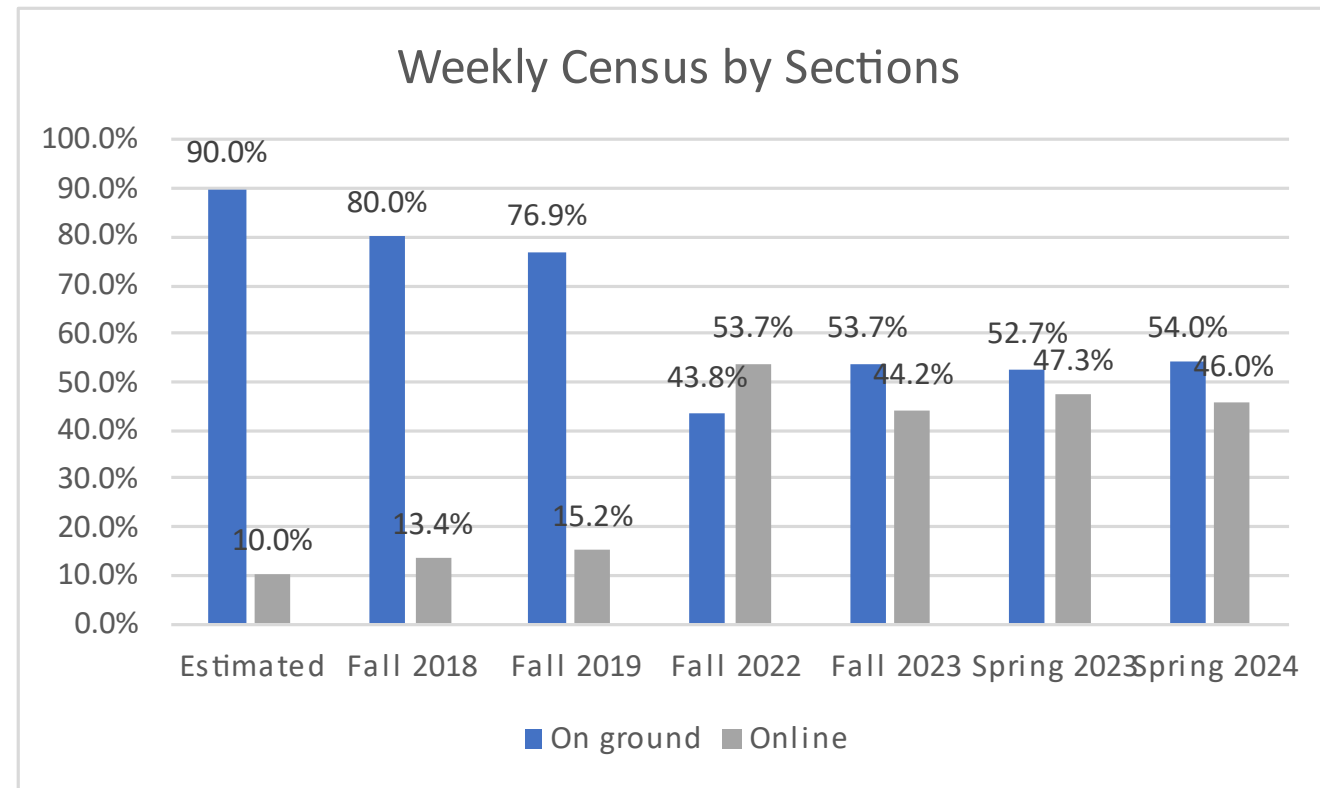
However, in some instances there is an expectation of what appears to be a status quo (e.g., replacement of Davies Hall).

- The pandemic provided the impetus to shift to digital methods and work processes however technology and methods supporting HyFlex and hybrid instruction are still evolving
- The HomeBase concept is proving successful but it's still in its infancy with room to grow and develop
- The shift to online instruction is significant and has resulted in new course materials being developed and offered, however Faculty recognize this effort requires unique skills and capabilities
- There is a feeling among a number of Faculty that an expert in online learning would be a good investment to drive further success
- Workshop participants recognize that many operational and Student facing processes and systems are inefficient and do not provide a choreographed experience for the users
- The desire for innovation is impacted by current processes, difficulty in gaining alignment and decision making
- It appears in some instances Innovation is viewed as a one-time activity rather than a process to support and evolve experience (e.g., classrooms built many years ago have not evolved)
- There are examples of best practice across the Campus and other Los Rios Colleges but it is not clear how these practices are shared
- While innovation is appreciated, there appears to be a constituency who are hesitant to embrace new ideas and highly value the status quo

Insight 4 Embracing New Opportunities

Shift in Modality

- ARC Weekly Census Report



The above graphic documents the evolution in modality from Pre Covid to Spring 2024 (Sections data is used here however the WSCH data is almost identical)



While in its' infancy, the HomeBase concept provides students with an overall sense of belonging and inclusion and is valued by Students, Faculty and Classified Professionals

Image of a HomeBase

- Observation Study

“Coming in new, there isn't a checklist of services. It's like a **Treasure Hunt** to find out what's available.”

- Student Workshop Participant

“It takes a **lot of work** to develop the online course materials ... I better get that class again”

- Faculty Workshop Participant

Supporting Research

Summaries of recent relevant literature

“I’m willing to take risks and try to implement disruptive innovations, since I believe it’s the best solution for our Students”

Community College leader

Insight 4

Embracing New Opportunities

Signs of innovation are happening in a number of areas at ARC (e.g., HomeBase, HyFlex, online instruction).

While this innovation has been generally well-received consensus in workshops conducted was that further innovation holds significant promise in streamlining Student experience and supporting Instructional and other activities.

However, in some instances there is an expectation of what appears to be a status quo (e.g., replacement of Davies Hall).

Community Colleges Need to Evolve as Students’ Needs Do

The future of Community Colleges is full of potential. There exists an opportunity to address historic achievement gaps, put equity at the center of all programs and build partnerships and collaborations.

Community Colleges have a strong history of being sites of innovation and nimbleness. They provide hope for a future in which these institutions will continue to make an impact on the lives of Students and their families.

Eddy, Pamela, 2019, Survey, *Community Colleges Need to Evolve as Students’ Needs Do*, Harvard Business Review, 9-30-19

Creating a Culture of Student Success Innovation through Institutional Coaching

This article highlights the role of institutional coaches in supporting Community Colleges’ transformational change, such as been shown with guided pathways. Coaching is a proven strategy for facilitating growth and change for both individuals and organizations.

This article suggests that through coaching, Community Colleges can cultivate a culture of Student success innovation, and continuous improvement. Using coaches will strengthen the Colleges’ ability to implement change and new ideas.

Miller, J. M., Wetzstein, L., & Girardi, A. (2023). Creating a culture of student success innovation through institutional coaching. In E. Cox Brand (Ed.), *Student success center network. New Directions for Community Colleges*, 201, pp. 79–88. JohnWiley & Sons, Inc.

Artificial Intelligence, Real Career Training: Community Colleges Step Up as More Careers Require AI-Related Skills”

Community Colleges have recognized the increased demand for artificial intelligence (AI) related skills.

Community Colleges have recently been proactive in developing curriculum and courses that cater to this growing need. Students want these courses and certificates to prepare them for the future.

Colleges are at different stages of this process, but they are posed to train many Students for jobs in this rapidly expanding industry.

Finkel, Ed. 2024., “Artificial Intelligence, Real Career Training: Community Colleges Step Up as More Careers Require AI-Related Skills” *Community College Journal* 94 (5) 26-33

Supporting Research: Bibliography

- Carlson, Scott. 2023. *Chronicle of HE 3-31-23 the Backlog that could Threaten Higher Ed's Viability*, <https://www.chronicle.com/article/the-backlog-that-could-threaten-higher-eds-viability?sra=true>
- . 2012. *How the Campus Crumbles: Colleges Face Challenges from Deferred Maintenance. Chronicle of HE, 5-12-2022*, <https://www.chronicle.com/article/how-the-campus-crumbles-colleges-face-challenges-from-deferred-maintenance/>
- Ezarik, Melissa and Chris Ryan. 2022. *Survey_ Students Want Connections with Professors but May Not Initiate Them*, Student Voice Series, Inside HigherEd, May 19, 2022.
- Finkel, Ed. "Artificial Intelligence, Real Career Training - Community College Daily.", last modified -04-16T18:11:39+00:00, accessed Jun 19, 2024, <https://www.ccdaily.com/2024/04/artificial-intelligence-real-career-training/>.
- . 2024b. "Artificial Intelligence, Real Career Training: Community Colleges Step Up as More Careers Require AI-Related Skills." *Community College Journal* 94 (5): 26-33. <http://proxy.cc.uic.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eh&AN=177020189>.
- . 2023. "Meeting Students Where they are." *Community College Journal* 93 (5): 12-19. <http://proxy.cc.uic.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eh&AN=162819560>.
- Granito, Vincent J. *Psychology of Learning Spaces: Impact on Teaching and Learning*, Journal of Learning Spaces Volume 5, Number 1. 2016
- Hanna, Allegra D. and York, Michelle. "Impacting Student Success." Tarrant County College District., accessed Jun 18, 2024, <https://www.tccd.edu/magazine/volume-09/issue-02/eli/>.
- . "Impacting Student Success." Tarrant County College District., accessed Jun 14, 2024, <https://www.tccd.edu/magazine/volume-09/issue-02/eli/>.
- Jenkins, Davis, Hana Lahr, and John Fink. 2021. *Rethinking Community Colleges to Serve 21st-century Students and Communities: Lessons from Research on Guided Pathways*. Vol. 2022 Wiley. doi:10.1002/cc.20501.
- Knox, Liam and Craig Chandler. 2022. *A New Plan to Fix Old Buildings*, Inside HigherEd, May 11, 2022.
- Lawton, Julia A., Mark Toner, and Communication works. *EQUITY IN DESIGN FOR HOLISTIC STUDENT SUPPORTS What We're Learning*, <https://www.achievingthedream.org>
- Leroy, Glen, Trudi Hummel, Lucy Brajevich, and Graham Smart. 2001. "Creating a Place for Learning--Everywhere, all the Time." *Community College Journal* 72 (1):8-11. <http://proxy.cc.uic.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ633301>.
- Li, Qiu Jie, Xuehan Zhou, Brad Bastian, and Di Xu. 2021. *How can we Improve Online Learning at Community Colleges?: Voices from Online Instructors and Students*. Vol. 25 The Online Learning Consortium. doi:10.24059/olj.v25i3.2362.
- Lowe, Aisha, Nadia Leal-Carrillo, Chantee Guiney, and Amparo Diaz. 2021. *Equity through Innovation in Teaching and Learning: A Student-centered Approach to Systemwide Implementation of Direct Assessment CBE*. Vol. 6 Wiley. doi:10.1002/cbe2.1237.
- Martinez, Edna, Sharon Velarde Pierce, and Isela Peña. 2023. "You've Got to Put the Student First": *Faculty Advisors as Educators and Emotional Laborers in Community College Baccalaureate Contexts*. Vol. 52 SAGE Publications. doi:10.1177/00915521231201449.
- Martinez, Rose M. 2024. "Community College Innovation Exemplars Honored at the Community College Futures Assembly." *Diverse: Issues in Higher Education* 41 (3): 51-51. <http://proxy.cc.uic.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eh&AN=177268290>.

Supporting Research: Bibliography, cont.

Michal, Rich. 2023a. "Building Maintenance Issues Admissions Leaders should Know about (Opinion)." Inside HigherEd
<https://www.insidehighered.com/views/2023/01/17/building-maintenance-issues-admissions-leaders-should-know-about-opinion#>.

———. 2023b. *First-Impression Facilities Challenges Maintaining Older Campus Buildings, a Challenge due to Specific Characteristics of such Structures, is an Important Factor in the College Enrollment Process, Writes Facilities Professional.*

Miller, Jennifer M., Lia Wetzstein, and Amy Girardi. 2023. *Creating a Culture of Student Success Innovation through Institutional Coaching*. Vol. 2023 Wiley.
doi:10.1002/cc.20562.

Morales, Carlos R. 2019. "Supporting and Connecting E-Learners." *Community College Journal* 89 (5): 6-7. <http://proxy.cc.uic.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=135872796>.

Swaak, Taylor. 2023. *Chronicle of HE 3-2-23 As Colleges Focus on Quality in Online Learning, Advocates Ask: What about in-Person Courses?*, March 2, 2023,
<https://www.chronicle.com/article/as-colleges-focus-on-quality-in-online-learning-advocates-ask-what-about-in-person-courses>.

Wassmer, Robert and Meredith Galloway. 2023. *What Matters for Improving the Success Rates of Different Cohorts of Community College Students?*. Vol. 51 SAGE Publications.
doi:10.1177/00915521231163625.

Yanda, Fikri and Welhelmina Febriana Ayhuan. 2024. "Book Review: The Impacts of Green Space on Student Experience at an Urban Community College: An Exploration of Wellbeing, Belonging, and Scholarly Identity , by Naidoo, V." *Community College Review* 52 (1): 144-146. doi:10.1177/00915521231201217.

04.

Strategic Design Brief

- Experience Principles
 - Experience Evolution
 - Concept Map
 - Work Settings and Attributes
-

Strategic Design Brief

The Strategic Design Brief defines the Learning and Work Experience strategy for future. The Brief serves to guide decision making for a project from the beginning of the strategic planning process through the implementation and adoption of the solution. The objective of the Strategic Design Brief is to define the basic directives for the development of a future learning and work experience that links ARC's business priorities, desired culture and objectives for the future.

This brief was developed in conjunction with knowledge derived from the Applied Research + Consulting team's global experience and Steelcase's global education research on learning, work, Students, Faculty, workers and the Institution. It is intended to assist ARC's Project team in the development of the planning and design of physical space, the technology strategy and the change management process.

Leveraging Space + Technology

These guidelines and conceptual recommendations help to further illustrate how the learning and work experience can be enriched by leveraging space and technology differently than is currently being done. This creates a link of how space and technology can be integrated to support ARC's strategic objectives and desired learning and work experience. This section is organized as follows:

Experience Principles

A set of principles and attributes aligned with the key opportunities and insights to drive behavioral, spatial and technology strategies for the future learning and work experience.

Concept Map

A concept map documents a menu of group and individual spaces and defines the strategic relationships.

Concept Map Applied

Application of design concepts to a typical floor plan to allow ARC Executive Team, Faculty, Classified Professionals, Students and Leaders to visualize the actual solution and how it will work.

Experience Evolution

Identifies essential shifts between today vs tomorrow's learning and work experience in the areas of culture, process, technology and space.

Work Settings and Attributes

Detailed recommendations for individual and group settings which take into consideration space, technology, people and behavior.

04. Strategic Design Brief

Experience Principles

Experience Principles

Foundation + Principles

Foundation

We have learned through Steelcase's global research and our consulting efforts that the best employee experience and organizational performance result from a strategic and holistic approach to learning and work environments. It cohesively integrates process, culture/behavior, tools/technology and space.

Culture and Process are the components that drive results in organizations. These include the habits related to how people behave, the things people do and how work gets done. Tools and Space enable people in their learning and work experience, helping them to perform more effectively.

On the following slides we define the Experience principles for ARC and link each to the solution elements (culture, process, tools and space).



Experience Principles

Foundation + Principles

Principles

Experience principles define the performance attributes of the environment that encompass all elements of the learning and work experience. These principles represent the summary of our data collection and synthesis efforts. They provide a lens for the design of the new environments and help to bridge the Critical Success Factors, Foundational Pillars, Key Findings, Insights and Recommendations for ARC's future learning and work experience.



1. *Encouraging* College Community

How might we create a vibrant, joyful community which transcends the virtual world and positively strengthens the culture of the ARC?

2. *Cultivating* Trust + Connection

How might we foster empathy and trust, encouraging dynamic interactions between Colleagues, Administration and Students to grow internal networks, promote sharing of best practices, and speed up decision making?

3. *Creating* Inspiring Experiences

How might we create inspiring experiences across the Campus to enhance learning, attract + develop Students and Employees, and promote Student success?

4. *Enabling* Choice + Control

How might we provide an optimized experience and a range of flexible settings that allow Students, Faculty and Classified Professionals to choose the best places in support of their study and work?

5. *Integrating* Digital + Physical (Dual Modality)

How might we provide a consistent and seamless experience that connects Students, Faculty and Classified Professionals to their learning, teaching and administrative activities whether in person or online?

Experience Principles

Principle + Considerations

1. *Encouraging College Community*

How might we create a vibrant, joyful community which transcends the virtual world and positively strengthens the culture of ARC?

Recent events have resulted in significant shifts in learning and working patterns. The strength of the College community has been diminished since the shift to online learning and hybrid working. This has also impacted the levels of vibrancy, density, sense of connectedness and expectations around building community.

A strategic approach to the working and learning experience can promote the behaviors that contribute to growth, organizational transformation and a shared sense of belonging. Building community, connecting Students, Faculty and Classified Professionals and developing networks will lead to deeper engagement and a strong commitment to Student success and the mission of ARC.

Considerations

- Provide destinations and group spaces at key intersection points that help foster meaningful connections and relationships within and across all constituents
- Design an inviting, comfortable aesthetic that encourages informal conversations and supports serendipitous interactions
- Explore engaging ways to celebrate and acknowledge contributions and successes across the College by maximizing the use of analog and digital display
- Provide views into surrounding spaces, both interior and exterior, to build awareness and understanding of Department and Student activities
- Consider a variety of tools to bring people together, socialize and have fun e.g., digital and analog games, chalkboards, nutritious food and drink, etc.
- Create and evolve rituals, norms and protocols that will promote and build community
- Consider ways to offer extended services outside of peak hours



Experience Principles

Principle + Considerations

2.

Cultivating Trust + Connection

How might we foster empathy and trust, encouraging dynamic interactions between Colleagues, Administration and Students to grow internal networks, promote sharing of best practices, and speed up decision making?

This design principle is closely aligned with “Encouraging College Community.” With an extended time apart, due to both the pandemic and the Davies Hall closure, social capital between peers, mentors, and leadership needs to be rebuilt with in-person interactions. Restoring trust will be supported by building spaces for these interactions to occur both planned and through serendipitous encounters.

Creating spaces that bring people together both formally and informally will allow them the opportunity to socialize, repair and rebuild trust. Additionally, restoring the colocation of departments will help forge unity, promote the exchange of best practices and expedite decision making.

The physical environment should be an enabler to enhance this exploration of ideas and meaningful interactions.

Considerations

- Provide spaces where people can share information or express emotions confidentially with a trusted coworker
- Break down barriers by removing walls and opening up the space to support the cross pollination of people
- Consider the location adjacencies of Student Services, HomeBases and amenities to strengthen connections between Students, Faculty and Classified Professionals
- Enable views into Department communities to gain awareness and appreciation of one another’s activities and contributions
- Support team building with casual spaces that encourage informal interactions
- Create spaces for communal activities, such as sharing a meal or gathering outside to help build connections and trust
- Explore ways to socialize and share best practices across the College from the Faculty and Classified Professionals’ perspective
- Develop communication strategies and methods to enhance transparency and build trust across all constituents



Experience Principles

Principle + Considerations

3. *Creating* Inspiring Experiences

How might we create inspiring experiences across the Campus to enhance learning, attract + develop Students and Employees, and promote Student success?

Place is the most visible artifact of culture and has the potential to shape behavior. How a space looks and feels says a lot about ARC's brand and culture, influencing prospectives and current Student perceptions as well as the College's ability to attract and retain talent.

Designing the campus with inspiring, equitable learning and work environments can lead to a more positive mindset and greater resiliency. Creating more exposure to new ideas and developing ways to connect to the wider College, will strengthen the focus on Student success and overall sense of purpose.

Considerations

- Create vibrant spaces that are stimulating and inspiring where people feel a sense of comfort and belonging
- Provide a variety of spaces to support individual Student study and project activities
- Extend the classroom experience by designing areas that support Student / Faculty interactions before and after class
- Continue to evolve the HomeBase concept – to provide a safe landing space for Students and authentic representation of the given area of interest
- Consider a range of options for informal connections – lounge or standing height, planned or impromptu, for small or large groups
- Support wellbeing throughout the campus in individual and communal spaces and with amenities e.g., prayer rooms, mother's room, etc.
- Encourage people to integrate appropriate time for restorative activities – signaling that taking a break is okay
- Connect to the outdoors and weave natural elements into spaces for reflection, learning and work



Experience Principles

Principle + Considerations

4.

Enabling Choice + Control

How might we provide an optimized experience and a range of flexible settings that allow Students, Faculty and Classified Professionals to choose the best places in support of their study and work?

Offering greater choice and control of when, where and how to learn and work can help increase satisfaction, minimize potential resistance to change, and contribute to wellbeing.

Recognizing differing styles and balancing solutions to support them will be key drivers in successfully creating a desirable and productive learning and working experience. Providing equitable guidelines and empowering people to align on what works best for them will lead to greater adoption of hybrid working.

A greater variety of spaces allows people to choose the best place to learn and work based on specific activities and personal preference. This also encourages movement and increases opportunities for connecting and interacting. The goal is to create a flexible learning and working experience that recognizes there isn't a "one-size-fits-all" solution, and that activities and preferences vary everyday all day.

Considerations

- Provide choice and control through a greater variety of spaces that support different activities for teaching, learning and working
- Create flexible settings that enable individuals and groups to adapt spaces based on activities, needs and the ebb and flow during semesters
- Ensure Leaders empower and trust individuals to choose how, when and where to work most effectively through the development of equitable guidelines
- Make it easy for people to locate and connect with others while working either on-ground or remotely
- Develop protocols and processes for use and personalization of spaces for successful on-ground hybrid experience



Experience Principles

Principle + Considerations

5. *Integrating* Digital + Physical (Dual Modality)

How might we provide a consistent and seamless experience that connects Students, Faculty and Classified Professionals to their learning, teaching and administrative activities whether in person or online?

Providing a consistent, dependable and seamless virtual and on-ground experience is fundamental to successfully supporting future ways of learning, teaching and working.

Currently people participating remotely have a vastly different experience from those who are in the same room. Managing the complexities of presence disparities for online participants is critical for creating a connected and engaging experience.

When the reality of presence disparity isn't addressed, the overall learning and collaboration experience can easily become unpleasant and taxing, with participants feeling strained physically, cognitively and emotionally.

Considerations

- Provide reliable technology and tools for use by individuals so that connecting across the campus and from home is improved and optimized
- Enhance the Zoom Room/HyFlex experience in classrooms to more effectively support online learning and Student engagement
- Create settings in Faculty and Classified Professional communities that support the use of analog and digital tools to capture, visualize, share and display information
- Consider using digital communications at the entrances of Department communities to share information and learnings
- Create protocols and consistent processes to ensure inclusion and an equitable experience for all participants, whether located on-site or remotely
- Provide appropriate training and resources to create content and support the adoption and use of technology to ensure Students and Faculty have an optimal learning and teaching experience



Insight + Experience Principle Linkages

The matrix to the right illustrates the correlation between the Insights that emerged from the Discovery Process and the Experience Principles developed for ARC. This begins to provide a visible and explicit roadmap from strategic objectives through to workplace design.

The Experience Principles define the performance attributes of the workplace that encompass all elements of the learning and work experience (culture, process, tools and space).

Key:

- Primary Linkages
- Secondary Linkages

		Insights			
		Cultivating the Optimal Experience	Evolving the Instructional Experience	Nurturing the Community	Embracing New Opportunities
Experience Principles	Encouraging College Community	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	Cultivating Trust + Connection	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Creating Inspiring Experiences	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Enable Choice + Control	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Integrating Digital + Physical	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

04. Strategic Design Brief

Experience Evolution

Experience Evolution

Evolution Overview

Learning and Work Experience of Today vs. Future

The following page describes elements of the current learning and work experience at ARC and compares them to elements of the desired future experience as uncovered during the Discovery process. This provides a clear contrast and an aspirational goal for the future learning and work experiences based on the drivers and enablers of the Experience Model and the resulting Experience Principles.



Experience Evolution



Essential Shifts

From	To
Experiences for both Students, Faculty and Classified Professionals vary widely across the Campus due to differences in building age, design and condition.	Design Standards, Guidelines and Processes are developed to ensure Students, Faculty and Classified Professionals at ARC will have an equitable experience in all buildings across the Campus.
The increase in online learning and hybrid working has impacted the levels of vibrancy, density on ground, sense of connectedness and community across all constituents.	Intentionally designed group spaces that encourage informal conversations and support serendipitous interactions will provide destinations to build meaningful connections across all constituents.
The extended time apart, due to both the pandemic and the closure of Davies Hall has eroded social capital and trust between Employees and Leadership.	Informal social areas created to bring people together both formally and informally will allow them the opportunity to socialize, repair and rebuild trust.
Current standards for the allocation of space are based on hierarchical planning with assigned individual spaces which do not adequately support the shift in the way people are working today.	Greater choice and control of when, where and how to learn and work will help increase satisfaction, minimize potential resistance to change, and contribute to wellbeing.
The average classroom experience is standardized based on a fixed furniture arrangement set up for lecture style delivery. There is limited opportunity for instructors to vary their teaching style to enhance Student learning.	By reimagining Classroom designs into flexible and fluid solutions , rigorous discussions and group work between Students and Instructors will be enabled and energized.
Students who participate in synchronous online classes, have an inequitable experience compared to students who are in the classroom, due to technology challenges.	A rich technology enabled environment, using both analog and digital tools is created to support multiple learning preferences providing a seamless, equitable experience among participants for online synchronous learning.

04. Strategic Design Brief

Concept Map

Concept Map

Overview of zones

The Concept Map is an inventory of settings which represent a new approach to ARC's future learning and work environment.

Insights from the Discovery process have been combined and blended with Steelcase research to form an aspirational vision of ARC's future learning and work experience. These shifts are brought to life in the following Concept Map of Spaces.

The Concept Map of Spaces:

- Identifies the main spatial ingredients for future solutions
- Defines the inter-relationship between the different spaces and combines key settings together into zones
- Maps the flow of spaces through buildings without consideration of the physical limitations of the building structure

The Concept Map does not represent the quantity of the spaces, nor the square feet allocated to each space type. The final number of spaces and their sizes will be determined during future implementation efforts.



Concept Map

Overview of zones

The Concept Map of Spaces consists of 3 zones that differ in terms of the activities supported:

Connection Zone

Spaces for All

This zone comprises the heart of the campus with settings that support community, encouraging Faculty, Classified Professionals and Students to gather, socialize and collaborate.

- Coffee + Connect
- Courtyards
- HomeBase

Learning Zone

Students + Faculty

This zone supports formal and informal learning, wherever learning happens.

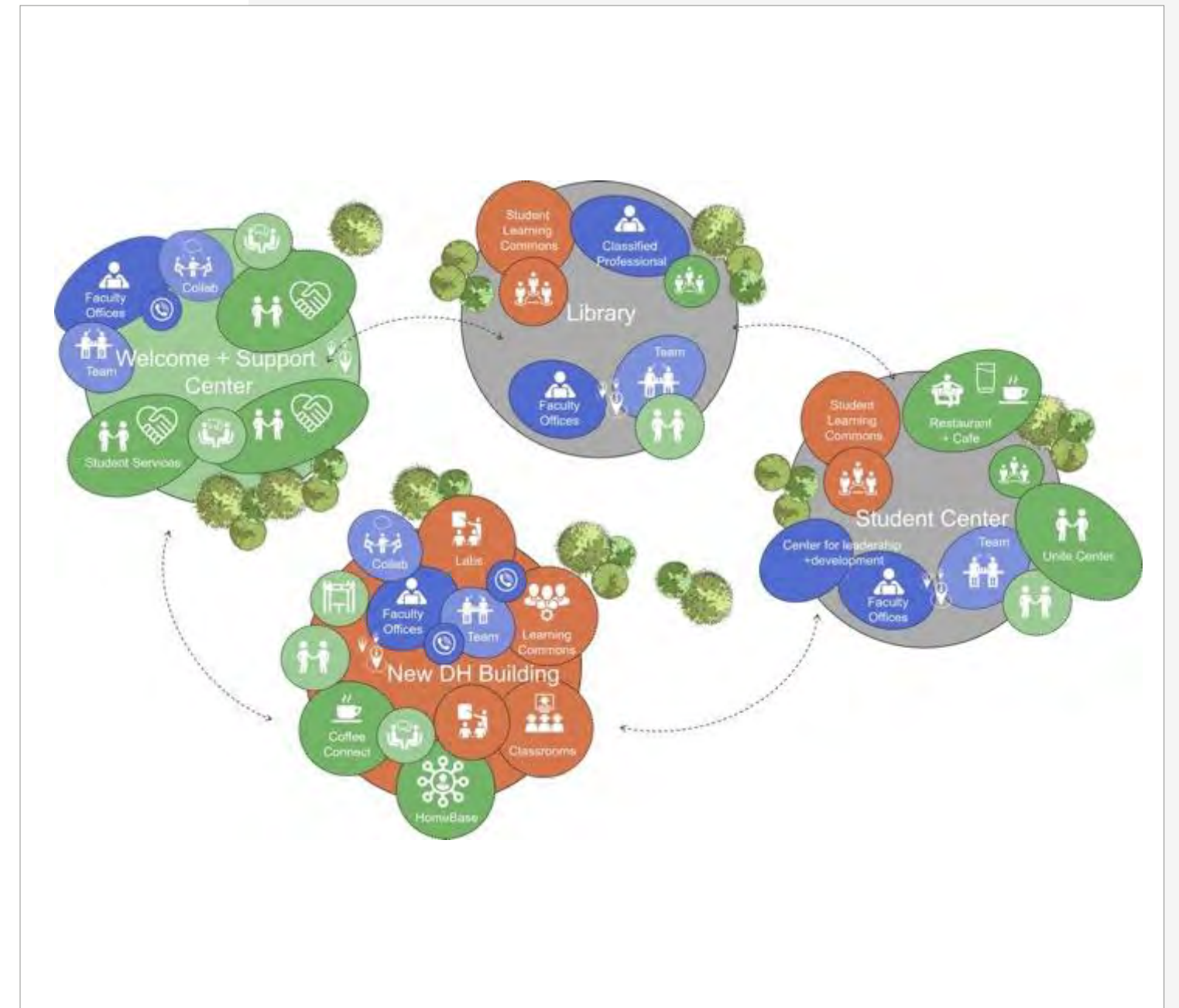
- Classrooms
- Student Learning Commons

Community Zone

Faculty + Classified Professionals

This zone is comprised of a variety of settings that support both individual and collaborative work for Faculty and Classified Staff.

- Front Porch
- Department Hub
- Meeting Room
- Focus Room/Pod
- Shielded Focus
- Workstation
- Private Office: Single Occupancy
- Private Office: Double Occupancy



04. Strategic Design Brief

Worksettings + Attributes

Worksettings Overview

Connection Zone

Coffee + Connect



HomeBase



Courtyards



Learning Zone

Classrooms



Student Learning Commons

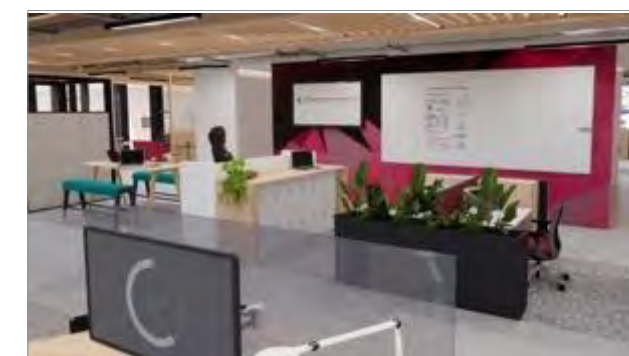


Community Zone

Front Porch



Department Hub



Meeting Room



Focus Room/Pod



Shielded Focus



Workstation



Private Office: Single Occupancy



Private Office: Double Occupancy



Zone Overview

Connection Zone



Connection Zone Settings

This zone comprises the heart of the campus with settings that support community, encouraging Faculty, Classified Professionals and Students to gather, socialize and collaborate. Worksettings incorporated in the Connection Zone include

- **Coffee + Connect**
- **HomeBase**
- **Courtyards**

Design Intent

The Connection Zone is an ecosystem of settings which support the learning goals of the College. While these settings support individual and group learning they also support the development of relationships, enhancement of the College's culture and provide a venue for collegiate debate and exploration of ideas.

Key:

- Connection
- Learning
- Community

Worksettings

Connection Zone | Coffee + Connect

Coffee + Connect is where Students, Faculty and Classified Professionals can come together over food and drinks for connecting, studying, and working with each other. It is an inviting and energizing destination. It is a place to work, recharge and connect while offering healthy snack and drink options. It is separated and shielded from areas where focus work happens. It should be designed with a range of settings to accommodate individuals and group preferences. If possible, the Coffee + Connect should extend to outdoor courtyards to take advantage of the temperate Northern California weather and views to the beautiful campus environment. The space serves as a destination for intentional and chance encounters and promotes wellbeing and rejuvenation.,



Worksettings

Connection Zone | Coffee + Connect

Space

- Locate centrally on the primary path, to act as a 'collision zone' where people connect, chat and share ideas
- Include a variety of settings that support eating, learning, and working, for individuals and groups of various sizes
- Consider informal lounge settings with a comfortable aesthetic where people can come together for work and study related discussion
- Use different levels of lighting to enhance the design and experience
- Provide access to views of the outdoors and introduce café settings outside, if possible

Tools + Technology

- Consider digital information displays to provide up-to-date information about the College, resources, events and activities
- Incorporate technology that allows the space to be used for large presentations / gatherings
- Include Wi-Fi and access to power for personal devices such as laptops, phones, chargers, etc.

People + Behavior

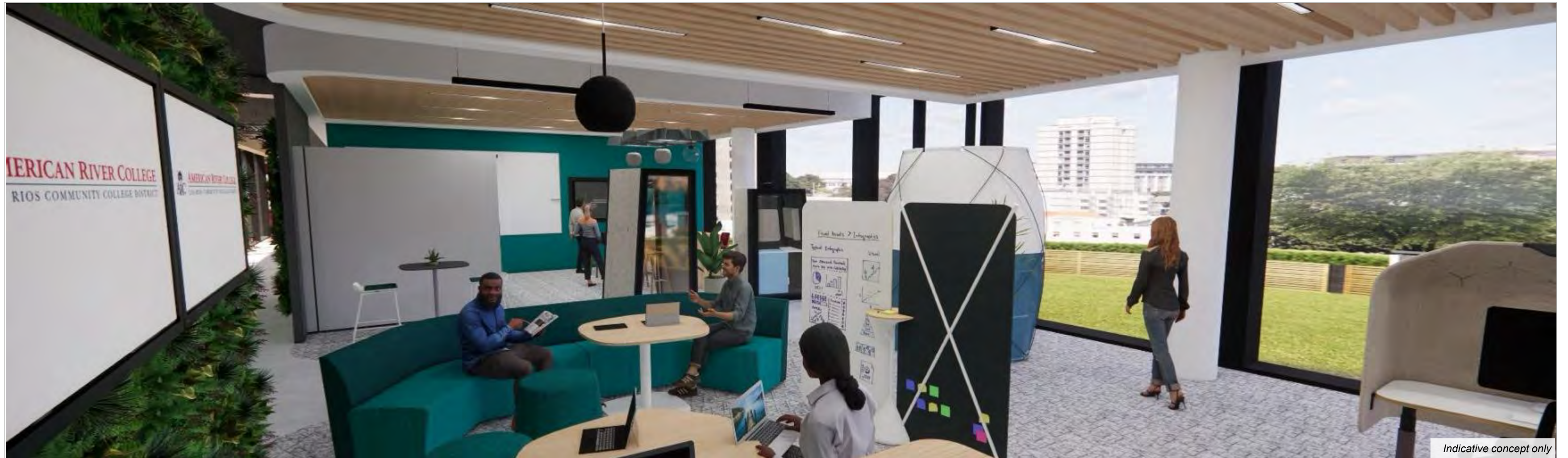
- Encourage Faculty, Classified Professionals and Leaders to use the setting to foster informal connections with Students and peers
- Include a coffee and beverage experience to support the community rituals that bring people together
- Incorporate Student artwork and cultural events where possible
- Offer food and beverage options that appeal to the diversity of the College
- Develop protocols to ensure the area is kept clean for all users



Worksettings

Connection Zone | HomeBase

The HomeBase offers a place for Students within a program/community of interest to gather, connect, and provides a sense of belonging. Each space is owned by a Department/field of interest and varies in size based on the scale of the program. These spaces offer a comfortable, fun, welcoming environment for Students to study between classes, seek resources and socialize. Within the HomeBase Students have access to Student Service Specialists, Peer Mentors, Counselors and Faculty. Ideally these spaces should be flexible to accommodate a range of activities both individual and group (e.g. workshops, events and project work). It is equipped with the latest technology to support both personal and shared devices.



Worksettings

Connection Zone | HomeBase

Space

- Design a comfortable, inviting and inclusive environment
- Include a variety of settings to accommodate individuals and small groups for studying and socializing
- Consider a kit-of-parts to allow the HomeBase to scale up or down depending on field of interest size and needs
- Provide display areas for materials and artifacts related to the HomeBase program
- Consider a range of methods to display Student artwork
- Include workstations for Classified Professionals supporting the HomeBase program
- Provide small coffee and nourishment area for Students

Tools + Technology

- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.
- Consider digital information displays to provide up-to-date information about the HomeBase, events, activities, resources, and to celebrate achievements and successes
- Incorporate technology that allows the space to be used for presentations / gatherings / events
- Provide access to laptops, desktop computers and printer services

People + Behavior

- Promote an environment of inclusivity and community
- Create equitable experiences across the HomeBase locations
- Encourage Students to use the space to meet and build relationships with each other
- Emphasize the space as a way to promote wellbeing and relieve stress
- Establish protocols for how the space is to be used
- Establish protocols for materials display and for Student artwork



Indicative concept only



Indicative concept only

Worksettings

Connection Zone | Courtyards

Courtyards are an outdoor element of the Community Zone which leverage ARC's beautiful campus and the temperate Northern California climate. They are conveniently located both within and next to most of the College buildings or along major circulation routes and offer appropriate views into buildings where possible. These spaces are active, energizing, inviting and serve as destinations for Students, Faculty and Classified Professionals to socialize, study and work outdoors. The vibrancy of these outdoor settings offer the opportunity to build community by creating awareness of Student Programs and hosting events. Courtyards also allow users to rejuvenate and connect to nature, enhancing wellbeing.



Indicative concept only

Worksettings

Connection Zone | Courtyards

Space

- Enhance existing Courtyards with a range of comfortable settings to support individual and small group activities
- Provide shading elements such as canopies, umbrellas, screens and planters
- Incorporate Student artwork where appropriate and the ability to hang banners
- Design the selections of finishes and aesthetics to complement the surrounding area and withstand the elements

Tools + Technology

- Provide access to Wi-Fi and exterior-rated power
- Consider security lighting for safety during evening classes and events

People + Behavior

- Encourage use of the Courtyards through the planning and communication of special events
- Support the different work modes from focus and respite, to collaboration and socialization
- Establish guidelines to ensure proper use and maintenance



Zone Overview

Learning Zone



Learning Zone Settings

This zone supports formal and informal learning, wherever learning happens. Worksettings incorporated in the Learning Zone include:

- Classrooms
- Student Learning Commons

Design Intent

The Learning Zone is an ecosystem of settings that support the core function of the College which is Student learning and success.

Classroom settings are reconceptualized to offer an enhanced Student and Instructor experience. At the same time these Classrooms offer greater flexibility in how the courses are conducted and how Students interact with the Instructor and each other.

The intent is to improve the Classroom technology to reduce the burden on Faculty. Simultaneously Students, are ensured of an equitable visual and sound related experience whether on-ground or in person.

The Student Learning Commons concept is introduced to provide Students with places to connect and work before or after attending a class. The Commons should include both group and individual settings. The Group settings will create an inviting atmosphere for studying and informal learning in between classes, while the Focus settings will support individual study or online classes while Students are on Campus.

Key:

- Connection
- Learning
- Community

Worksettings

Learning Zone | Classrooms

Classrooms are designed to support the current and evolving instructional modalities and methodologies. This flexibility allows various methods of teaching and learning to be implemented while supporting the unique requirements of the courses being taught. The typical classrooms can flex between traditional lecture-mode, to group-mode, to discussion-mode and back again. The improved Zoom/HyFlex technology allows the learning experience to be equitable for both in-person and virtual participants. Technology and tools are integrated in smart ways to make it easy and intuitive for everyone to use.



Worksettings

Learning Zone | Classrooms

Space

- Provide easily reconfigurable furniture that supports Faculty preferences for teaching
- Ensure each Student has adequate workspace space for writing materials and storage for personal belongings
- Provide access to natural light and views to the outdoors where possible
- Utilize finishes and materials that create an energizing and inspiring environment

Tools + Technology

- Provide intuitive technology for Faculty to connect organizational and personal devices to display digital content
- Incorporate appropriate technology to ensure all classroom participants, both in-person and virtual, can hear and see all materials being presented and discussed
- Provide multiple cameras to give virtual participants an accurate context of the classroom to remain engaged in discussions
- Utilize vertical surfaces to allow Faculty and Students to display content, both analog and digital (e.g., whiteboards, monitors)
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Provide training for Faculty to maximize the use of the technology and the flexibility of the classroom options
- Include access to technology support for troubleshooting and assistance if required
- Establish and display protocols that outline how to restore the classroom for the next class



Worksettings

Learning Zone | Student Learning Commons

Located near Classrooms, the Student Learning Commons provides a place for Students to touch down before or after class. Enclosed pods offer Students a place to join online classes while remaining on Campus. The Commons should allow Students to create, collaborate, and focus in both group and individual settings. The Group settings will create an inviting atmosphere for studying and informal learning in between classes, while the Focus settings will support individual study. All spaces within the Student Learning Commons should be available on a first-come, first-serve basis.



Worksettings

Learning Zone | Student Learning Commons

Space

- Locate the Learning Commons near Classrooms
- Design the space with a variety of settings to support both small groups and individuals
- Provide pods for Students to join online classes
- Energize the space with views to the outdoors
- Incorporate a range of furniture settings to create separation and add interest across the open space
- Offer adequate workspace space for Students to spread out materials
- Support a variety of postures to allow Students to choose the appropriate seating

Tools + Technology

- Provide moveable whiteboards and tackboards to allow Students to display and create content, and provide temporary visual privacy
- Consider including monitors with quick and easy connections for Students to project digital content and connect with virtual participants
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Communicate and encourage Students to use the space to extend their learning experience before and after class
- Establish protocols that are visible to users to encourage appropriate behaviors which will create an inviting and inclusive space for all



Indicative concept only



Indicative concept only

Zone Overview

Community Zone



Community Zone Settings

This zone is comprised of a variety of settings that support both individual and collaborative work for Faculty and Classified Staff. Worksettings incorporated in the Community Zone include:

- **Front Porch**
- **Department Hub**
- **Meeting Room**
- **Focus Room/Pod**
- **Shielded Focus**
- **Workstation**
- **Private Office: Single Occupancy**
- **Private Office: Double Occupancy**

Design Intent

The Community Zone is an ecosystem of worksettings that support Faculty and Classified Professionals in the variety of activities they undertake in their day-to-day work. All four work modes (Focus, Collaboration, Learning, Socializing) are supported, and the settings are intended to optimize the effectiveness of each mode.

The ultimate goal of the Community Zone is to build and enhance community within and between department across the campus. The goal is for each Community Zone to provide a similar experience.

Key:

- Connection
- Learning
- Community

Worksettings

Community Zone | Front Porch

The Front Porch is the initial threshold for welcoming, orienting and accommodating visitors to an Academic or Administrative Department. It forms the first impression of the culture and mission of the Department and sets the tone for the experience. Visitors can access up-to-date information, quickly orient themselves to the space and learn about the Department they are visiting. The Front Porch allows Classified Professionals or Faculty to greet students and visitors as they inquire about services or academics.



Indicative concept only

Worksettings

Community Zone | Front Porch

Space

- Create a welcoming atmosphere through the application of finishes, fabrics, furniture and artwork
- Incorporate artifacts that illustrate the vision and mission of the department as well as past and present accomplishments
- Create display points to share up-to-date and relevant information about the College, the Department, Services and Programs
- Design for views into the Department's interior
- Provide a range of seating options for comfortable waiting and quick informal meetings
- Integrate various lighting levels to create a warm and friendly atmosphere

Tools + Technology

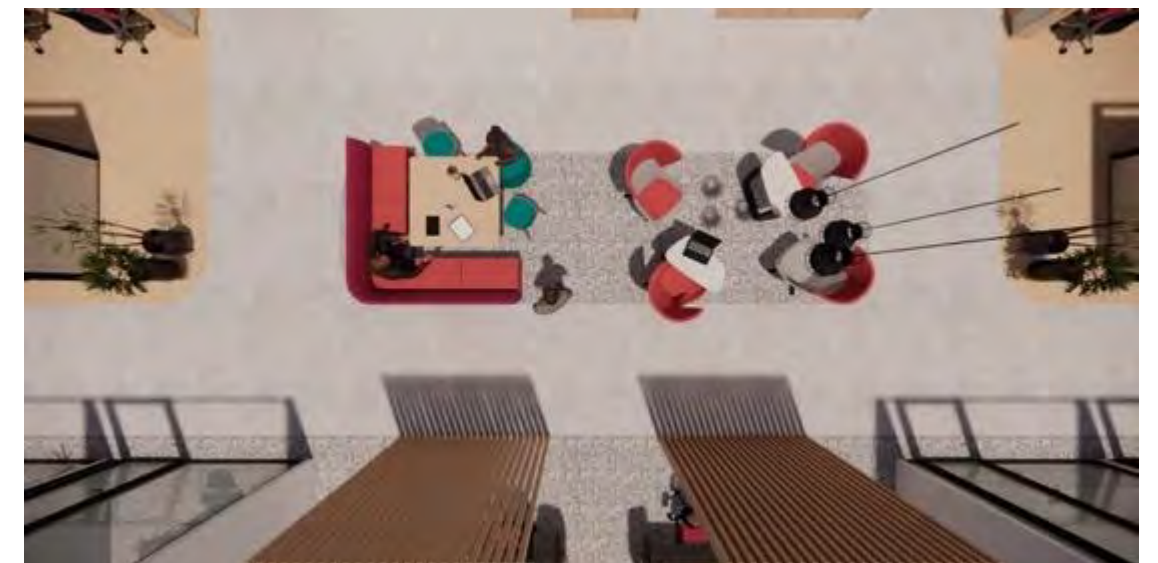
- Consider different creative formats for communicating relevant messages – digital, analog and /or publications
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Encourage Faculty or Classified Professionals to use the Front Porch for small, quick informal meetings when appropriate
- Develop a process to keep content fresh, relevant and updated regularly



Indicative concept only



Indicative concept only

Worksettings

Community Zone | Department Hub

The Department Hub is adjacent to the primary individual work areas for Faculty and Classified Professionals and contains a variety of causal individual and group spaces. It is owned by the Department, providing a sense of identity, belonging and connection for all team members (Resident, Hybrid and Remote workers). It is flexible and can vary in size based on the scale and needs of the Program / Department. The Department Hub supports individual and group work and provides people with the ability to quickly transition to scheduled and spontaneous collaboration or find moments of respite and rejuvenation. It incorporates layered levels of privacy creating a perceived separation between individual and group work. It offers a range of storage for group related artifacts and materials as well as a resource center for printing and supplies. A coffee station is included to house drinks and store snacks and lunches. The space evokes a relaxed and residential atmosphere to encourage conversations, informality and a shared sense of community.



Indicative concept only

Worksettings

Community Zone | Department Hub

Space

- Create a welcoming and friendly atmosphere through the application of finishes, fabrics, furniture and artwork
- Consider a kit-of-parts to allow the setting to scale up or down depending on location, Department/Program size and needs
- Use both solid and translucent vertical elements to create varying degrees of privacy
- Provide a range of settings and postures to support informal conversations and meetings
- Include elements of greenery, access to natural light, and views to the outdoors where possible
- Provide a resource center for easy access to storage, printers and various office supplies

Tools + Technology

- Incorporate digital technology where appropriate
- Include whiteboards for analog display and capturing content
- Provide multi-function devices with printing capability
- Supplement acoustical privacy with sound-masking as needed
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Create a relaxed atmosphere which draws people in and allows colleagues to connect
- Encourage Leaders to work in the Department Hub to model behavior and ensure use
- Establish protocols that promote the intended use of the space
- Develop a process to ensure the resource center is routinely stocked and maintained
- Encourage users to keep the area clean & tidy



Worksettings

Community Zone | Meeting Room

The Meeting Room is located within the vicinity of the Department area. It is an enclosed bookable room for people to meet and come together. It supports various types of collaborative work such as reviewing and evaluating, informing and presenting or generating information. The technology provided supports collaboration that is both face-to-face and virtual and offers an equitable experience for those in the room and those participating virtually.



Worksettings

Community Zone | Meeting Room

Space

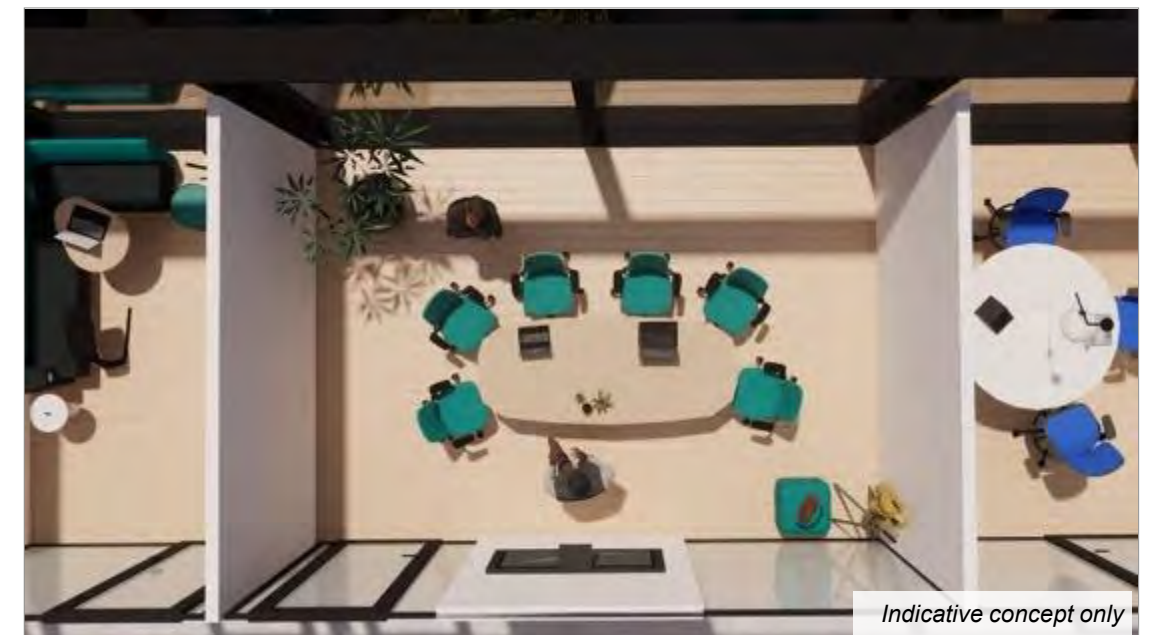
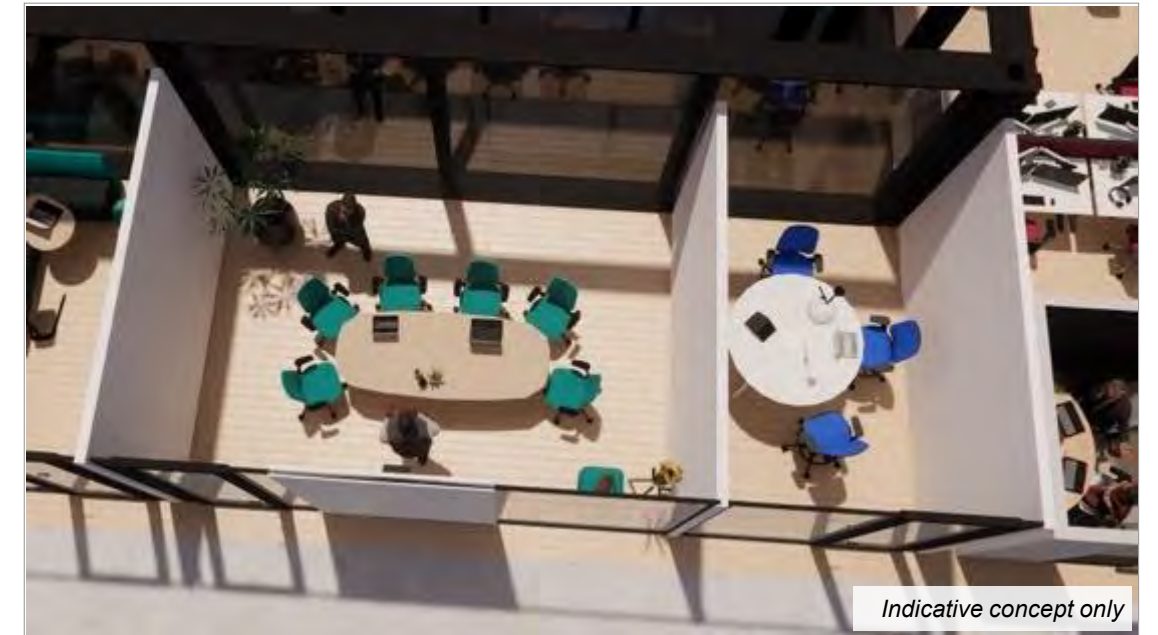
- Provide views into the room by incorporating transparent and opaque glass
- Design appropriately sized meeting rooms to accommodate 3-6 people and 6-8 people
- Provide seating for “primary” participants and “secondary” participants, with sightlines to the camera(s) and screen(s) for virtual participants
- Design the size based on department requirements
- Offer a variety of surfaces to display content (ex: digital screens, whiteboards, tack boards, etc.)

Tools + Technology

- Offer a consistent, seamless technology experience for both in-room and virtual participants
- Integrate an in-room booking system and information board to automate the room-booking process
- Supplement acoustical privacy with sound-masking as needed to prevent unwanted transfer of conversations to other spaces
- Provide whiteboards for display and capture of information
- Include access to power and Wi-Fi

People + Behavior

- Develop protocols that promote the intended use and behaviors
- Provide reservation methods that allow for booking rooms but prevent long-term block bookings or “squatting”



Worksettings

Community Zone | Focus Room/Pod

The Focus Room is located within the Community Zone and is a small enclosed room for 1-3 people or a fully enclosed booth for one person. It is designed to be multi-purpose in support of individual heads-down focus work, small meetings (physical or virtual), Office Hour sessions with Students or private discussions. It is both reservable and available on-demand to provide accessibility to all Faculty and Classified Professionals. The technology provided supports face-to-face and virtual connection and the experience is consistent and seamless.



Worksettings

Community Zone | Focus Room/Pod

Space

- Plan size to support 1-3 people
- Consider including freestanding Phone Booths/Pods, where appropriate, that provide flexibility and create space division in open spaces
- Provide alternative settings to support different postures and preferences
- Enable penetration of natural light into the space where possible
- Mix transparent and opaque glass on Focus Rooms/Pods to balance visibility and privacy
- Provide backgrounds with whiteboard, artwork, or brand identification for an enhanced video experience for virtual calls

Tools + Technology

- Supply multiple monitors and docking stations where appropriate
- Include video technology to allow for virtual collaboration
- Consider lighting to enhance user camera appearances; avoid lighting directly overhead
- Offer consistent and seamless technology solutions that are easy to connect to
- Supplement acoustical privacy with sound-masking as needed
- Include Wi-Fi and access to power

People + Behavior

- Develop and communicate protocols that promote the intended use and behaviors
- Provide a combination of Focus Rooms/Pods that are both reservable and non-reservable / available on a first-come, first-served basis
- Include methods to signal availability
- Provide reservation methods that allow for booking some of the Focus Rooms but prevent long-term block bookings



Worksettings

Community Zone | Shielded Focus

The Shielded Focus area includes a range of settings to conduct heads-down work within the Community Zone. Individuals can find a space to tuck away for deep focus work. Located in close proximity to the Focus Rooms and Pods, its fluid boundaries and appropriate protocols support uninterrupted focus work. Faculty and Classified Professionals come here to work alone, amongst peers. There are a variety of options in the Shielded Focus area including sheltered individual desks, semi-enclosed settings and fully enclosed Focus Rooms and Pods. Working in this area signals to others that an employee is in focus mode and prefers not to be interrupted. The range of individual settings provides users with options to meet their needs and individual preferences for how to focus.



Indicative concept only

Worksettings

Community Zone | Shielded Focus

Space

- Provide a series of enclosed, semi-enclosed and open sheltered work areas that are quiet, private areas within the Community Zone
- Include a variety of settings and postures to address individual preferences
- Consider high-back furniture and screens to create visual privacy
- Include soft furnishings & baffles to help improve acoustics
- Consider finishes and colors that create a relaxed feeling
- Locate on perimeter of the space away from major traffic routes
- Provide access to daylight and greenery

Tools + Technology

- Supply multiple monitors and docking stations where appropriate
- Consider appropriate sound masking to minimize auditory distractions
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Encourage people to work uninterrupted in a secluded and controlled space as needed
- Consider “No Phone Zone” protocol to reduce unwanted distractions
- Develop protocols that ensure concentration by discouraging external interruptions and collaboration within the zone
- Include protocols that discourage individuals from “squatting” in these settings for extended periods of time



Worksettings

Community Zone | Workstation

The Workstation supports individual work in the Department. There is a combination of assigned Workstations for Residents and unassigned Workstations for Hybrid and Remote workers. The unassigned workstations can be scheduled in advance or available on a walk-up-and-use basis. These unassigned Workstations provide Hybrid and Remote Classified Professionals or Adjunct Faculty with choice of where to work in the Community Zone. Designing the Workstation with a kit-of-parts will ensure future flexibility and provides the user with a range of choice within the setting. Focus work will happen throughout the Community Zone and the spacing and density of individual Workstations should be considered to minimize visual and acoustical distractions



Worksettings

Community Zone | Workstation

Space

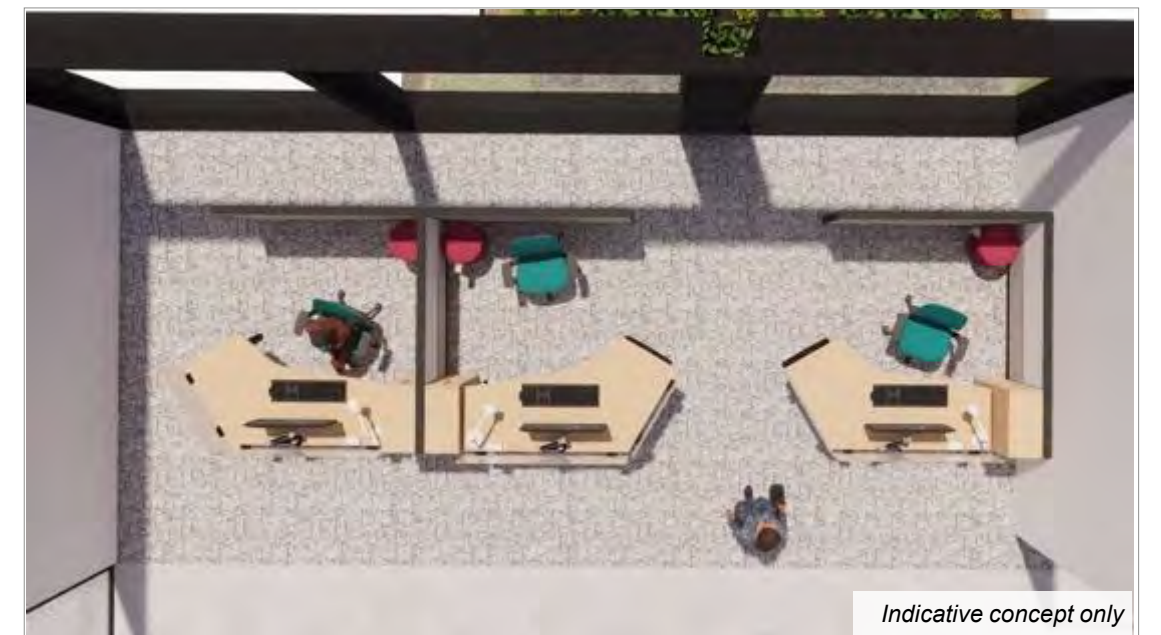
- Develop a kit of parts (including work tools, task lights etc.) to provide flexibility and give users greater choice within the individual setting
- Provide height adjustable workstations to allow users to shift from seated to standing positions
- Reduce the height of panels to provide greater visibility, more open communication and more access to daylight
- Include freestanding screening elements to signal the need for privacy and no interruptions
- Consider benching workstations as an option for Hybrid and Remote workers
- Identify individual and group storage needs both at a workstation and Department level

Tools + Technology

- Offer consistent and seamless technology solutions and tools to effectively support in person and virtual connections
- Consider appropriate sound masking to minimize auditory distractions
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Develop protocols to communicate accepted behaviors at the workstations in the Department Hub
- Establish protocols for scheduled video calls that occur in enclosed spaces to minimize distractions in the open neighborhood



Worksettings

Community Zone | Private Office: Single Occupancy

The Private Office is intended to support individual work, small meetings, virtual calls with audio and visual needs, and one-on-one confidential conversations. The Private Office is located within the Community Zone and enhances Office Hour sessions with Students and interactions with other Faculty and Classified Professionals. The Office may be assigned, unassigned or shared, and may accommodate artifacts of one or more staff member depending on the hybrid strategy being implemented to support Faculty and Departmental needs. Designing the Private Office with a kit-of-parts will ensure future flexibility and provides the user with a range of choices within the setting. Integrating storage, tools and digital technologies in the Private Office ensures that personal workstyles, collaboration and the creative process are supported.



Worksettings

Community Zone | Private Office: Single Occupancy

Space

- Design the Private Office for multi-use by including a collaboration space for an additional one to two people
- Develop a kit of parts to provide flexibility and greater choice within the individual setting
- Include both transparent and solid boundaries to vary levels of privacy but still allow daylight to extend through the space
- Include semi-transparent glass walls or transparent sidelights to provide both visual privacy and views to the exterior
- Provide height adjustable desks to allow users to shift from seated to standing positions
- Consider the storage and display needs for Faculty and Classified Professionals: lockable, open shelving for books, credentials etc.

Tools + Technology

- Provide consistent and seamless technology solutions to support in person and virtual connections
- Supply dual or curved monitors and docking stations at the desk where appropriate
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Develop protocols that promote the intended use and behaviors, recognizing that work activities and work styles vary by individual and department
- Create a welcoming environment for Students to interact with Faculty during Office Hours
- Establish protocols for signaling occupancy, availability or the need for privacy



Indicative concept only



Indicative concept only

Worksettings

Community Zone | Private Office: Double Occupancy

The Double Occupancy Private Office hosts multiple users and is designed to support the needs of up to two occupants using the office at the same time. Shielding elements within the office allow the two occupants to focus on individual work, while relieving concerns of privacy and concentration. Lockable storage keeps each occupant's belongings safe while others are using the space. The Office may be assigned, unassigned or shared depending on the hybrid strategy being implemented to support Faculty and Departmental needs. Designing the Office with a kit-of-parts will ensure future flexibility and provides the user with a range of choices within the setting. Integrating storage, tools and digital technologies ensures that personal workstyles and collaboration are supported. It is located in the Community Zone in close proximity to alternative settings that support collaborative and social activities.



Worksettings

Community Zone | Private Office: Double Occupancy

Space

- Design the office to support all occupants' needs for work, display and storage
- Provide shielding elements to define each occupant's work area and support the need for focus
- Develop a kit of parts to provide flexibility and greater choice within the setting
- Include both transparent and solid boundaries to vary levels of privacy but still allow daylight to extend through the space
- Include semi-transparent glass walls or transparent sidelights to provide both visual privacy and views to the exterior
- Provide height adjustable desks to allow users to shift from seated to standing positions
- Consider the storage and display needs for Faculty and Classified Professionals: lockable, open shelving for books, credentials etc.

Tools + Technology

- Provide consistent and seamless technology solutions to support in person and virtual connections
- Supply dual or curved monitors and docking stations at the desk
- Include access to power and Wi-Fi for personal devices such as laptops, phones, chargers, etc.

People + Behavior

- Develop protocols that promote the intended use and behaviors, recognizing that Faculty work activities and work styles vary by individual and department
- Create a welcoming environment for Students to interact with Faculty during Office Hours
- Establish protocols for signaling occupancy, availability or the need for privacy



Indicative concept only



Indicative concept only

05.

Scenario Development

- Classroom Utilization Key Findings + Scenarios
 - Work Modes Study Key Findings
 - Scenario Definition and Details
-

05. Scenario Development

Classroom Utilization Key Findings + Scenarios

Classroom Usage

Patterns, Constraints + Opportunities

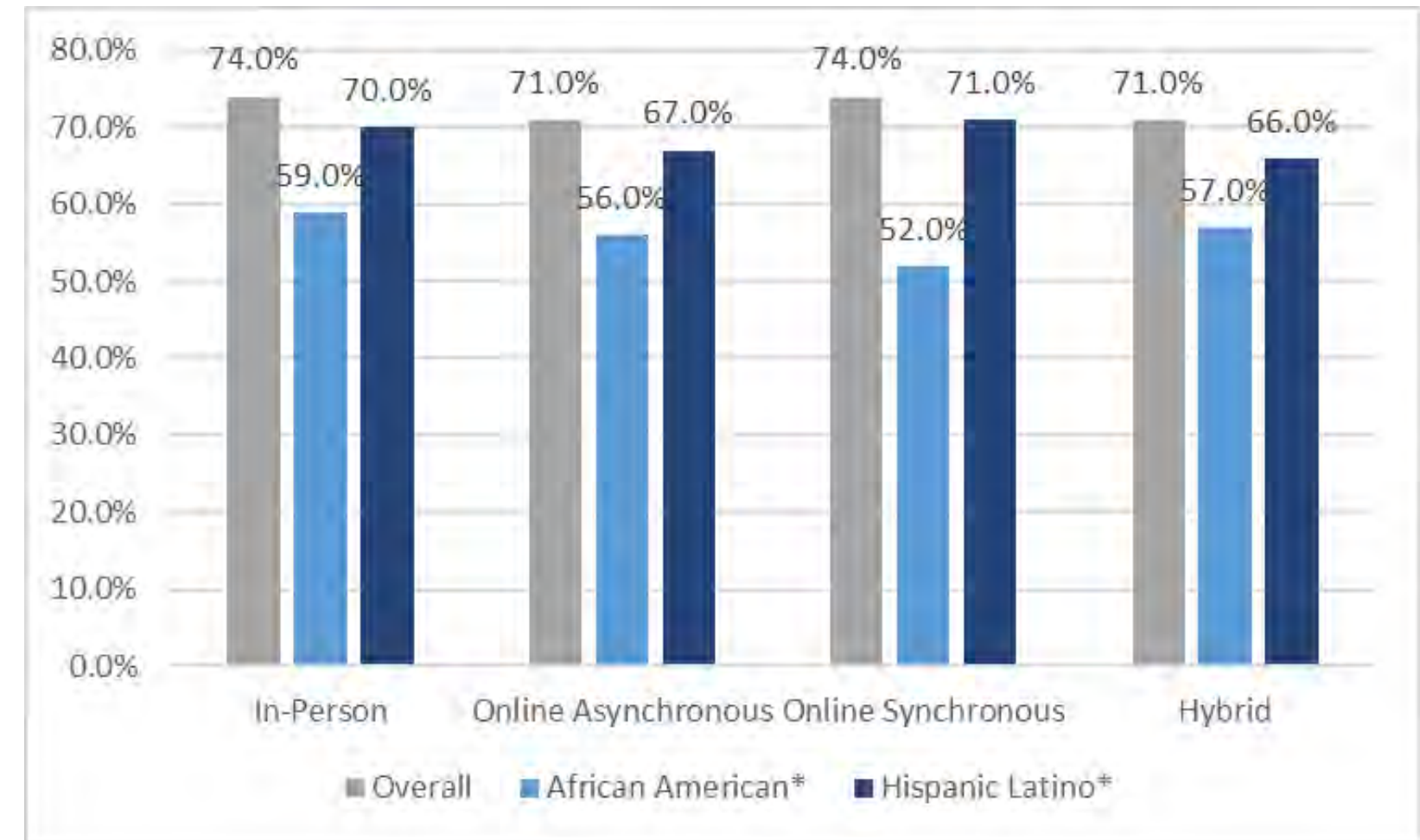
This section explores classroom usage patterns, evolving modalities, ARC Executive Team perspective on the longer-term modality mix, Student success rates by modality and three scenarios based on varying levels of scheduling targets and Student demand. The data that underlies the analysis presented here is derived from a number of sources, which include:

- Census reports for Fall 2018, Fall 2019, Fall 2022, Fall 2023 and Spring 2024
- Classroom scheduling data for Fall 2019 and Spring 2024
- ARC Leader workshop results from long term modality exercise
- ARC modality success report

The opportunities indicated by analysis of the data in this section and the associated three classroom scenarios could be significant for repurposed or reduced space. However, there are a number of potential realities, which will need to be considered before the full impact can be determined. These include but are not limited to:

- Constancy of Student interest in the current modality mix
- Appropriateness of encouraging Students in lower success categories to emphasize on-ground classes
- Operational implications of shifting some instruction to other than Monday – Friday or to Non-Peak times
- Willingness and appropriateness of Faculty to teach other than Monday – Thursday and in the afternoon / evening
- Timing and transportation constraints of Adjunct Faculty who teach on multiple campuses
- Ability of support capabilities to clean, service and maintain facilities and technology

ARC Success Rates by Modality Spring 2024



Classroom Usage

Key Findings

- There has been a **significant shift in modalities** between 2018 and 2024; on-ground has shifted from approximately 80% to the mid 50s% and there does not appear to be a catalyst to change the current levels of modality
- A **significant reduction in the stock of classrooms** has occurred between 2019 and 2024 (126 to 95) yet utilization is still low
 - ✓ Lecture room number decreased by 40.5%
 - ✓ Combo room number decreased by 5.9%
 - ✓ Lab room number remained the same
- Excess classroom capacity is indicated for all classroom types regardless of combination of course days considered
 - ✓ **Monday – Sunday** average utilization by room type is Lecture 27.1%, Combo 21.3% and Lab 29.5%
 - ✓ **Monday - Thursday** average utilization by room type is Lecture 42.8%, Combo 35.9% and Lab 47.1%
 - ✓ Utilization levels for **Friday, Saturday and Sunday** are all low for all classroom types – Sunday 0%, Saturday 6.1% or less and Friday 15.1% or less
- **Peak utilization** of all classroom types tends to be in earlier in the day hours **9am – 2pm**
- ARC Leader response to **ideal long-term modality mix** varied but when the statistics from the 2 teams in the Leadership workshop were averaged the result was **on-ground 60% and online 40%** which is similar to the Spring 2024 Weekly Enrollment Census statistics report where Section data indicates on-ground 54% and online 46%
- Student success by modality generally indicates that on-ground has higher success than online, however online synchronous has equal or higher success rates than in-person in 2 of the 3 groups
- **Scenario and demand modeling indicates excess capacity in classrooms exist** and it appears Scenario 3 (which is generally similar Fall 2019 scheduling and demand patterns) would be a potential target for further investigation and implementation

Usage Patterns Fall 2019 vs Spring 2024

Monday - Friday

**Classroom Utilization By Time of Day
Monday - Friday**

		8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Aggerate
Lecture Rooms	2019 Fall	36.2%	69.5%	76.5%	75.1%	59.7%	54.6%	55.7%	37.8%	37.3%	23.8%	44.3%	45.4%	39.5%	19.7%	48.2%
	2024 Spring	27.7%	61.8%	60.9%	64.1%	48.6%	45.0%	48.6%	29.1%	26.8%	19.1%	35.5%	25.5%	21.4%	7.7%	37.3%
	Net Change	-8.5%	-7.6%	-15.6%	-11.0%	-11.1%	-9.6%	-7.0%	-8.7%	-10.5%	-4.7%	-8.9%	-20.0%	-18.1%	-12.0%	-11.0%
	% Change	-23.4%	-11.0%	-20.4%	-14.7%	-18.6%	-17.6%	-12.6%	-23.1%	-28.1%	-19.7%	-20.0%	-43.9%	-45.9%	-60.8%	-22.7%
Combo Rooms	2019 Fall	36.5%	51.8%	56.5%	71.8%	76.5%	56.5%	56.5%	67.1%	43.5%	30.6%	30.6%	44.7%	42.4%	28.2%	49.5%
	2024 Spring	5.0%	56.3%	56.3%	62.5%	41.3%	45.0%	31.3%	20.0%	13.8%	10.0%	35.0%	22.5%	15.0%	3.8%	29.8%
	Net Change	-31.5%	4.5%	-0.2%	-9.3%	-35.2%	-11.5%	-25.2%	-47.1%	-29.8%	-20.6%	4.4%	-22.2%	-27.4%	-24.5%	-19.7%
	% Change	-86.3%	8.7%	-0.4%	-12.9%	-46.1%	-20.3%	-44.7%	-70.2%	-68.4%	-67.3%	14.4%	-49.7%	-64.6%	-86.7%	-39.7%
Lab Rooms	2019 Fall	32.0%	56.0%	59.4%	56.6%	57.1%	60.0%	61.1%	47.4%	46.9%	36.0%	45.7%	38.3%	32.6%	23.4%	46.6%
	2024 Spring	10.9%	48.0%	54.3%	58.3%	49.1%	46.9%	54.3%	48.0%	46.3%	33.1%	27.4%	33.1%	27.4%	24.6%	40.1%
	Net Change	-21.1%	-8.0%	-5.1%	1.7%	-8.0%	-13.1%	-6.9%	0.6%	-0.6%	-2.9%	-18.3%	-5.1%	-5.1%	1.1%	-6.5%
	% Change	-66.1%	-14.3%	-8.7%	3.0%	-14.0%	-21.9%	-11.2%	1.2%	-1.2%	-7.9%	-40.0%	-13.4%	-15.8%	4.9%	-13.9%

This slide documents changes in usage patterns between Fall 2019 and Spring 2024 for each of the 3 classroom types. The focus is on Monday – Friday across all potential course times (Saturdays and Sundays are not included due to very low usage levels).

Net Change is defined as the utilization difference between Fall 2019 and Spring 2024. % Change is defined as the percent of net change relative to the Fall 2019 utilization number. Select details for each classroom type is shown in the text box to the right.

Lecture

- Utilization decreased for all times in the range
- The average utilization reduction is 22.7%

Combo

- Utilization decreased for all but 2 time slots
- The average utilization reduction is 39.7%

Labs

- Utilization decreases in all but 3 time slots
- The average reduction is 13.9%

Usage Patterns Fall 2019 vs Spring 2024

Monday - Thursday

**Classroom Utilization By Time of Day
Monday - Thursday**

		8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Aggerate
Lecture Rooms	2019 Fall	44.9%	79.7%	87.5%	85.1%	67.9%	64.9%	66.6%	45.3%	45.3%	29.4%	54.1%	55.1%	48.0%	23.6%	56.9%
	2024 Spring	31.8%	71.0%	69.3%	73.3%	54.0%	52.3%	55.1%	33.0%	30.7%	22.7%	42.6%	30.1%	25.0%	8.5%	42.8%
	Net Change	-13.1%	-8.7%	-18.2%	-11.8%	-13.9%	-12.6%	-11.4%	-12.3%	-14.6%	-6.7%	-11.4%	-25.0%	-23.0%	-15.1%	-14.1%
	% Change	-29.2%	-10.9%	-20.8%	-13.9%	-20.5%	-19.4%	-17.2%	-27.2%	-32.2%	-22.7%	-21.2%	-45.3%	-47.9%	-64.0%	-24.8%
Combo Rooms	2019 Fall	42.6%	54.4%	61.8%	76.5%	82.4%	66.2%	67.6%	82.4%	52.9%	38.2%	38.2%	55.9%	52.9%	35.3%	57.7%
	2024 Spring	6.3%	67.2%	67.2%	71.9%	48.4%	54.7%	37.5%	25.0%	17.2%	12.5%	43.8%	28.1%	18.8%	4.7%	35.9%
	Net Change	-36.4%	12.8%	5.4%	-4.6%	-33.9%	-11.5%	-30.1%	-57.4%	-35.8%	-25.7%	5.5%	-27.8%	-34.2%	-30.6%	-21.7%
	% Change	-85.3%	23.5%	8.8%	-6.0%	-41.2%	-17.4%	-44.6%	-69.6%	-67.5%	-67.3%	14.4%	-49.7%	-64.6%	-86.7%	-37.7%
Lab Rooms	2019 Fall	39.3%	66.4%	70.0%	68.6%	65.7%	67.9%	70.0%	56.4%	56.4%	43.6%	55.7%	47.1%	40.0%	28.6%	55.4%
	2024 Spring	13.6%	56.4%	62.9%	67.9%	56.4%	54.3%	63.6%	55.7%	52.9%	39.3%	32.9%	40.0%	33.6%	30.7%	47.1%
	Net Change	-25.7%	-10.0%	-7.1%	-0.7%	-9.3%	-13.6%	-6.4%	-0.7%	-3.6%	-4.3%	-22.9%	-7.1%	-6.4%	2.1%	-8.3%
	% Change	-65.5%	-15.1%	-10.2%	-1.0%	-14.1%	-20.0%	-9.2%	-1.3%	-6.3%	-9.8%	-41.0%	-15.2%	-16.1%	7.5%	-14.9%

This slide documents changes in usage patterns between Fall 2019 and Spring 2024 for each of the 3 room types. The focus is on Monday – Thursday across all potential course times (Fridays, Saturdays and Sundays are not included due to very low usage levels).

Net change is defined as the utilization difference between Fall 2019 and Spring 2024. % change is defined as the percent of net change relative to the Fall 2019 utilization number. Select details for each classroom type is shown in the text box to the right.

Lecture

- Utilization decreased for all times in the range
- The average utilization reduction is 24.8%

Combo

- Utilization decreased for all but 3 time slots
- The average utilization reduction is 37.7%

Labs

- Utilization decreased for all but 1 time slot
- The average utilization reduction is 14.9%

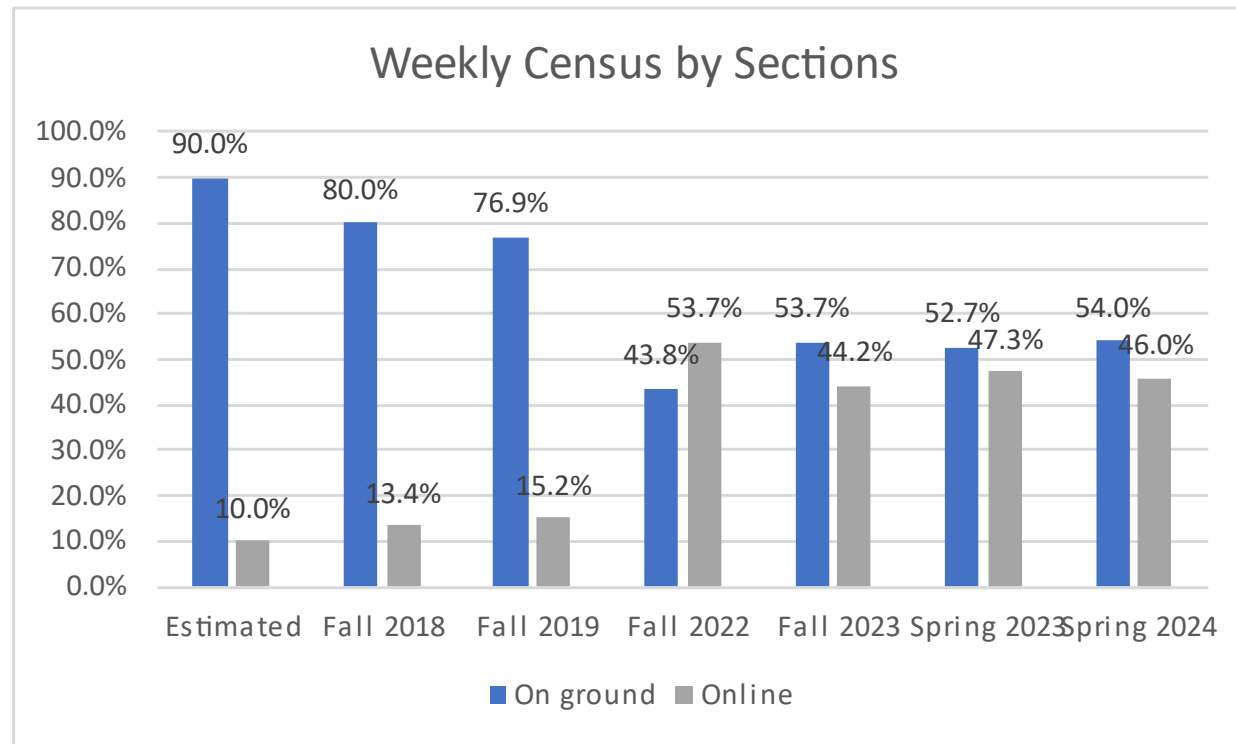
Evolution - Online vs On-Ground

On Ground vs Online Class Mix Evolution

Weekly Enrollment Census Statistics

	Estimated	Fall 2018	Fall 2019	Fall 2022	Fall 2023	Spring 2023	Spring 2024
On ground	90.0%	80.0%	76.9%	43.8%	53.7%	52.7%	54.0%
Online	10.0%	13.4%	15.2%	53.7%	44.2%	47.3%	46.0%

Note: for 2018 and 2019 hybrid is included in online and for 2022, 2023 and 2024 it is included in on-ground

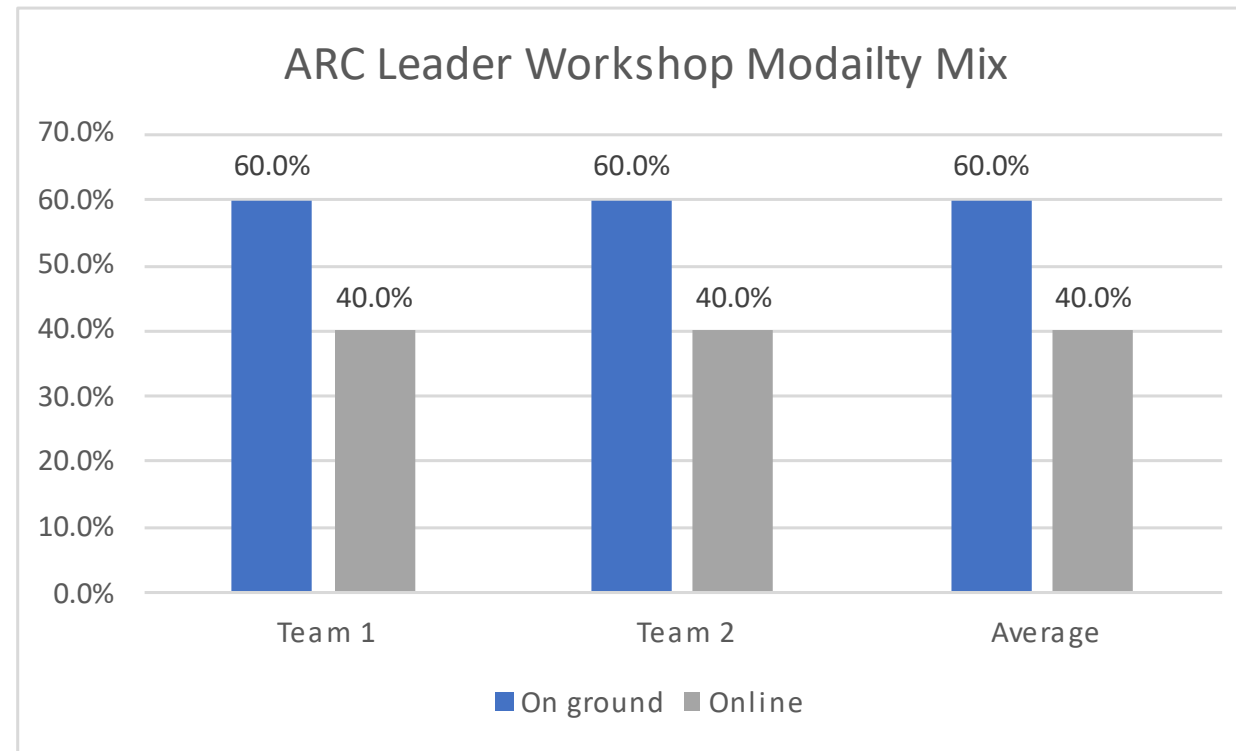


The above graphic documents the evolution in modality from Pre Covid to Spring 2024 (Sections data is used here however the WSCH data is almost identical). While the data is limited there are two trends which are apparent.

- Prior to Covid on-ground courses were slowly declining over time as a percentage of the modality mix
- After Covid on-ground courses have varied between 43.8% and 54.0% of the modality mix

Leader Workshop Long Term Modality Exercise Results

	ARC Leaders		Workshop
	Team 1	Team 2	Average
On ground	60.0%	60.0%	60.0%
Online	40.0%	40.0%	40.0%



The above graphic is from the ARC Leader workshop where each team was asked to suggest what they thought was the long-term modality mix that would be ideal for their Students. The graphic indicates the results of each team for this exercise and the average of the responses.

Of particular interest the average from this exercise is similar to the Spring 2024 modality numbers from Sections data contained in the Enrollment Census Statistics.

Classroom Scenarios

This and the following slide explore a range of scenarios which vary target utilization levels and demand for courses based on post pandemic patterns. The analysis also estimates the resulting impact on the inventory of classrooms. The three scenarios considered are:

- Scenario 1 – Peak utilization is set to 80% and Non-Peak is based on Spring 2024 actual course demand hours
- Scenario 2 – Peak utilization is set to 80% and Non-Peak is set to 35% of course demand hours specified
- Scenario 3 – Peak utilization is set to 85% and Non-Peak is set to 40% of course demand hours specified

For each Scenario a range of course demand hours is considered for each classroom type. Here the changing demand represents growth / decline in Student population and / or changes in modality. The course demand levels considered include:

- Current demand less 10%
- Current demand (Spring 2024)
- Current demand increased by 10%
- Current demand increased by 20%

Scenario 3 has slightly higher utilization for Lecture rooms than was the case in Fall 2019 and was used as proof of concept (utilization levels realistically achievable). There is potential that a “**universal classroom**” could support higher levels of utilization but was not explored in this analysis.

Scenario 3 for current course demand hours indicates there is a 28.8% excess in total classrooms based on the current inventory of classrooms (Spring 2024).

The opportunities illustrated by the modeling indicate the potential for significant reductions in classrooms and / or repurposing of the associated space. As in all modeling situations, there are potential realities, constraints and leadership decisions which will need to be considered before the full impact can be determined.

Classroom Scenarios

	Classroom Utilization Scenario 1 Monday - Thursday (4 days)				Classroom Utilization Scenario 2 Monday - Thursday (4 days)				Classroom Utilization Scenario 3 Monday - Thursday (4 days)			
	Peak @ 80% utilization, Non Peak @ actual scheduled course demand				Peak @ 80% utilization, Non Peak @ 35% course demand specified				Peak @ 85% utilization, Non Peak @ 40% of course demand specified			
	Lecture	Combo	Lab	Total	Lecture	Combo	Lab	Total	Lecture	Combo	Lab	Total
Current Hours Course Demand Less 10%	949.5	289.8	831.6	2070.9	949.5	289.8	831.6	2070.9	949.5	289.8	831.6	2070.9
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	30.9	10.4	23.7	65.1	32.1	9.8	28.2	70.1	27.9	8.5	24.5	60.9
Excess # Rooms	13.1	5.6	11.3	29.9	11.9	6.2	6.8	24.9	16.1	7.5	10.5	34.1
% Excess	29.7%	35.0%	32.2%	31.5%	26.9%	38.7%	19.6%	26.2%	36.5%	46.7%	30.1%	35.9%
Current Hours Course Demand	1055	322	924	2301	1055	322	924	2301	1055	322	924	2301
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	34.4	11.6	26.4	72.3	35.7	10.9	31.3	77.9	31.0	9.5	27.2	67.7
Excess # Rooms	9.6	4.4	8.6	22.7	8.3	5.1	3.7	17.1	13.0	6.5	7.8	27.3
% Excess	21.9%	27.7%	24.7%	23.9%	18.8%	31.9%	10.6%	18.0%	29.5%	40.8%	22.4%	28.8%
Current Hours Course Demand Plus 10%	1160.5	354.2	1016.4	2531.1	1160.5	354.2	1016.4	2531.1	1160.5	354.2	1016.4	2531.1
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	37.8	12.7	29.0	79.5	39.3	12.0	34.4	85.7	34.1	10.4	29.9	74.4
Excess # Rooms	6.2	3.3	6.0	15.5	4.7	4.0	0.6	9.3	9.9	5.6	5.1	20.6
% Excess	14.1%	20.5%	17.2%	16.3%	10.7%	25.1%	1.7%	9.8%	22.4%	34.9%	14.6%	21.6%
Current Hours Course Demand Plus 20%	1266	386.4	1108.8	2761.2	1266	386.4	1108.8	2761.2	1266	386.4	1108.8	2761.2
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	41.3	13.9	31.6	86.8	42.9	13.1	37.5	93.5	37.2	11.4	32.6	81.2
Excess # Rooms	2.8	2.1	3.4	8.3	1.1	2.9	-2.5	1.5	6.8	4.6	2.4	13.8
% Excess	6.3%	13.3%	9.6%	8.7%	2.6%	18.2%	-7.3%	1.6%	15.4%	29.0%	6.8%	14.5%

05. Scenario Development

Work Modes Study Key Findings

Hybrid Approach

Hybrid, Worker Profiles and Work Modes

Traditionally, workplaces have been planned so that each person is assigned a personal workspace, reflecting a 1:1 person to seat ratio. In a hybrid workplace for many employees work can occur at home, in the office and other places. For some of these employees, individual workspaces in the office are unassigned, and when in the office these people select work settings that match their current mode of work and their personal preference.

The key underlying factor for most effective hybrid workplace strategies is the definition of worker profiles and types. These are based on how individuals work and their level of mobility/choice today and in the future. Other factors that should be considered when developing a hybrid strategy are:

- Cultural strengths and weakness of the organization
- Job function requirements
- Current and desired degree of choice
- Personal suitability or situation
- Resources to train and develop the hybrid worker
- Availability of mobile technology and infrastructure

The profiles developed for this engagement are based on a deep understanding of the time Classified Professionals spend in a range of work modes. The work modes employed, and their definition were first developed by workplace researchers Nonaka and Takeuchi. Steelcase's Workspace Futures team have expanded the knowledge associated with the concept of work modes and we have leveraged that information in this engagement.

Alone Routine Tasks	Working by yourself doing tasks that don't require significant focus and/or privacy including email or casual correspondence.
Alone Deep Focus Work	Working by yourself doing tasks that require significant focus and/or privacy as in creating content, building spreadsheets or reading documents.
Collaborate Sharing information	Working with at least one other person and sharing information which could be a typical meeting to update people or reviewing project progress.
Collaborate Creating content	Working with at least one other person and creating content, idea sharing, brainstorming or innovation as in a product development meeting, or a problem-solving session.
Socialize Building connections	Spending time with others in a relaxed setting as in planned or chance encounters, team bonding exercises, or celebrations.
Other	This mode captures activities such as taking personal time, exercising, taking a mental break, lunch, etc. that occur throughout the workday.

Work Mode Study

Key Findings

- ARC's response rates to this instrument were below what is typical and due to this a number of views of the results had insufficient data to be presented in this document. This limited the findings and also suggests that while the broad direction of the findings are valid, they should not be viewed as definitive.
- Across the College the predominant work mode is alone 64% with alone routine 31% and alone deep focus 33%.
- The predominant worker profiles are profile 3 and 4.
- All 8 worker profiles are present, and their distribution varies by department, location and level (as would be expected).
- When considering the effectiveness of work, alone work has a higher percentage of time targeted at home than collaborative work or socialization.
- Calculated days in the office vary between 1.49 and 2.38.
- Calculated time in the office varies by department (data for other views is not available) which is to be expected. However, the lower range of days in the office do not seem to be appropriate for Student facing positions.
- Based on the low response rate and work with similar clients we suggest 3 days a week or 24 hours a week in the office be targeted for hybrid workers.

Alone
Routine Tasks

Alone
Deep Focus Work

Collaborate
Sharing information

Collaborate
Creating content

Socialize
Building connections

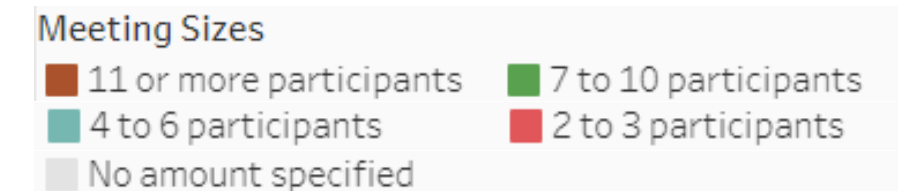
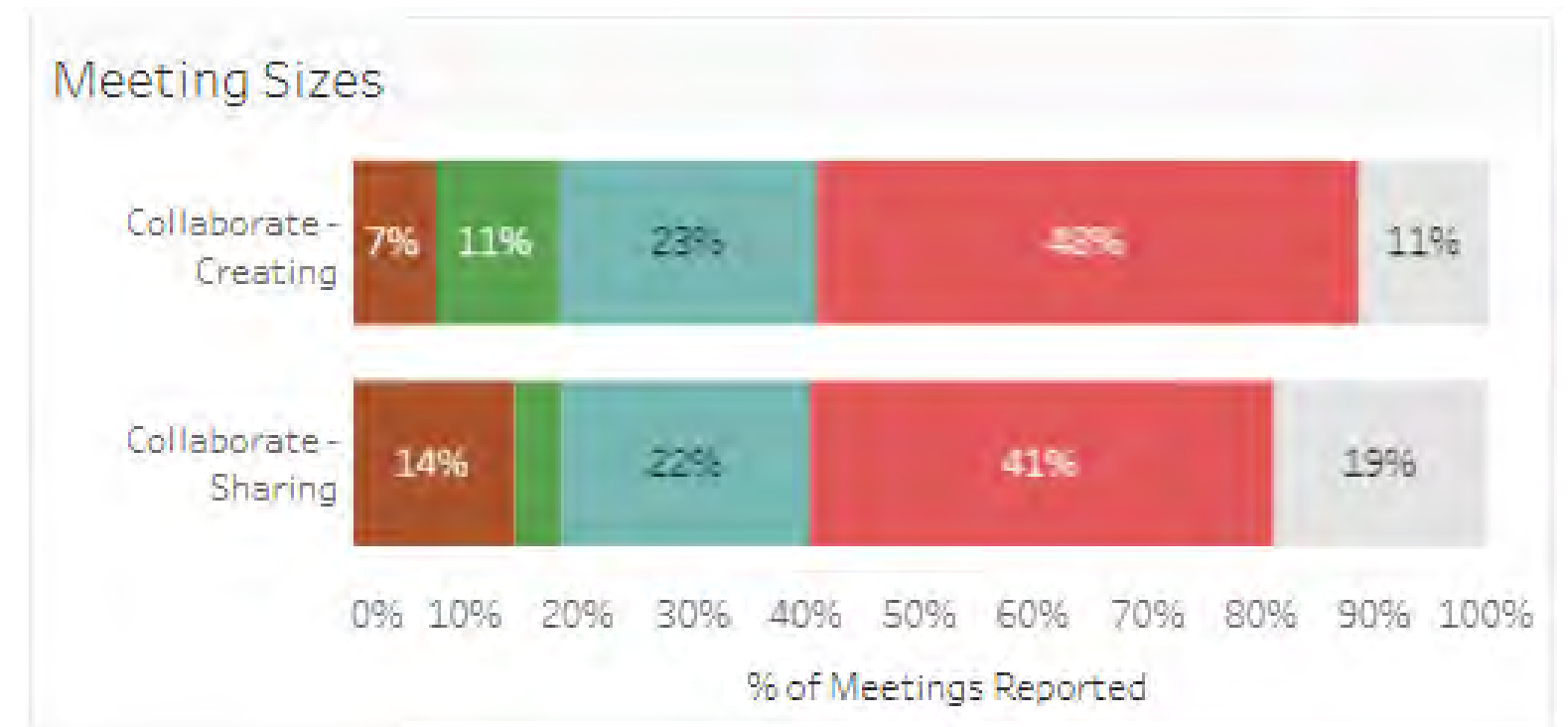
Other

Collaborative Meeting Sizes

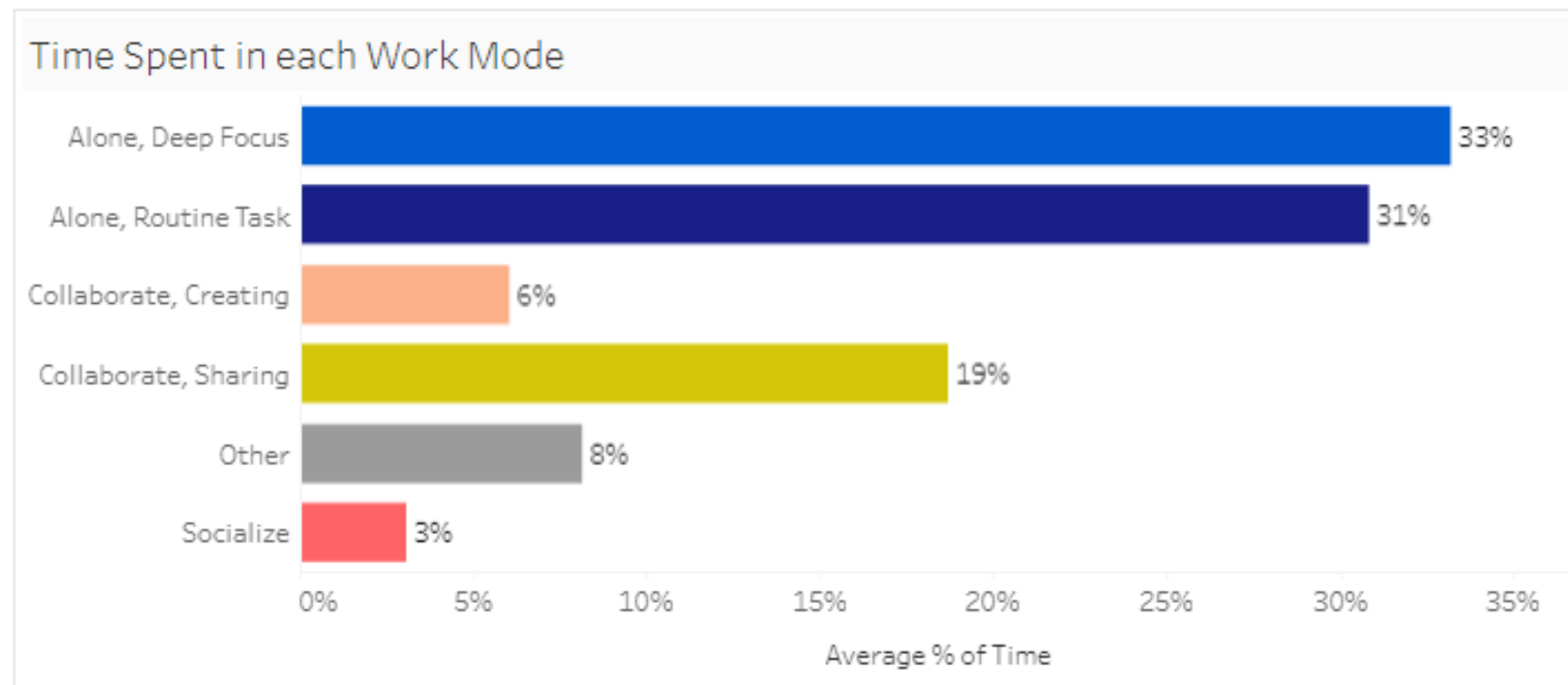
The work mode capability collects information from each collaborative activity including the number of people in each session. This chart documents the size of meetings for both collaborative work modes. At ARC, in general, meetings tend to be small.

- The most frequent meeting size is 2 – 3 participants
- The second most frequent meeting size is 4 - 6 participants
- Approx. 79.7% of collaborative creating sessions include 2 to 6 participants
- Approx. 77.7% of collaborative sharing sessions include 2 to 6 participants

Note in calculating percentages above “No amount specified” was removed from the total.



Work Mode Aggregate Profile



This chart indicates the average percentage of time respondents spend in each work mode (data here is aggregated across all departments, locations and levels). Items of note at the aggregate level are:

- The predominant work mode is alone deep focus
- 64% of time is spent in alone work
- The predominant collaborative activity is sharing
- 25% of time is spent in collaborative work
- 3% of time is spent in socializing

It should be noted that the various subdivisions (department, level and location) analyzed may or may not have all 8 profiles and the percent of time in each work mode will vary based on the unique work patterns associated with a given profile in a specific subdivision.

Work Effectiveness

By Department

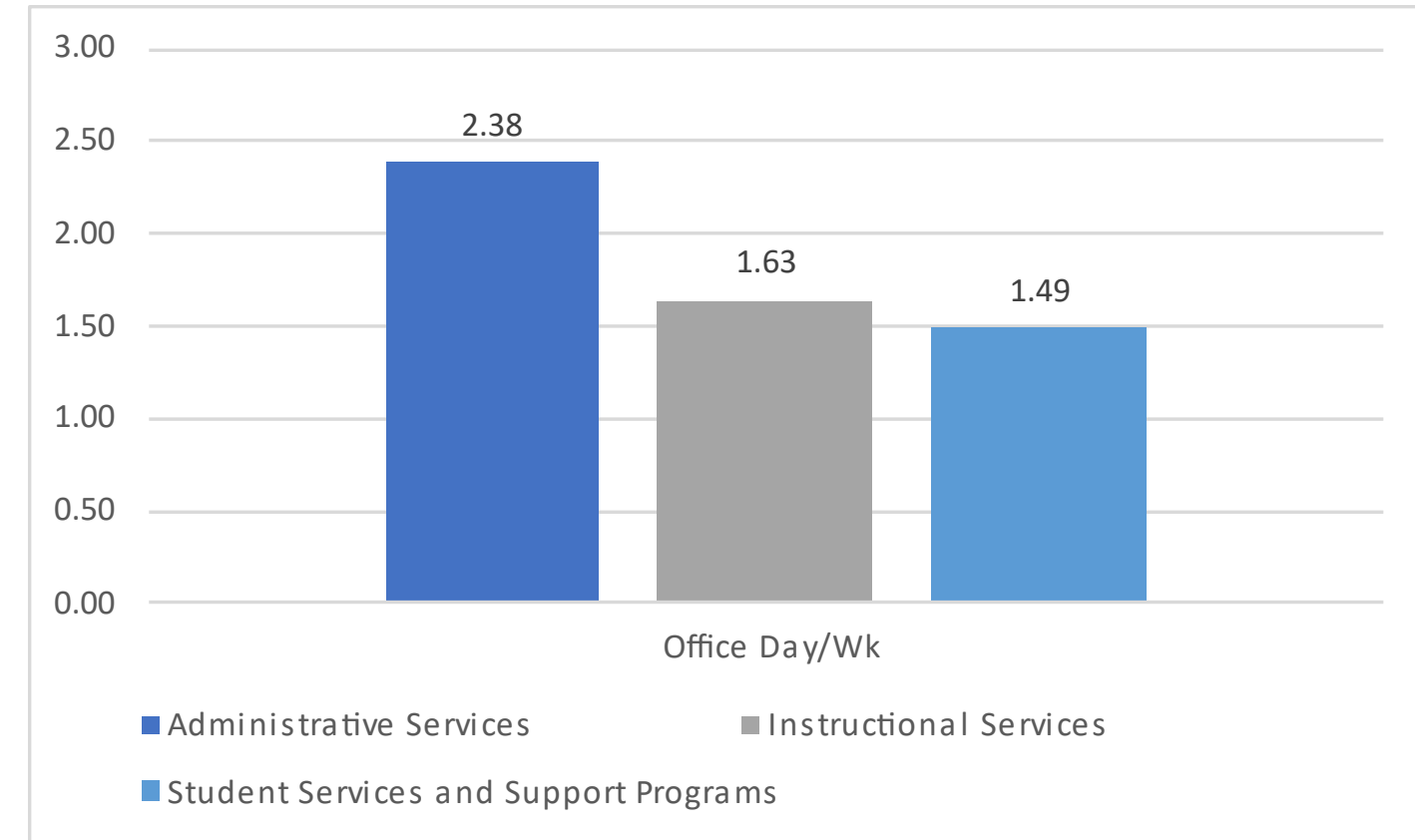
The tables on this page are based on aggregating responses by department across all work mode instances to the question “where would you be most effective” office or home?

The data shows that in most instances team members believe from an effectiveness / productivity perspective there is less reason for alone work to be done in the office as compared to collaborative work and socialization. Data from Administrative Services appears to vary from the other two groups with a higher percentage of alone deep focus in the office and a lower percentage of collaborative sharing in the office. This is not typical and is likely due to low response rates for this instrument.

For the bar charts on this page, the numbers at the top of each bar represent the days per week the average person believes would be most effective to spend in the office by department. These are derived by weighting headcount “effectiveness” responses by work mode across each profile for each department.

The results from Instructional Services and Student Services and Support are similar. Administrative Services data indicates a higher need to be in the office.

Given the manner work modes overlap during a typical day, it would probably be better to view these “days per week in the office” as “hours per week in the office”.



Administrative Services	Effectiveness	
	% Home	% Office
Alone - deep focus	50.0%	50.0%
Alone - routine task	71.8%	28.2%
Collaborate - sharing	61.9%	38.1%
Collaborate - creating	0.0%	100.0%
Socialize	16.7%	83.3%
No response and no preference removed from calculation		

Instructional Services	Effectiveness	
	% Home	% Office
Alone - deep focus	77.9%	22.1%
Alone - routine task	78.2%	21.8%
Collaborate - sharing	48.4%	51.6%
Collaborate - creating	0.0%	100.0%
Socialize	25.0%	75.0%
No response and no preference removed from calculation		

Student Services and Support	Effectiveness	
	% Home	% Office
Alone - deep focus	85.8%	14.2%
Alone - routine task	87.7%	12.3%
Collaborate - sharing	58.3%	41.7%
Collaborate - creating	41.9%	58.1%
Socialize	36.1%	63.9%
No response and no preference removed from calculation		

05. Scenario Development

Scenarios Definition + Details

Scenarios

Overview

This section identifies three sets of potential future-oriented scenarios for ARC's consideration. This includes one set of three scenarios for Faculty and Students (Davies Hall reimagination), one set of three scenarios for Classified Professionals and Students (Welcome and Support Center reimagination) and one set of three scenarios for classrooms. These scenarios are based on the synthesis of all data from this engagement including but not limited to the following items.

- ARC Executive Team interviews and workshop
- Interviews with select members of the Classified Professional and Academic Senates
- Experience Survey and Work Mode Study
- Classroom utilization history
- Workshops with Students, Faculty and Classified Professionals
- Relevant Research Studies on Student Success by Joe Bly, ARC Psychology Student and VP Student Senate
- Consultation with external educational experts
- Steelcase research

The intent of these scenarios is to provide ARC Leadership with a range of solutions to inform future decision making for the Campus Master Plan. Each of the scenarios will have varying impacts on the Student, Faculty and Classified Professionals' experience, their overall effectiveness and future real estate requirements.

Most scenarios include one or more elements of a hybrid solution. In implementing any hybrid solution there are a number of key factors which are necessary for success. These include:

- Leadership alignment and behaviors that demonstrate endorsement
- Front line leaders fully understand the strategy and consistently apply it to ensure equity and inclusion
- Processes are evaluated and adjusted to support the new hybrid strategy
- A robust technology platform is implemented to enhance individual and group work, support virtual connections and provide a great learning and work experience
- An effective Change Management program is developed and implemented to ensure successful adoption of all elements of the new hybrid strategy including behaviors, process, technology and space

Scenario Development

Scenario development is both an art and a science and is heavily influenced by a range of factors investigated during the discovery phase of the ARC consulting effort. These factors include but are not limited to:

- What ARC is seeking to achieve as represented by its Critical Success Factors
- The unique development of Foundational Pillars for ARC's strategy and their relative ranking by Leaders, Faculty and Classified Professionals
- Results of the Work Mode Study
- Observation study and analysis of classroom utilization data

In developing the scenarios for ARC there were five key aspects which drove the positioning of the solution along the hybrid continuum. These include the following:

- Highly ranked Foundational Pillars of College Community, Success Rates and Flexibility + Balance
- The desire among all constituents to build a stronger sense of community
- The implementation of an equitable hybrid policy (one for Faculty and one for Classified Professionals)
- Work Mode Study results which indicate between 2 to 3 days in the office per week to ensure effectiveness for Classified Professionals
- Union agreements for time in the office for Faculty and Classified Professionals

05. Scenario Development

Foundational Pillars

Foundational Pillars

Foundational Pillars have been developed for this project following our interviews and workshop with ARC's Executive Team, Administrators combined with Steelcase's global research. These Pillars played a key role in envisioning the appropriate scenarios for the future learning and work experience at ARC.

College Community

The College experience promotes a culture of equity, belonging and inclusion, linked to ARC values.

Success Rates

Successful course completion, graduation and transfer rates are evaluated, measured and prioritized.

Innovation

Processes, systems and capabilities are evolved to meet emerging Student needs

Flexibility + Balance

Faculty and Classified Professionals have choice and control over where work is done and how they connect with students.

Work Experience

The on-ground experience for Faculty and Classified Professionals is enhanced to entice and increase in-person presence.

Communication

Communication is strengthened to ensure regular two-way flow of information between all constituents.

Campus Experience

Classrooms, HomeBase communities, social and athletic amenities build connections and provide a supportive experience for Students.

Learning + Development Flexibility

Students have choice and control over where and when learning, access to mentors and networking occurs.

Ranking of Foundational Pillars

This page documents the ranking of Foundation Pillars from each Workshop conducted with ARC Leaders, Faculty and Classified Professionals. *The Foundational Pillars are ranked in ascending order from 1 to 8 (1 being the MOST important and 8 being the LEAST important).*

The results indicate alignment between all groups with the Foundational Pillars of Success Rates and College Community being ranked in the top three. This alignment is in keeping with the ARC Mission Statement and was evident in our interactions with all constituents.

Flexibility and Balance over where work is done is ranked higher by Faculty and Classified Professionals than ARC Executive Team. This could be because the focus at this moment is on the desire to work from home more often and the perceived inequities around the hybrid policy.

The gaps represent opportunities for creating awareness of what is most important for the future ARC experience.

FOUNDATIONAL PILLARS	ARC Executive Team	Classified Group 1 In-person	Classified Group 2 In-person	Faculty Group 1 In-person	Faculty Group 2 Online	Davies Hall Project Team Online
Success Rates	1	1	4	2	3	3
College Community	2	2	1	1	1	1
Communication	3	5	2	7	5	2
Learning + Development Flexibility	4	6	8	5	7	7
Campus Experience	5	7	6	3	6	5
Innovation	6	4	7	6	2	6
Flexibility + Balance	7	3	3	4	4	4
Work Experience	8	8	5	8	8	8

05. Scenario Development

Scenarios Overview

- Davies Hall
- Welcome + Support Center Experience

05. Scenario Development

Scenarios Overview

- Davies Building

Scenarios Overview: Davies Building

Faculty, Students and Classrooms

Note – Davies Hall building will be reimaged using existing location and approximately the same square footage minus excess classrooms, but no other constraints are included in these scenarios

As Was

Resident	0%
Hybrid (no ratio, no %)	100%
Remote	0%

- The space is comprised of 41 classrooms, 2 Labs and 97 Faculty offices including 4 Dean suites
- Davies Hall is now condemned, and Faculty and Classes have been distributed across the ARC Campus with many Faculty sharing offices
- Sharing of individual space was not supported
- There are 5 conference rooms and 2 workrooms for coffee or socialization
- Heavy personalization of offices
- There are no Student experience areas outside the classrooms
- Classrooms generally support traditional lecture mode with limited display technology

Scenario 1

Resident	0%
Hybrid (no ratio, no %)	100%
Remote	0%

- All Faculty are hybrid, with no office sharing and time on campus is as it is today
- Faculty offices will be redesigned to better accommodate Student and Faculty interaction
- Faculty communities will be created with offices located around a Department Hub with a coffee area
- Faculty communities will have access to views and outdoor spaces if possible
- Areas will be introduced where Students can congregate informally before and after class
- Classroom designs will be based on a “kit of parts” furniture concept to support a variety of configurations
- Classrooms reduced by 30% based on utilization
- Moderate change management required

Scenario 2

Resident	0%
Hybrid (2:1 ratio, shared offices)	100%
Remote	0%

- Faculty offices are designed to accommodate the workstyle and artifacts of two Faculty members assigned to an office and are shared on a 2:1 ratio
- Communities will be designed with a wider range of unassigned drop-in spaces for Faculty to work when they don’t need their private office
- Expanded areas where Students can congregate informally before and after class
- Settings will be considered for Students to take online classes while on campus
- Classroom designs and numbers are as in Scenario 1
- Significant change management required

Scenario 3

Resident	0%
Hybrid (3:1 ratio, unassigned)	100%
Remote	0%

- Faculty offices are assigned to a department but unassigned to specific Faculty members and are shared on a 3:1 ratio
- The use of offices can be determined and managed by the department
- Additional unassigned enclosed spaces will be included in Faculty community to support individual concentration and small group interaction
- The design within the Faculty community will consider the importance of the display of Faculty credentials and department branding
- Classroom designs and numbers are as in Scenario 1
- Significant change management required

As Was: Davies Hall

Faculty + Classrooms

Davies Hall is an older building that was designed in a traditional format with Classrooms and Faculty Offices. It is a three-story structure with two floors of Classrooms and one floor composed of Faculty Offices.

Classrooms were designed for traditional lecture mode, with the instructor at the front of the room and minimal ability to adapt the furniture within the room.

Faculty offices open to the interior corridors with minimal support for social and collaborative activities. During our observation of the Faculty areas across the ARC campus most offices appeared to be empty a substantial portion of the time.

Due to structural and seismic issues Davies Hall is now condemned, and Faculty and Classes have been distributed across the ARC Campus with many Faculty sharing offices. This situation and how to best resolve in the short and longer terms has resulted in stress among many Faculty members and ARC leadership.

The closure of Davies Hall has provided an ideal opportunity to reimagine the future experience for Faculty and Students. The Applied Research + Consulting team has chosen to focus our scenario development effort for Faculty and Students on recreating Davies Hall. The building to be modeled will be based on the square footage previously occupied with 30% less classrooms than in the original Davies Hall building (result of classroom utilization analysis).

Defining Characteristics

- The space is comprised of 41 classrooms, 2 Labs and 97 Faculty offices including 4 Dean Suites
- Sharing of individual space was not supported
- There are 5 conference rooms and 2 workrooms for coffee or socialization
- Heavy personalization of offices
- There are no Student experience areas outside the classrooms
- Classrooms generally supported traditional lecture mode with limited display technology

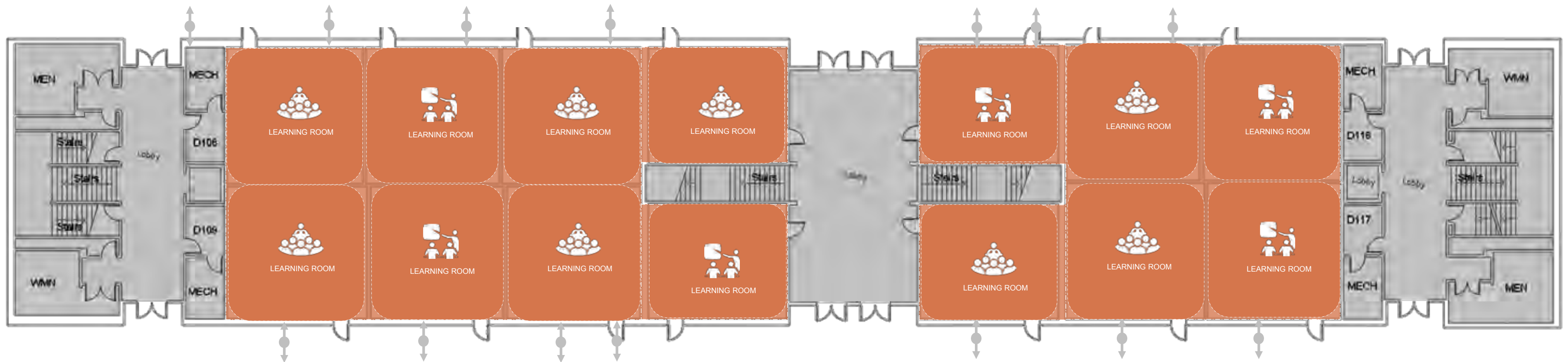
As Was: Davies Hall First Floor

Concept Zones

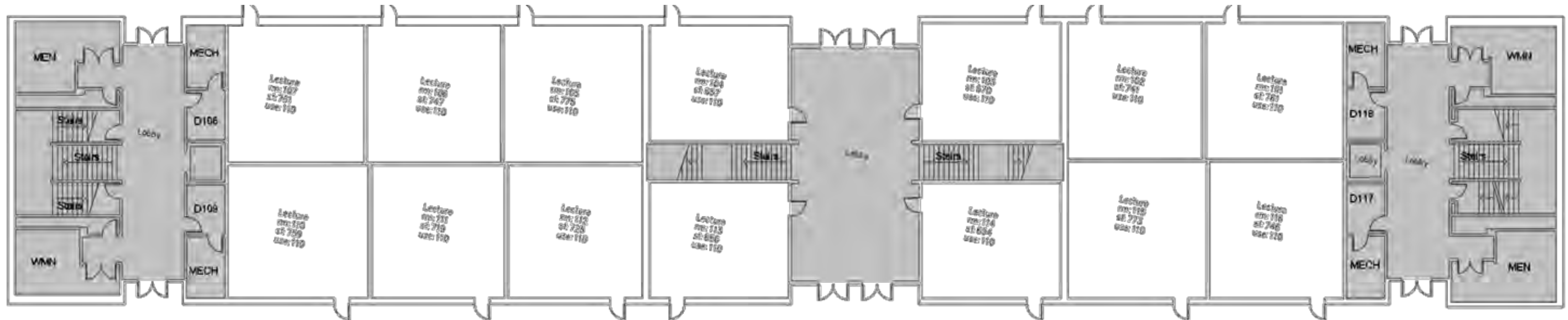


14 x Classrooms
(Varies in size)

■ LEARNING



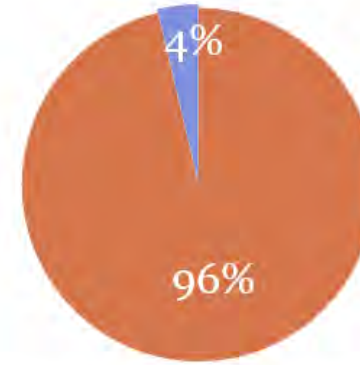
As Was: Davies Hall First Floor



14 x Classrooms
(Varies in size)

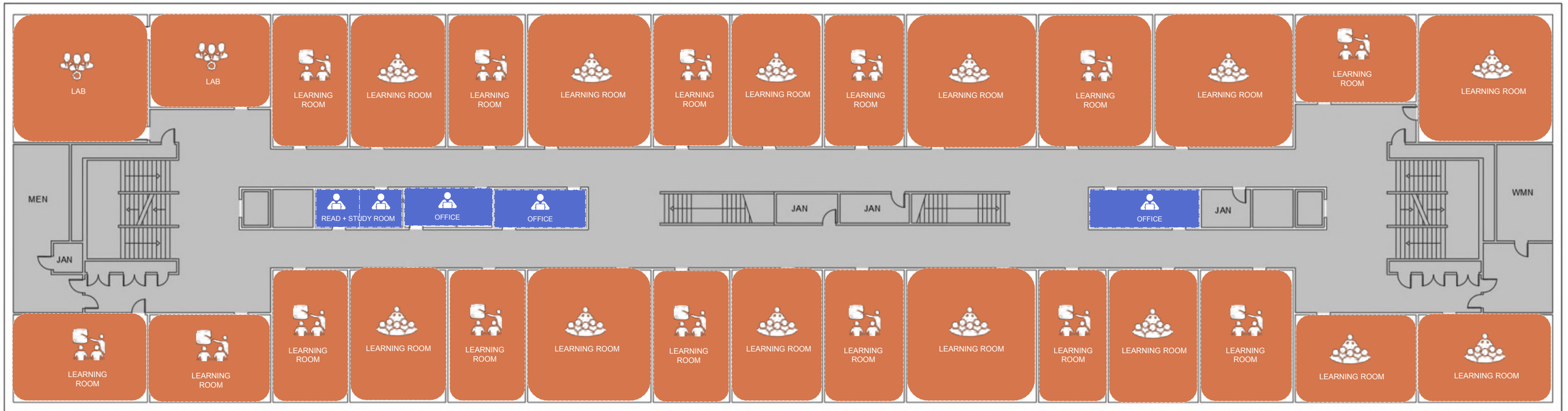
As Was: Davies Hall Second Floor

Concept Zones

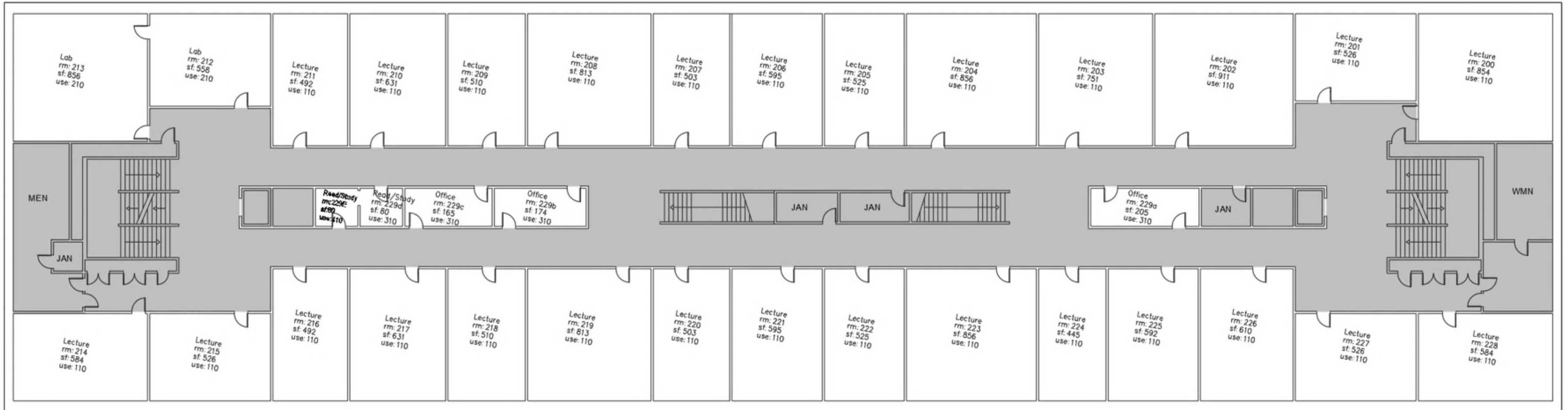


29 x Classrooms – (Including 2 x Labs)
(Varies in size)

■ COMMUNITY ■ LEARNING



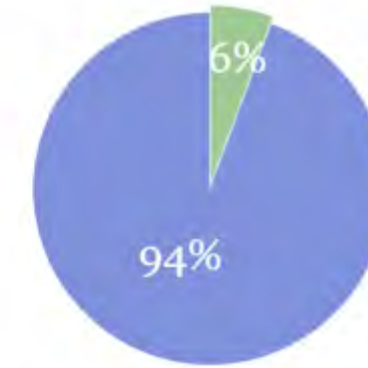
As Was: Davies Hall Second Floor



29 x Classrooms – (Including 2 x Labs)
(Varies in size)

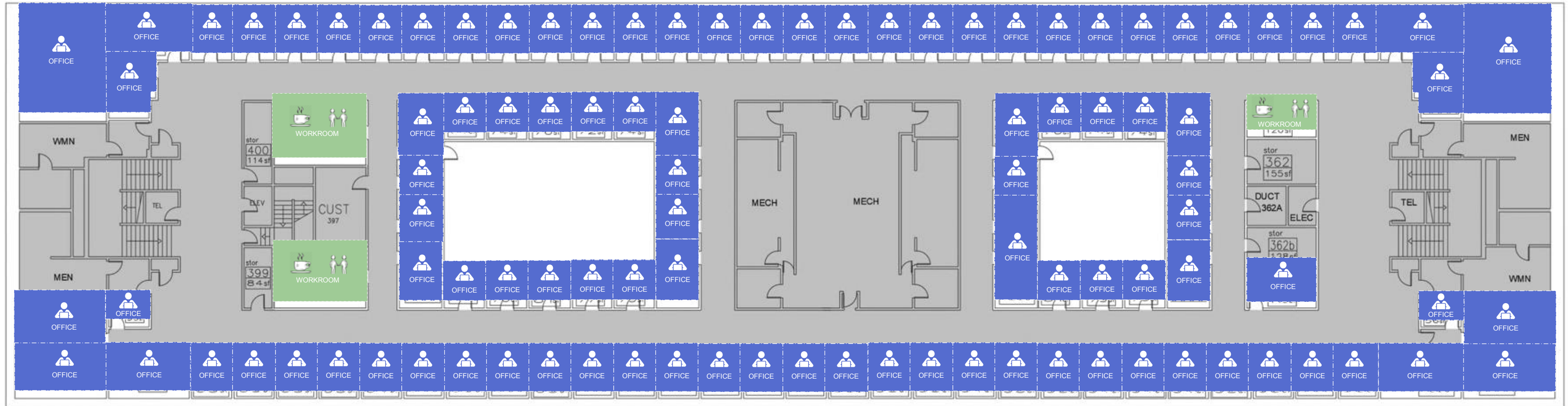
As Was: Davies Hall Third Floor

Concept Zones

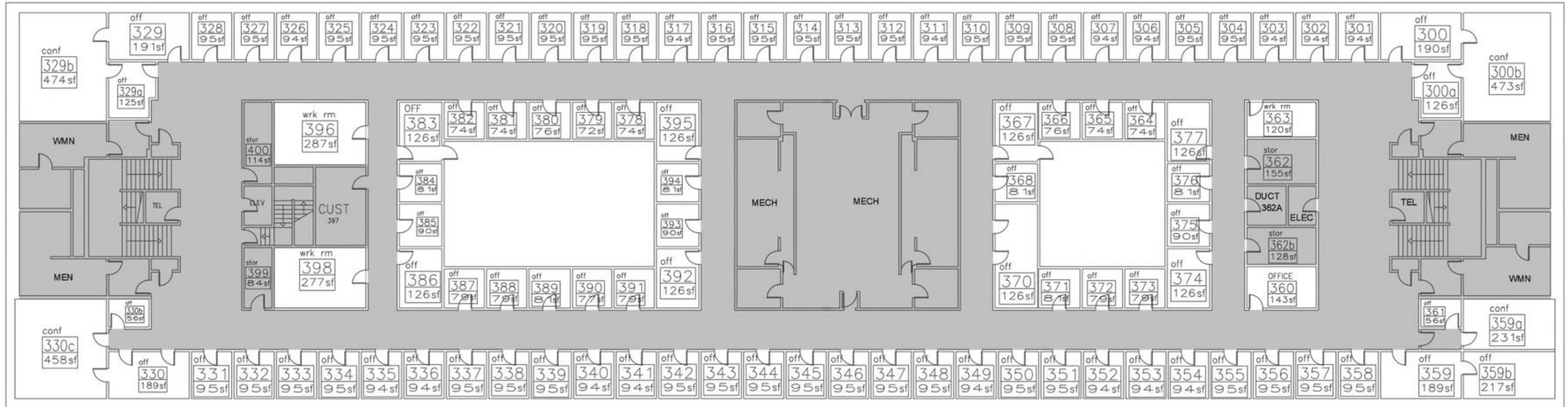


4 x Deans Offices
93 x Offices
(Varies in size)
20 x Workstations

■ CONNECTION
■ COMMUNITY



As Was: Davies Hall Third Floor



	Number People	% Population	Sharing Ratio	Req. Seats
Resident	0	0%	1	0
Hybrid	117	100%	1	117
Remote	0	0%	1	0
	117	100%		117
			Offices	93
			Workstations	20
			Deans Office	4

4 x Deans Office
93 x Offices
(Varies in size)
20 x Workstations

Scenario One: Davies Building

Davies Hall refined for an upgraded experience

In Scenario One the goal is to reimagine the current square footage of Davies Hall (less 30% of classrooms) in a potentially new building. The new building will be designed to make better use of space, build community, increase utilization and enhance the Faculty and Student experience. It will include Classrooms, Faculty offices, support areas and appropriate community spaces to promote interaction between Students and Faculty.

In Scenario One all Classrooms will be upgraded to easily accommodate a variety of teaching styles and Student interactions, based on the subject and Instructor preference. Views to outdoor spaces will be incorporated where possible. Areas where Students congregate informally before and after class will be considered.

The primary objective in this scenario is to arrange Faculty offices in centralized communities, while maintaining individual assigned offices. Although all Faculty are Hybrid, all Faculty are still assigned a private office.

Scenario One will provide an upgraded experience that:

- Modernizes the classroom with flexible settings to support active learning
- Extends the Student experience within the building beyond just the classroom
- Provides individual offices and workstations on a 1:1 ratio
- Promotes interaction between Faculty members through the community concept
- Supports informal interaction between Faculty and Students

Design Characteristics

- All Faculty are hybrid, with no office sharing and time on campus is as it is today
- Faculty offices will be redesigned to better accommodate Student and Faculty interaction
- Faculty communities will be created with offices located around a Department Hub with a coffee area
- Faculty communities will have access to views and outdoor spaces if possible
- Classroom designs will be based on a “kit of parts” furniture concept to support a variety of configurations
- Classrooms reduced by 30% based on utilization
- Areas will be introduced where Students can congregate informally before and after class
- New processes and protocols will be introduced as appropriate to support enhancements in the Student and Faculty areas
- Moderate change management required

100% Hybrid Workers

(1:1 ratio)

Moderate level

of Change Management effort required

Shift in real estate

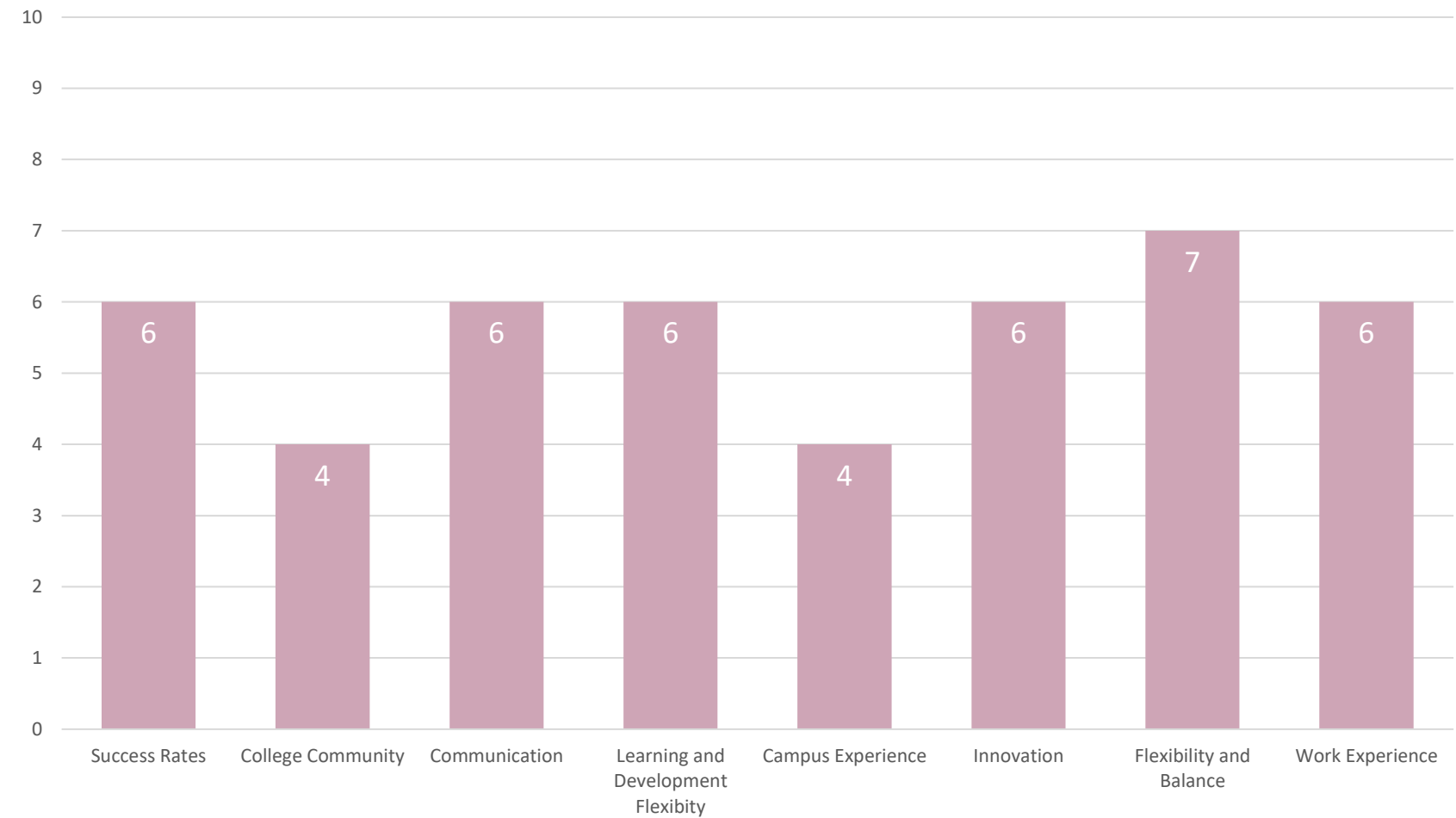
30% reduction in classrooms

Scenario One: Davies Building

Potential outcomes

- Flexibility + Balance is supported more highly than the other pillars since Faculty maintain their current hybrid approach, their assigned offices and have an enhanced ability to connect with colleagues and Students through the introduction of collaborative and social spaces
- Success Rates could be positively impacted by the creation of flexible classrooms that support a variety of teaching and learning styles
- Areas will be introduced where Students can congregate informally before and after class supporting a moderate degree of Learning Flexibility
- The exchange of ideas will be increased by bringing people together, through increased in-person presence which should result in more Innovation and an improved Work Experience
- Communication is supported by increased interactions in the social and collaborative spaces
- College Community and sense of belonging is supported to a lesser degree because the focus is primarily on the Faculty Community versus the College Community as a whole
- The Campus Experience is slightly enhanced because of the variety of classrooms and spaces to increase Student interaction

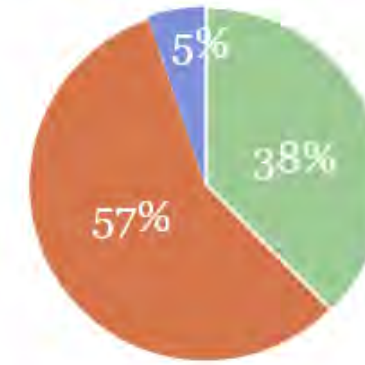
**Davies Building Experience
Scenario One**



The chart above indicates how the Scenario supports the Pillars ranked by ARC Executive Team. The Pillars are rated from 1-10 in each scenario.

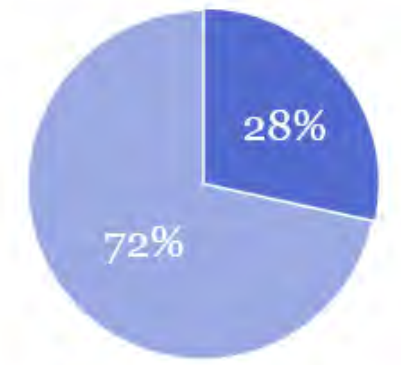
Scenario One: Davies Building First Floor

Concept Zones

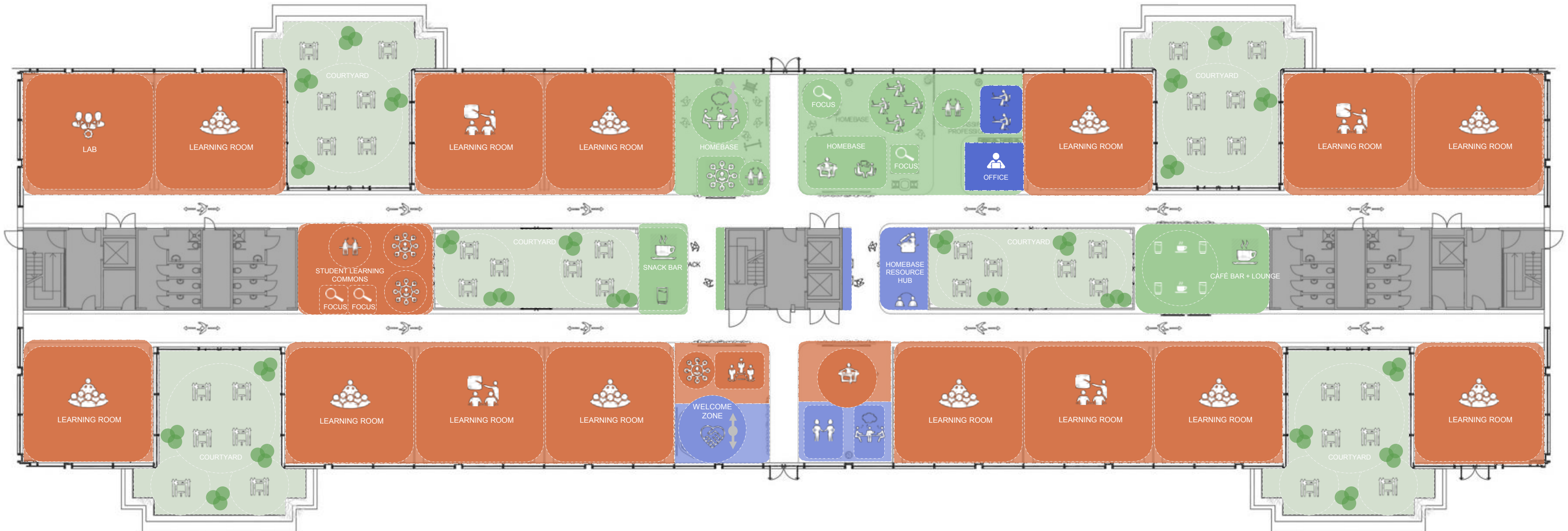


■ CONNECTION ■ LEARNING ■ COMMUNITY

I + We Space

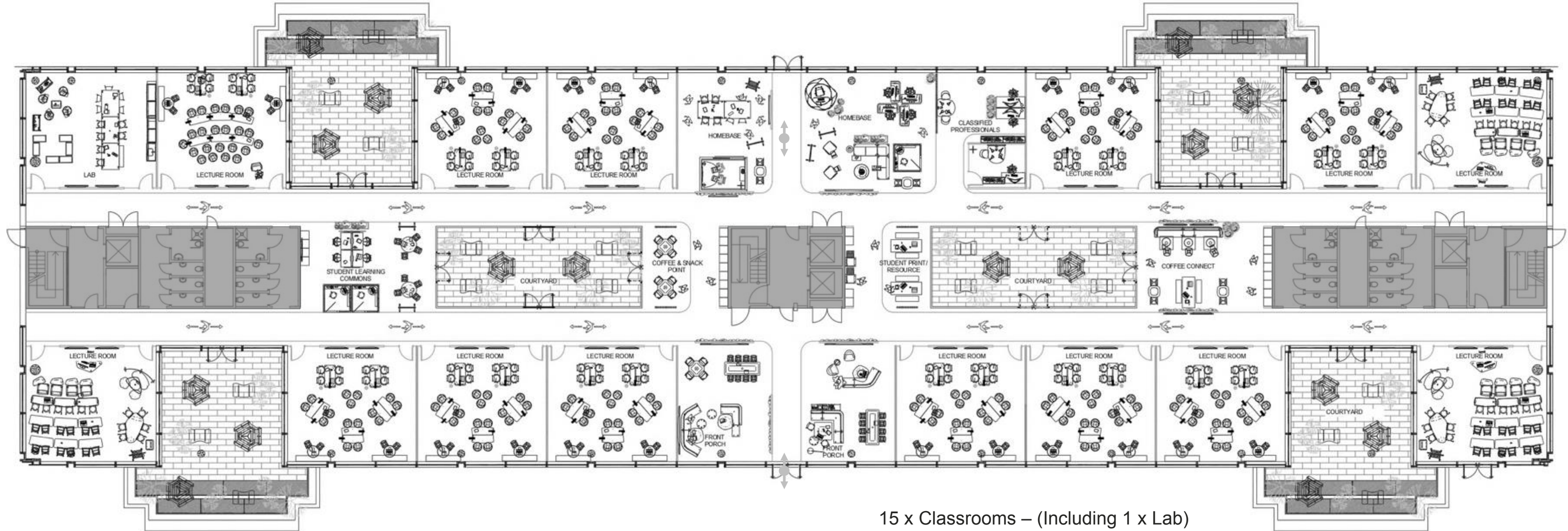


■ I Space ■ We Space



Scenario One: Davies Building

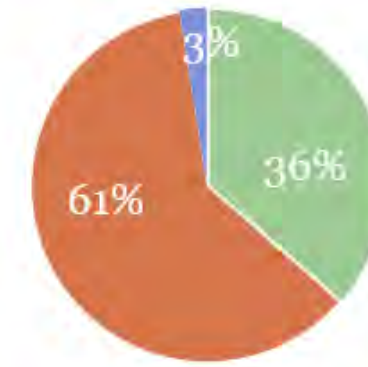
First Floor



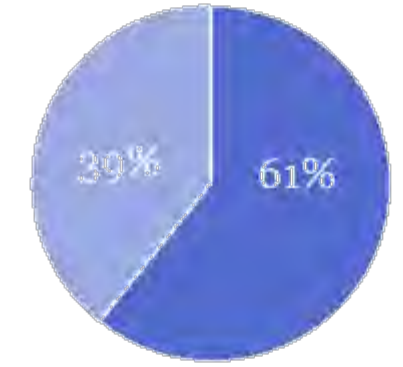
- 15 x Classrooms – (Including 1 x Lab)
- 1 x Homebase including:
 - 1 x Counsellor Office
 - 2 x Classified Professionals Workstations

Scenario One: Davies Building Second Floor

Concept Zones

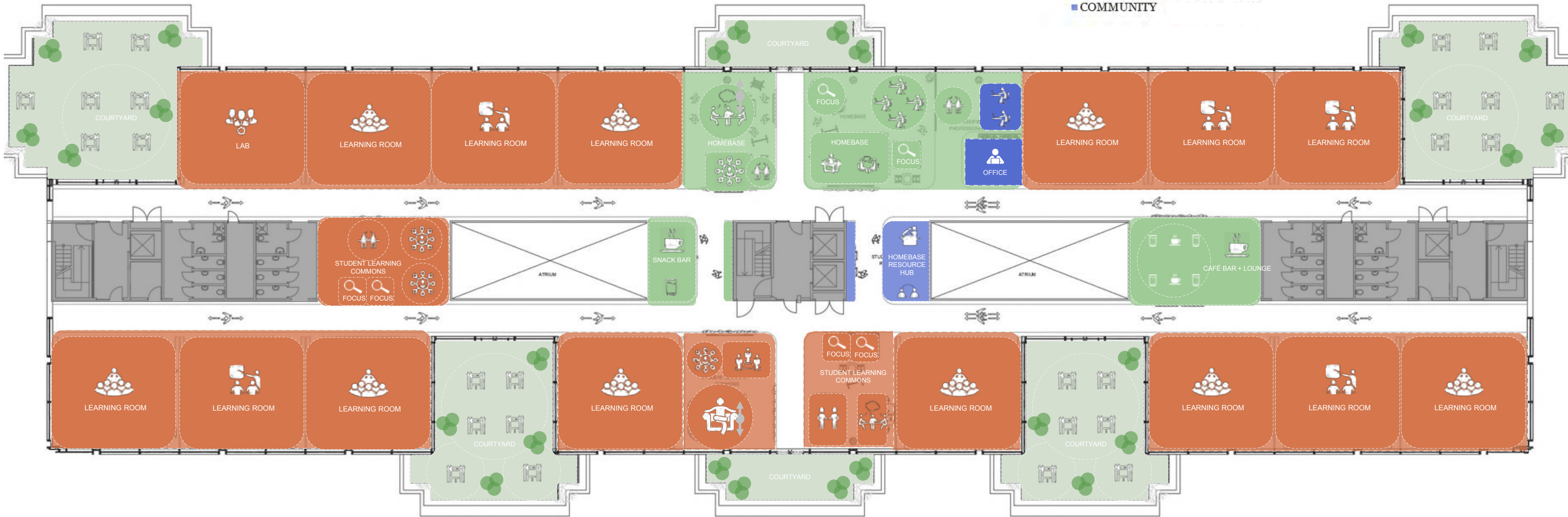


I + We Space

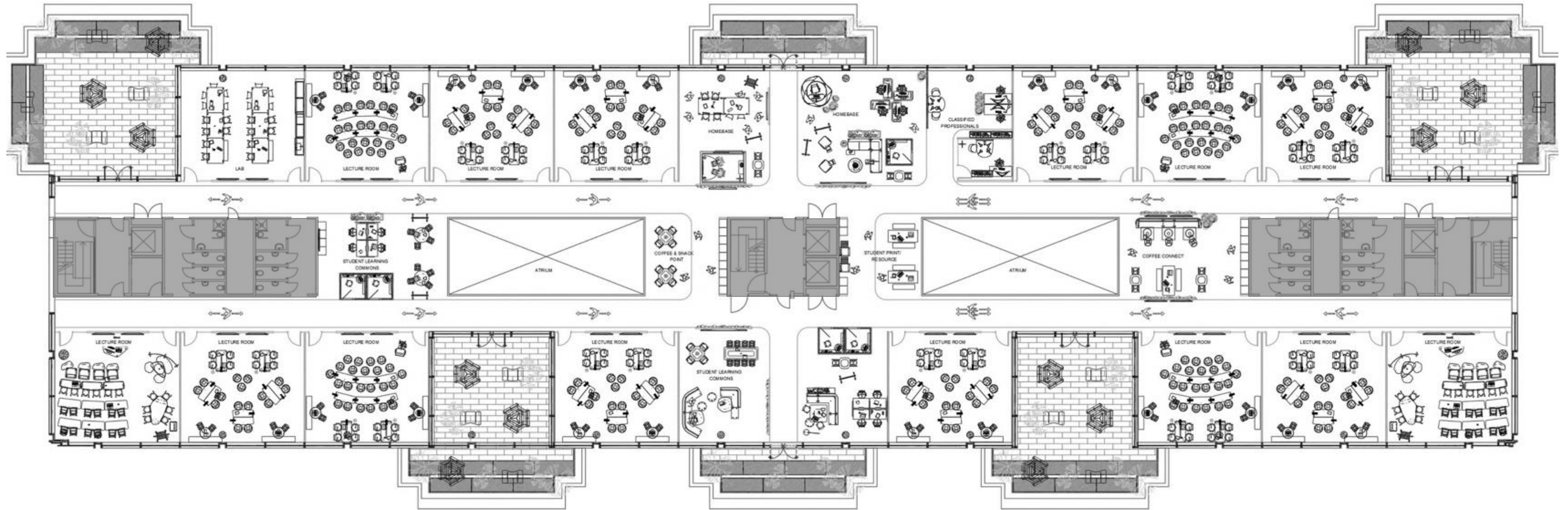


■ CONNECTION
■ LEARNING
■ COMMUNITY

■ I Space
■ We Space



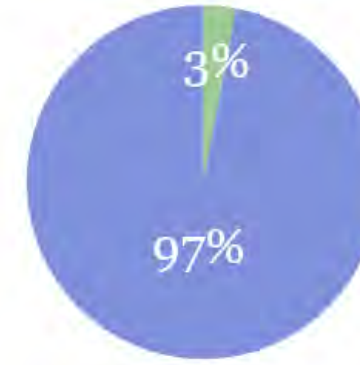
Scenario One: Davies Building Second Floor



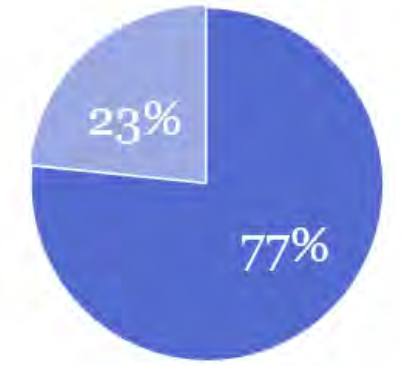
- 15 x Classrooms – (Including 1 x Lab)
- 1 x Homebase including:
 - 1 x Counsellor Office
 - 2 x Classified Professionals Workstations

Scenario One: Davies Building Third Floor

Concept Zones

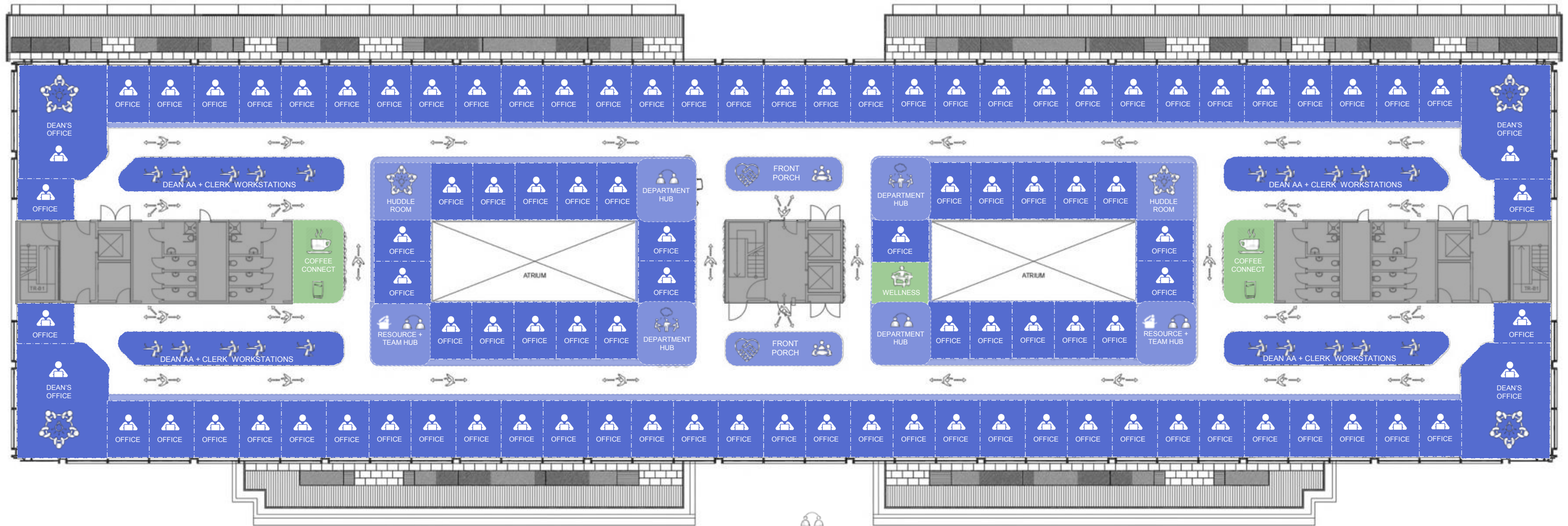


I + We Space

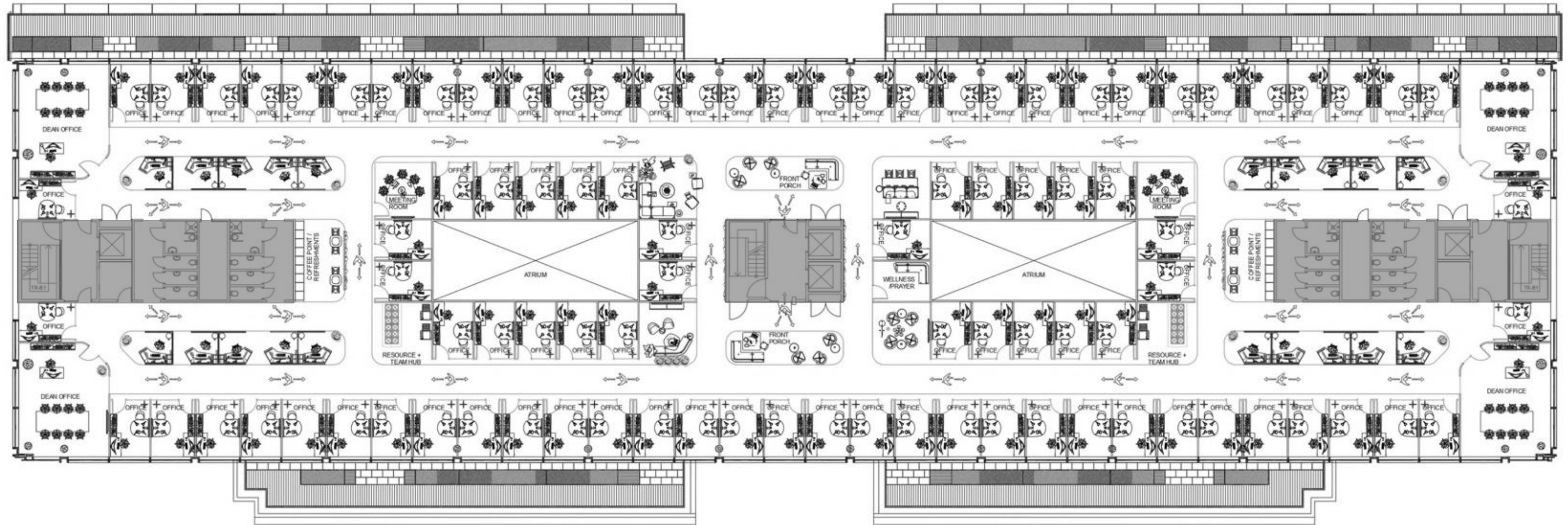


■ CONNECTION
■ COMMUNITY

■ I Space ■ We Space



Scenario One: Davies Building Third Floor



	Number People	% Population	Sharing Ratio	Req. Seats
Resident	0	0%	1	0
Hybrid	117	100%	1	117
Remote	0	0%	1	0
	117	100%		117
			Offices	93
			Workstations	20
			Deans Office	4

4 x Deans Offices
93 x Standard Offices
20 x Workstations

Scenario Two: Davies Building

Davies Hall redefined for an upgraded experience

In Scenario Two the concepts of Scenario One will be further reimagined and the sharing of Faculty offices will be introduced by implementing an office sharing ratio of 2:1. The resulting excess space will be used to expand and enhance Faculty communities and Student interaction areas.

Scenario Two will provide an upgraded learning experience and further enhanced Student and Faculty interactions that:

- Offers Students an enhanced learning experience before, during and after classes
- Better matches the office solution with Faculty work patterns
- Provides Faculty an enhanced work experience through a broad range of settings
- Leverages a hybrid workforce to better utilize square footage through sharing offices

Design Characteristics in addition to Scenario One

- Faculty offices are designed to accommodate the workstyle and artifacts of two Faculty members assigned to an office
- Faculty communities will be designed with a wider range of unassigned drop-in spaces for Faculty to work when they don't need their private office
- Expanded areas where Students can congregate informally before and after class
- Settings will be considered for Students to take online classes while on campus
- New processes and protocols will be introduced as appropriate to support new workstyles and sharing
- Significant change management required

100% Hybrid Workers

(2:1 ratio)

Moderate level

of Change Management effort required

Shift in real estate

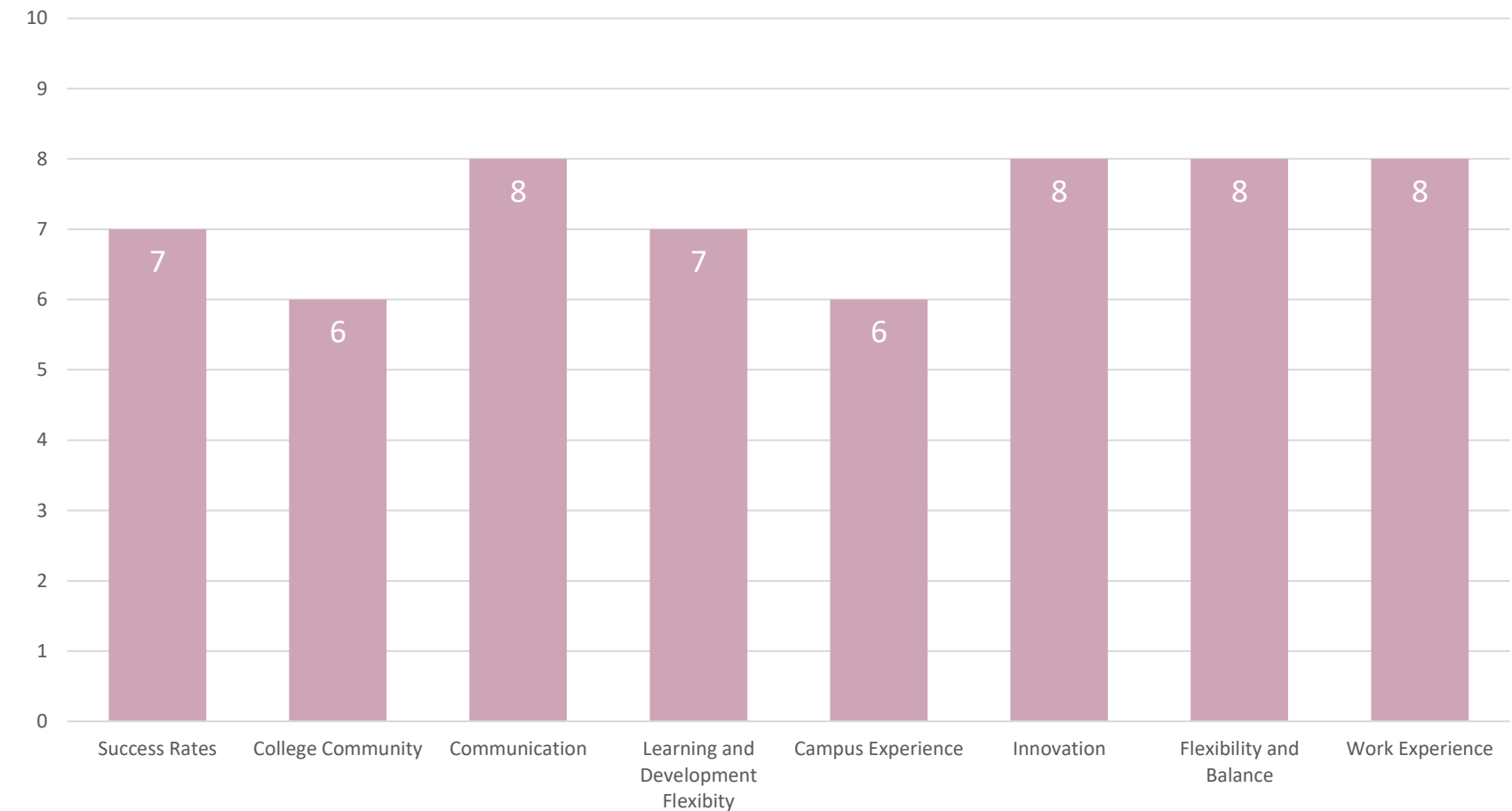
30% reduction in classrooms + 24% real estate reduction due to Faculty office sharing

Scenario Two: Davies Building

Potential outcomes

- By introducing the concept of shared offices in Scenario Two the solution more accurately matches usage levels, and more space can be reimaged into common areas to promote presence and increase energy that comes from people being together
- The connection spaces should lead to the exchange of more Innovative ideas, creating a stronger Learning Community
- Flexibility + Balance is enhanced by offering Faculty a variety of places to work when they come to Davies Hall
- The Faculty community design, which includes unassigned private spaces and connection spaces, should entice Faculty to come to Davies Hall and improve the Work Experience
- Areas will be introduced where Students can congregate informally before and after class providing a greater degree of Learning Flexibility than Scenario One
- Communication is enhanced by increased interactions in the social and collaborative spaces
- Success Rates will continue to be positively impacted by the creation of flexible classrooms as well as cross learning between Students that occurs in their connection spaces
- College Community and the Campus Experience are supported to a greater degree than Scenario One because there are more opportunities to bring people together, creating a sense of belonging and inclusion

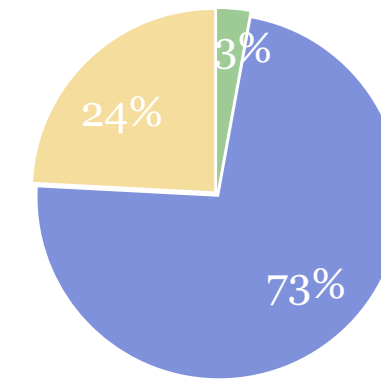
**Davies Building Experience
Scenario Two**



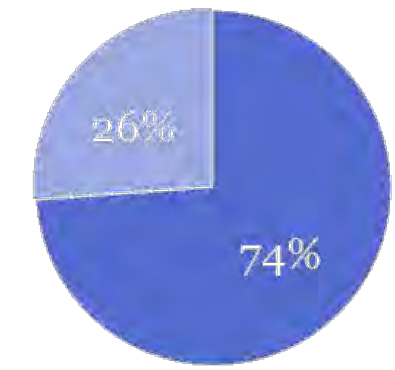
The chart above indicates how the Scenario supports the Pillars ranked by ARC Executive Team. The Pillars are rated from 1-10 in each scenario.

Scenario Two: Davies Building Third Floor

Concept Zones



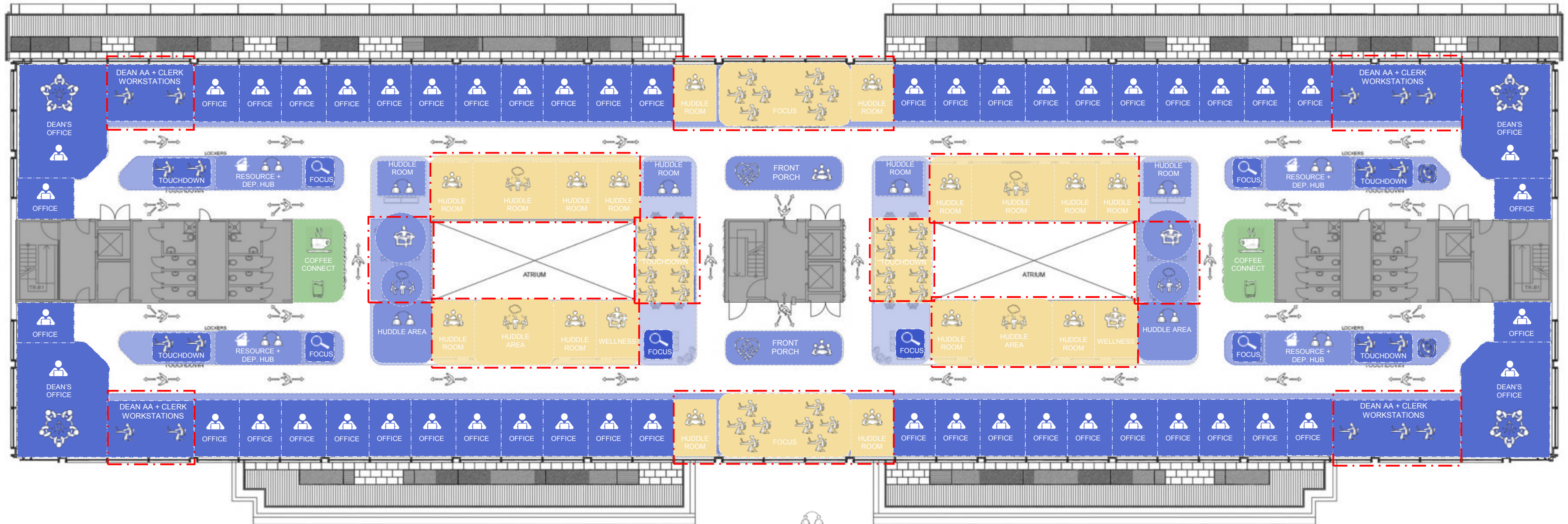
I + We Space



*space saving includes circulation

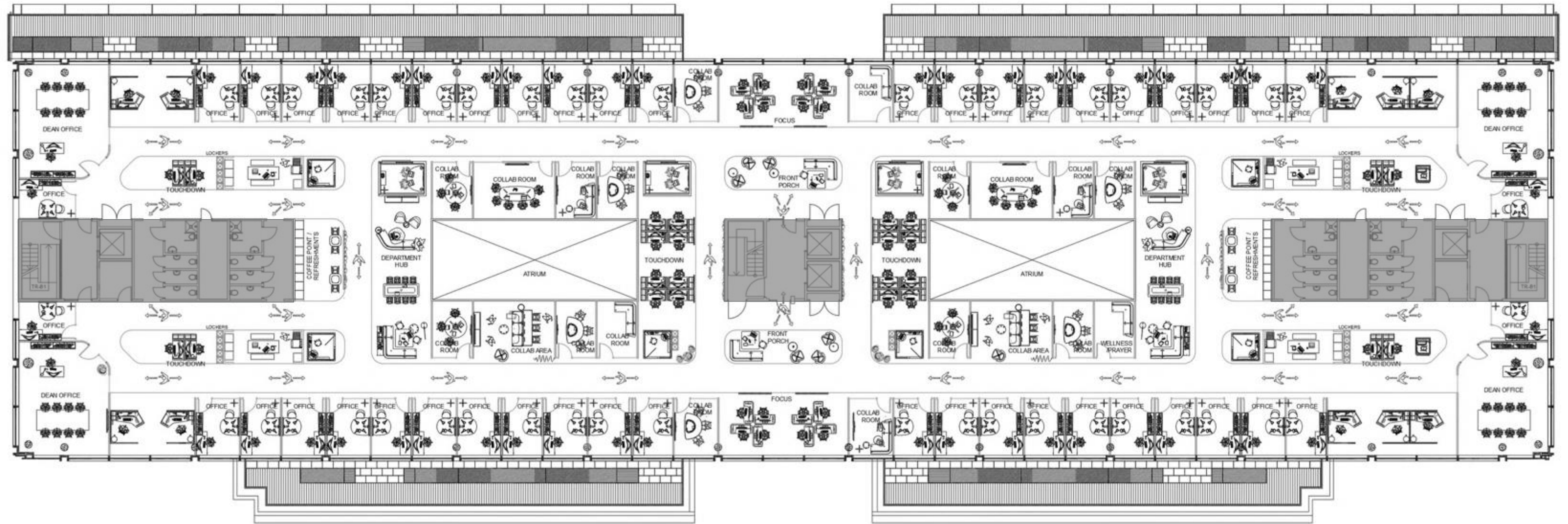
- CONNECTION
- LEARNING
- COMMUNITY
- SPACE SAVING

■ I Space ■ We Space



47 x offices removed
(versus scenario 1)

Scenario Two: Davies Building Third Floor



	Number People	% Population	Sharing Ratio	Req. Seats
Resident	4	0%	1	4
Hybrid	113	100%	2	56.5
Remote	0	0%	1	0
	117	100%		60.5
			Offices	46.5
			Workstations	10
			Deans Office	4

4 x Deans Offices
46 x Standard Offices
10 x Workstations

Scenario Three: Davies Building

Davies Hall transformed for an upgraded experience

In Scenario Three, as in Scenarios One and Two, the objective is to arrange Faculty offices in centralized neighborhoods. However, by implementing an office sharing ratio of 3:1, this will free up additional space and enhance Faculty neighborhoods and Student interaction areas.

Scenario three will provide an upgraded experience that:

- Offers Students a further enhanced learning experience before, during and after classes
- Provides Faculty a further enhanced work experience through a broad range of settings
- Further leverages a highly hybrid workforce to better utilize square footage through sharing offices at an increased sharing ratio

Design Characteristics in addition to Scenarios One + Two

- Faculty offices are assigned to a department but unassigned to specific Faculty Members and are shared on a 3:1 ratio
- The use of the Faculty The use of the offices will be determined and managed by the department
- offices will be determined and managed by the department
- Additional unassigned enclosed spaces will be included in Faculty community to support individual concentration and small group interaction
- The design within the Faculty community will consider the importance of the display of Faculty credentials and department branding

100% Hybrid Workers

(3:1 ratio)

Significant level

of Change Management effort required

Shift in real estate

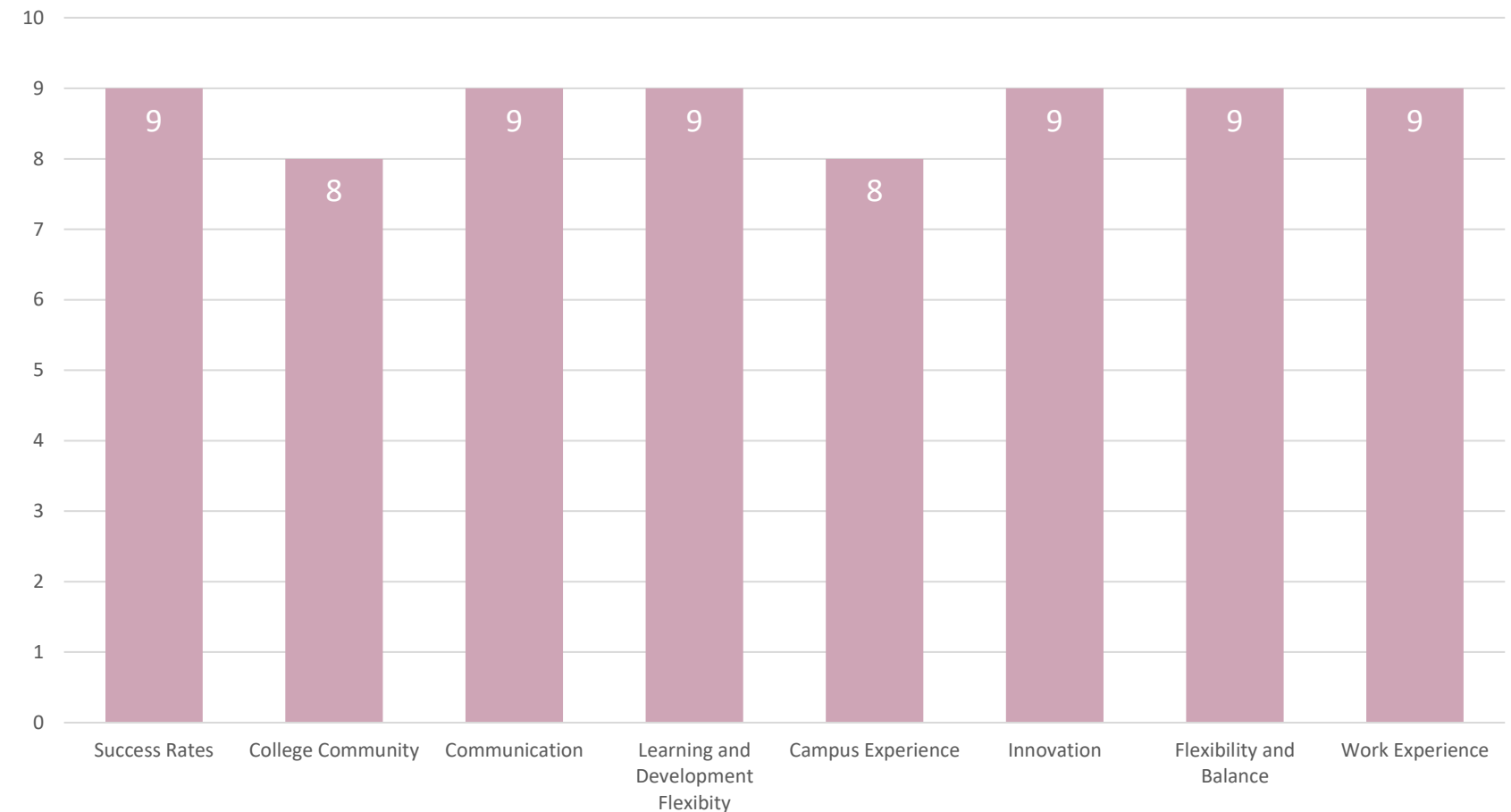
30% reduction in classrooms + 37% real estate reduction due to Faculty office sharing

Scenario Three: Davies Building

Potential outcomes

- By transforming the available square footage in Scenario Three, all Pillars can reach their maximum potential, positively impacting the learning and work experience
- By implementing an office sharing ratio of 3:1, additional space will be freed to enhance Faculty neighborhoods, Student interaction areas and community spaces
- In Scenario Three Flexibility + Balance is further promoted; Innovation is accelerated; and the on-site Work Experience is significantly enhanced
- Students will view the connection areas in Davies Hall as a preferred destination to study and socialize with each other which will positively impact their learning and lead to greater success
- College Community and the Campus Experience are supported to a greater degree than Scenario Two because there are more opportunities to bring people together, creating a sense of belonging and inclusion
- Communication is further enhanced by increased interactions in the social and collaborative spaces

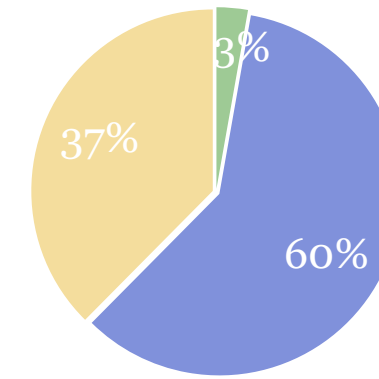
**Davies Building Experience
Scenario Three**



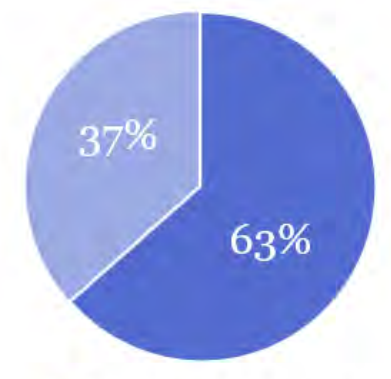
The chart above indicates how the Scenario supports the Pillars ranked by ARC Executive Team. The Pillars are rated from 1-10 in each scenario.

Scenario Three: Davies Building Third Floor

Concept Zones



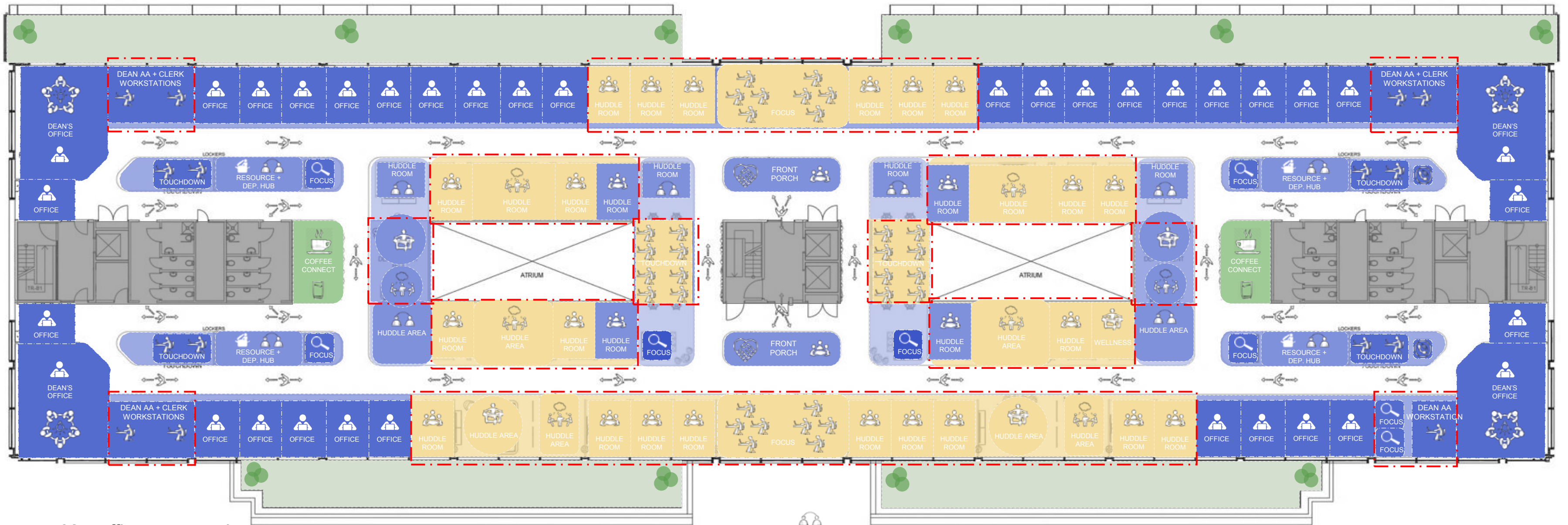
I + We Space



*space saving includes circulation

- CONNECTION
- LEARNING
- COMMUNITY
- SPACE SAVING

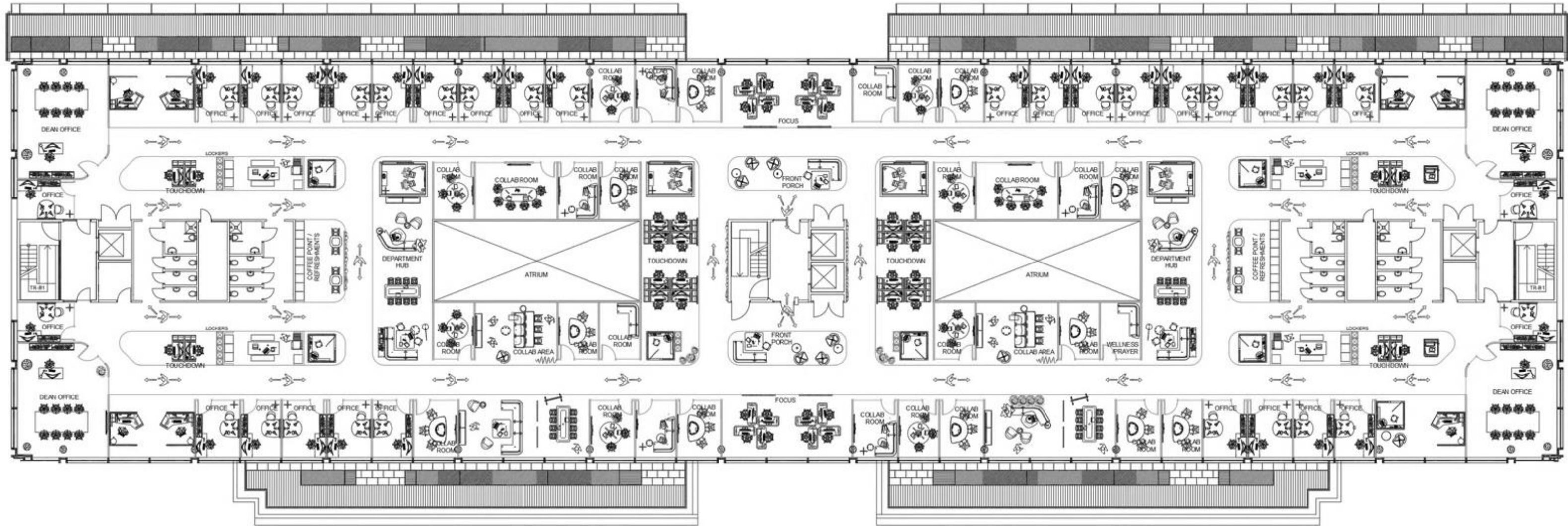
■ I Space ■ We Space



 62 x offices removed
(versus scenario 1)

Scenario Three: Davies Building

Third Floor



	Number People	% Population	Sharing Ratio	Req. Seats
Resident	4	0%	1	4
Hybrid	113	100%	3	37.7
Remote	0	0%	1	0
	117	100%		41.7
			Offices	31
			Workstations	6.7
			Deans Office	4

4 x Deans Offices
 31 x Standard Offices
 7 x Workstations

Scenarios One, Two and Three: Davies Building First Floor

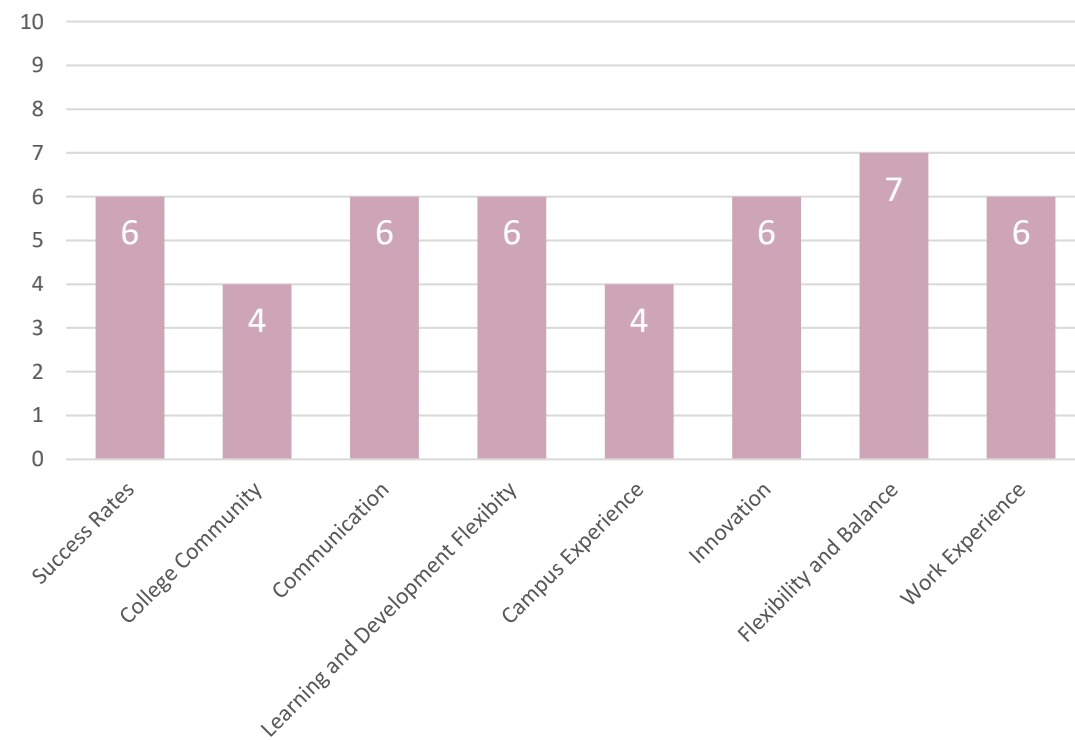


Scenario Two: Davies Building Third Floor

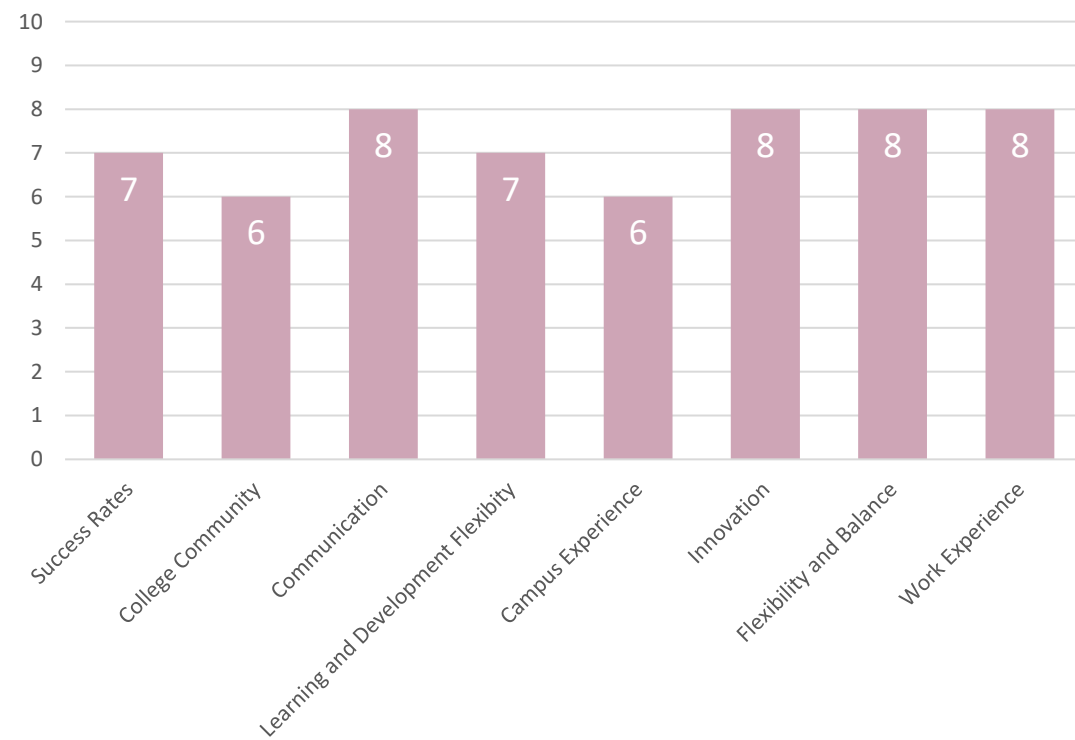


Scenario Comparison: Davies Building

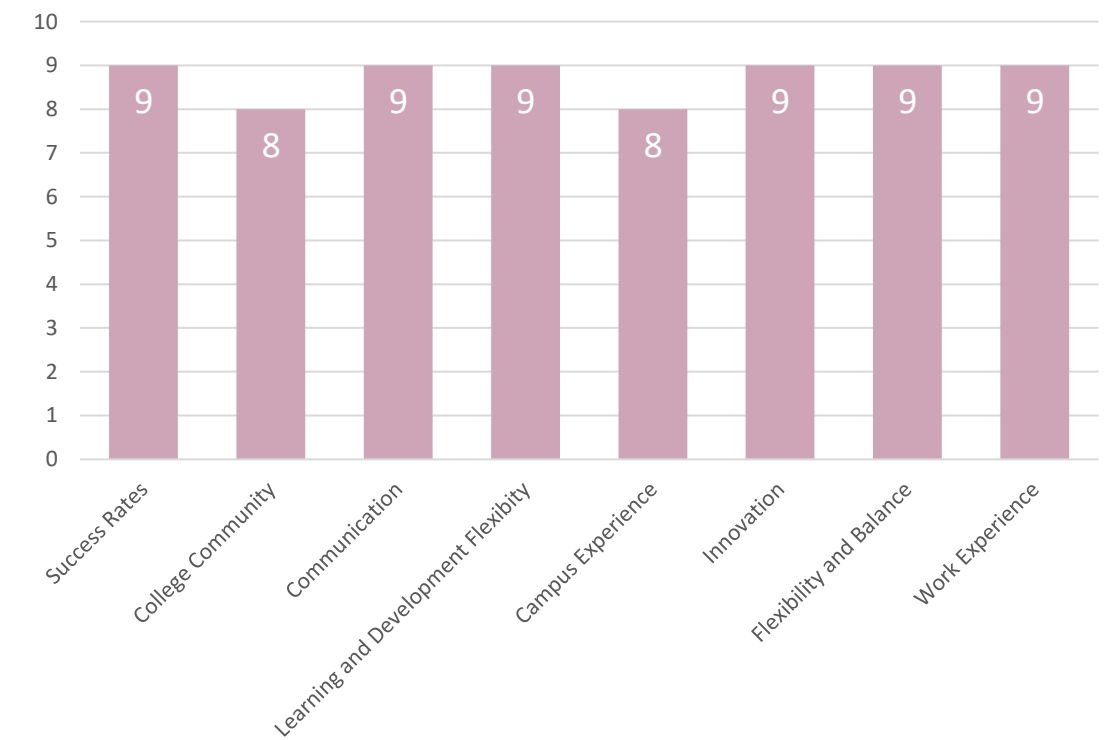
Scenario One



Scenario Two



Scenario Three



The charts above indicate how each Scenario supports the Pillars ranked by ARC Leadership Team. The Pillars are rated from 1-10 in each scenario.

05. Scenario Development

Scenarios Overview

- Welcome + Support Center

Scenarios Overview: Welcome + Support Center

Classified Professionals and Students

Note – Welcome and Support Center building interior will be reconceptualized and nonstructural walls will possibly be removed, but no other constraints are included in these scenarios

As Was

Resident (1:1 ratio, 80-100% time)	100%
Hybrid	0%
Remote	0%
Temporary Classified (varies, varies)	N/A

- Hierarchical planning methodology
- Limited group, collaborative and social spaces for employees and students
- Offices and workstations owned
- Limited hybrid program
- Temporary Classified of approx. 120 people in shared “swing seats” with a variable ratio
- Highly compartmentalized departmental space due to high number of interior walls

Scenario 1 *

Resident (1:1 ratio, 80-100% time)	70%
Hybrid (1:1 ratio, 60% time)	30%
Remote	0%
Temporary Classified (varies, varies)	N/A

- Hierarchical planning methodology (updated)
- Formal updated hybrid program for non-peak periods
- Office to workstation ratio will be unchanged
- Updated design in office areas with increase in collaborative space, etc. if possible
- The Welcome Lobby is redesigned
- Limited adjustment of walls
- Temporary Classified seating unchanged
- Outdoor space integrated if possible
- Moderate change management required

* **Scenario One was removed from the design and modeling effort (See comments below)**

Scenario 2

Resident (1:1 ratio, 80-100% time)	40%
Hybrid (1.5:1 ratio, 60% time)	50%
Remote (10:1 ratio)	10%
Temporary Classified (3:1 ratio, varies)	N/A

- Activity-based work planning methodology
- Formal updated hybrid program for non-peak periods
- Formal desk sharing introduced; sharing of desks and offices for hybrid and remote workers at 1.5:1 and 10:1 + Temporary Classified share at 3:1
- Quantity of group, collaborative and social spaces **enhanced** over scenario 1 with increased options for hybrid / remote workers
- The Welcome Lobby is evolved
- Moderate adjustment of walls
- Significant change management required

Scenario 3

Resident (1:1 ratio, 80-100% time)	20%
Hybrid (2.5:1 ratio, 60% time)	70%
Remote (10:1 ratio)	10%
Temporary Classified(5:1 ratio, varies)	N/A

- Activity-based work planning methodology
- Formal updated hybrid program for non-peak periods
- Desk sharing enhanced with 70% hybrid sharing at 2:5:1 + Temporary Classified share at 5:1
- Quantity of group, collaborative and social spaces **significantly enhanced** over scenario 2
- Front porches and transition zones for departments introduced
- Non-structural walls are removed or repositioned
- Significant change management required

Scenario As Is: Welcome + Support Center

Classified Professionals + Student Experience

The current environment in the Welcome Center is designed for Student Services, Classified Professionals (Full Time and Temporary) and Faculty. The workplace has been developed using a hierarchical planning methodology, where space is allocated by level. The layout is predominantly workstations surrounded by private offices. With a limited range of settings, the design is somewhat standardized and repetitive. There is a large number of Temporary Classified workforce, approximately 120 people, who sit in workstations or offices. All workstations and offices are assigned with a 1:1 ratio except for the Temporary Classified workforce who share with a variable ratio.

Prior to the pandemic, people worked in the office every day. However currently many Classified Professionals are hybrid workers (4 days a week in the office), and this program is limited and evolving.

There are many physical barriers (walls and doors) which sub divide and compartmentalize the space offering limited flexibility. The combination of enclosed spaces, the density of workstations and temporary accommodation of staff from the Admin Building has resulted in an environment that is tightly populated.

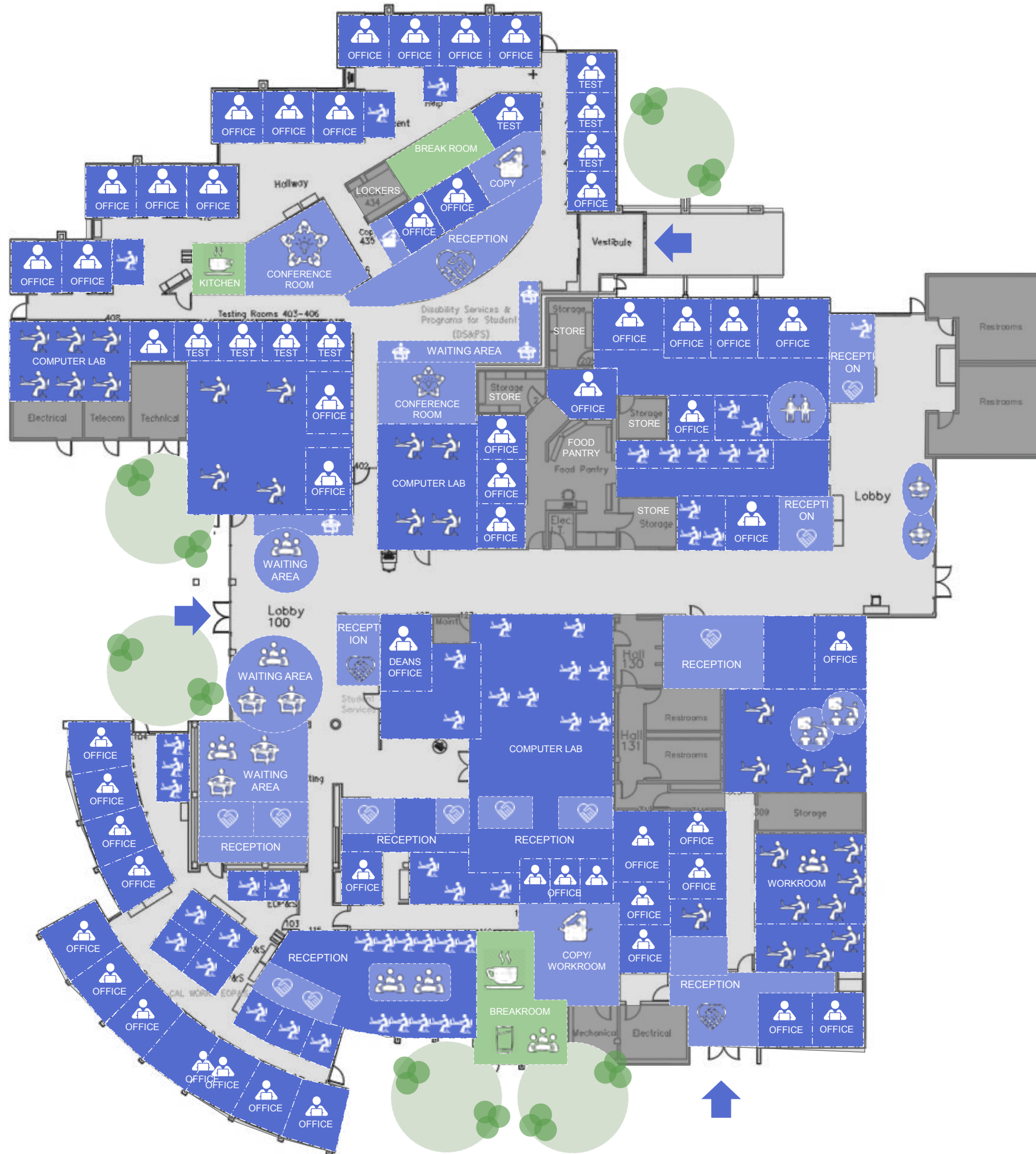
The main lobby of the building is designed for orienting Students to the appropriate Services including Financial Aid, Admissions and Records and Business Services. Students register for the services they are seeking at a Check-In Monitor at the Welcome Desk. Some Students wait in the open area for their turn, which is acknowledged on digital displays. There is an ebb and flow of Students in this space depending on semester timing. Each program has an adjacent area often set up with computers for Students to access the services.

This building also supports a number of programs including Beaver Cares, CalWORKs, Career & Pathways, DSPS, EOP&S, Transfer Center, TRIO Center and Veteran Services. Each have their own dedicated area. The HomeBase for People, Culture & Society is also temporarily located here.

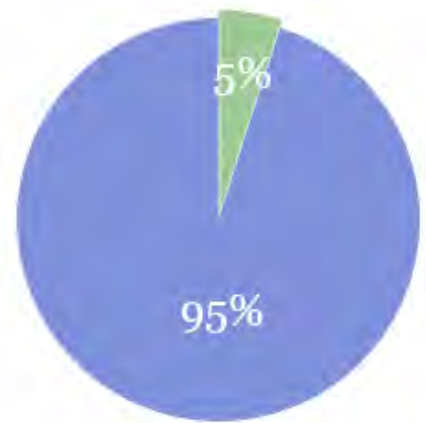
Defining Characteristics

- The space, Departments and Programs are segmented and compartmentalized by walls, doors, offices and hallways
- Wayfinding is challenging due to the number of barriers and limited signage
- Departments are comprised of predominantly private offices that open onto a workstation area with very little collaborative space
- Some Department and Program areas lack space which support confidential conversations for Student interactions
- Sharing of individual space only occurs for a limited number of flexible workers
- Coffee stations are ad hoc and the official break room does not appear to be well used
- Personalization of workstations and offices along with artifacts are visible throughout the building
- Team branding of spaces exists but vary greatly across teams
- The space is heavily weighted to individual settings with limited group and collaborative settings
- Limited hybrid program for all worker
- Student check-in occurs digitally in the lobby and Students transition to the appropriate area for their service interaction

As Is: Welcome + Support Center

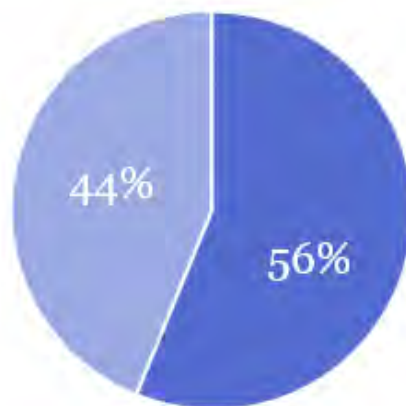


Concept Zones



■ CONNECTION ■ COMMUNITY

I + We Space



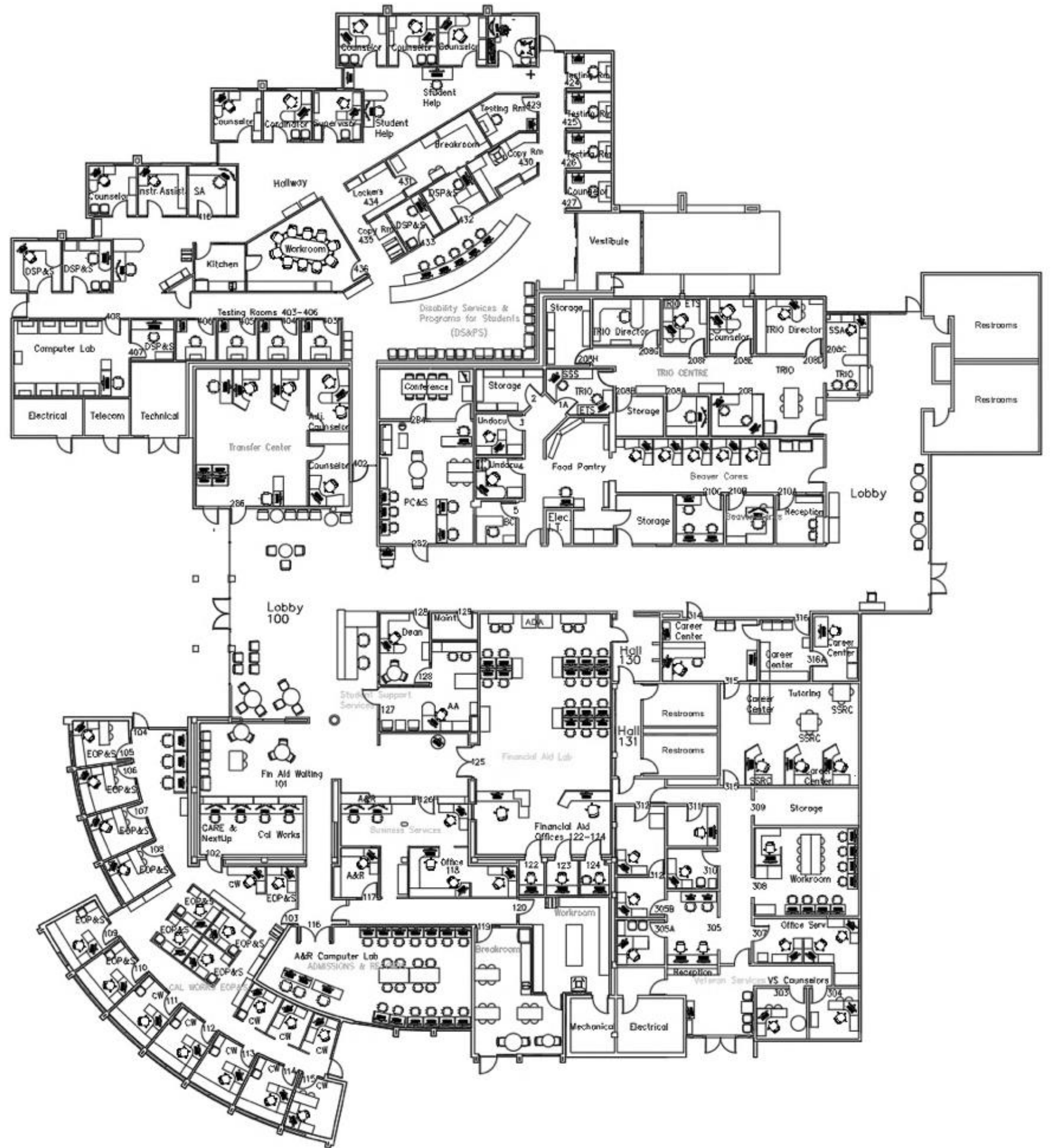
■ I Space ■ We Space

As Is: Welcome + Support Center

As-Is

	Number People	% Population	Sharing Ratio	Req. Seats	% People
Resident	57	100%	1	57	32%
Hybrid	0	0%	1	0	
Temporary	120	N/A	varies	????	68%
Remote	0	0%	1	0	
	177	100%		57	100%

Offices	11.3
Workstations	45.7
Swing Seats	?????



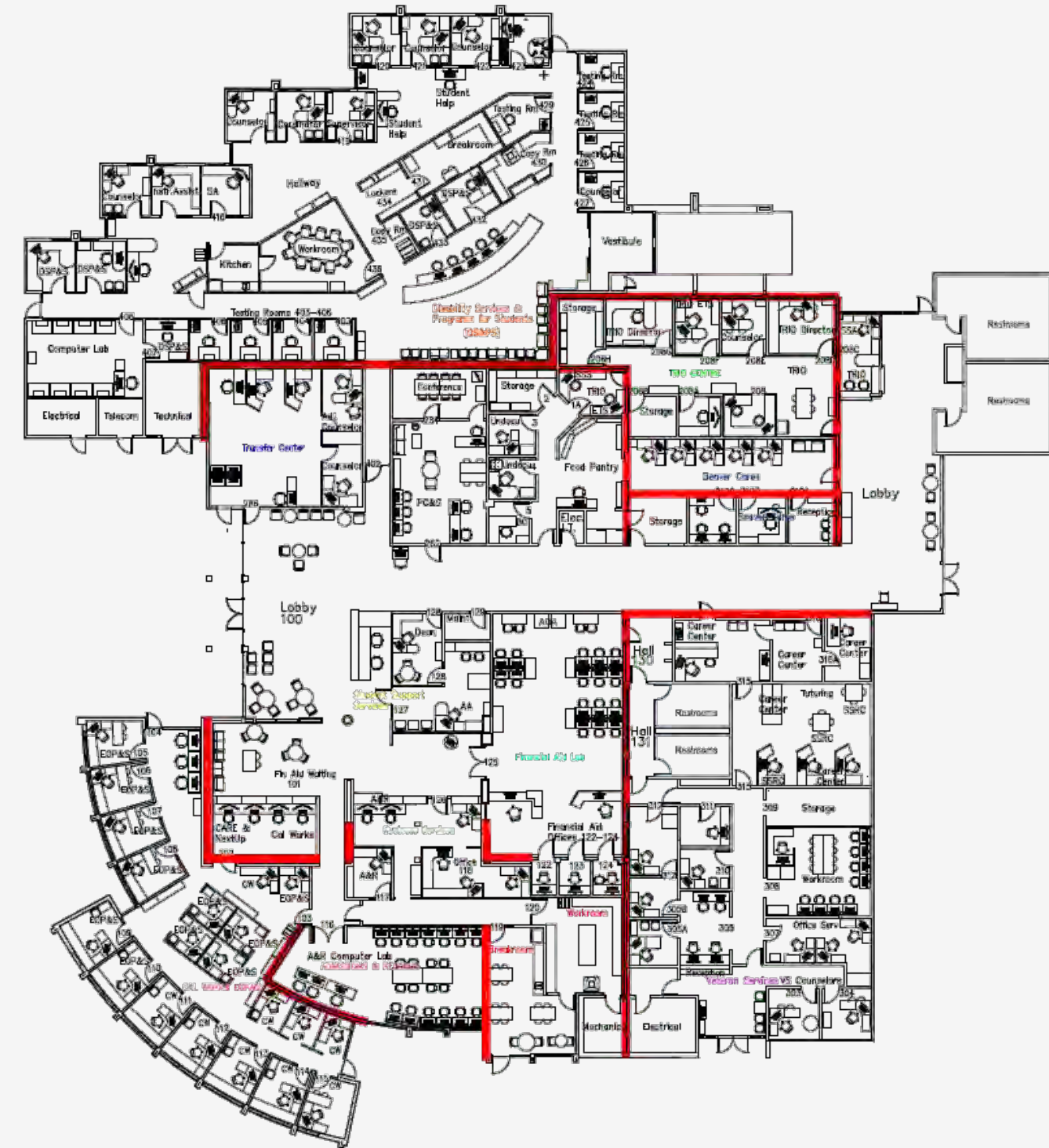
Scenario One: Welcome + Support Center

Scenario One was removed from the design and modeling effort.

Our initial modeling led to the realization that the constraints of this scenario offer limited improvements in employee experience and little to no real estate savings opportunity.

Key considerations include the following:

- Multiple buildings integrated into one with many structural walls
- Building envelope designed with unique shapes which result in areas which are difficult to integrate and optimize
- Space divided into many generally small areas
- New furniture applications could provide a somewhat improved experience, but the gain is not likely worth the investment required



Note red lines indicate internal structural walls

Scenario One: Welcome + Support Center

Welcome + Support Center refined for an upgraded experience

In Scenario One the goal is to make better use of the space to build community and improve common space utilization for all employees, Students and guests. By making limited adjustments to the existing infrastructure these spaces will be better connected to each other instead of being segmented.

In this and later Scenarios the Welcome Lobby for Student Services is redesigned to increase utilization and provide enhanced experience for Students, Faculty and Classified Professionals throughout the year.

Scenario One introduces a more defined and formal Hybrid solution. This is done by assigning profiles to individuals such as: Resident workers who come to the office 4-5 days a week and Hybrid workers who come to the office 3 days a week in non-peak periods. While this scenario will maintain individual ownership of offices and provide equity for the hybrid policy, it will not maximize office space utilization. *Temporary Classified worker presence and seating is unchanged from As-Is.*

Scenario One will provide people with an upgraded work experience that:

- Leverages existing offices and workstations on a 1:1 ratio
- Supports equitable hybrid working during non-peak periods
- Provides an enhanced community experience in common areas
- Enhances Student experience by offering multi-functional spaces

Design Characteristics

- The majority of workers maintain their current work pattern of one day a week remote while 30% of workers are identified as more flexible workers
- Private offices and workstations are assigned on 1:1 ratio
- Updated design in office areas with increase in collaborative space, etc. if possible
- If possible, collaborative settings will increase in the common areas and will be sized to accommodate the average meeting size of 3 or less
- The Welcome Lobby is designed to encourage interaction and community within and across departments and with Students
- Adjacent outdoor spaces will be designed to support activities in the College Center in addition to being a transition zone to the rest of the Campus
- Digital and analog vertical display will be enhanced for communication, celebration, branding and wayfinding
- Elements of existing furniture and infrastructure will remain and be re-used as appropriate
- Limited adjustment or reimagining of walls
- The workspace design is supported by appropriate behavioral protocols and rituals to ensure community building, equity across groups, appropriate levels of privacy and sufficient density

70% Resident Workers (non temp)
in office 4/5 days a week in non-peak periods
(1:1 ratio)

30% Hybrid Workers (non temp)
in office 3 days a week in non-peak periods
(1:1 ratio)

0% Remote Workers (non temp)
N/A

Temporary Classified Workers
(current variable ratio)

Moderate to significant level
of Change Management effort required

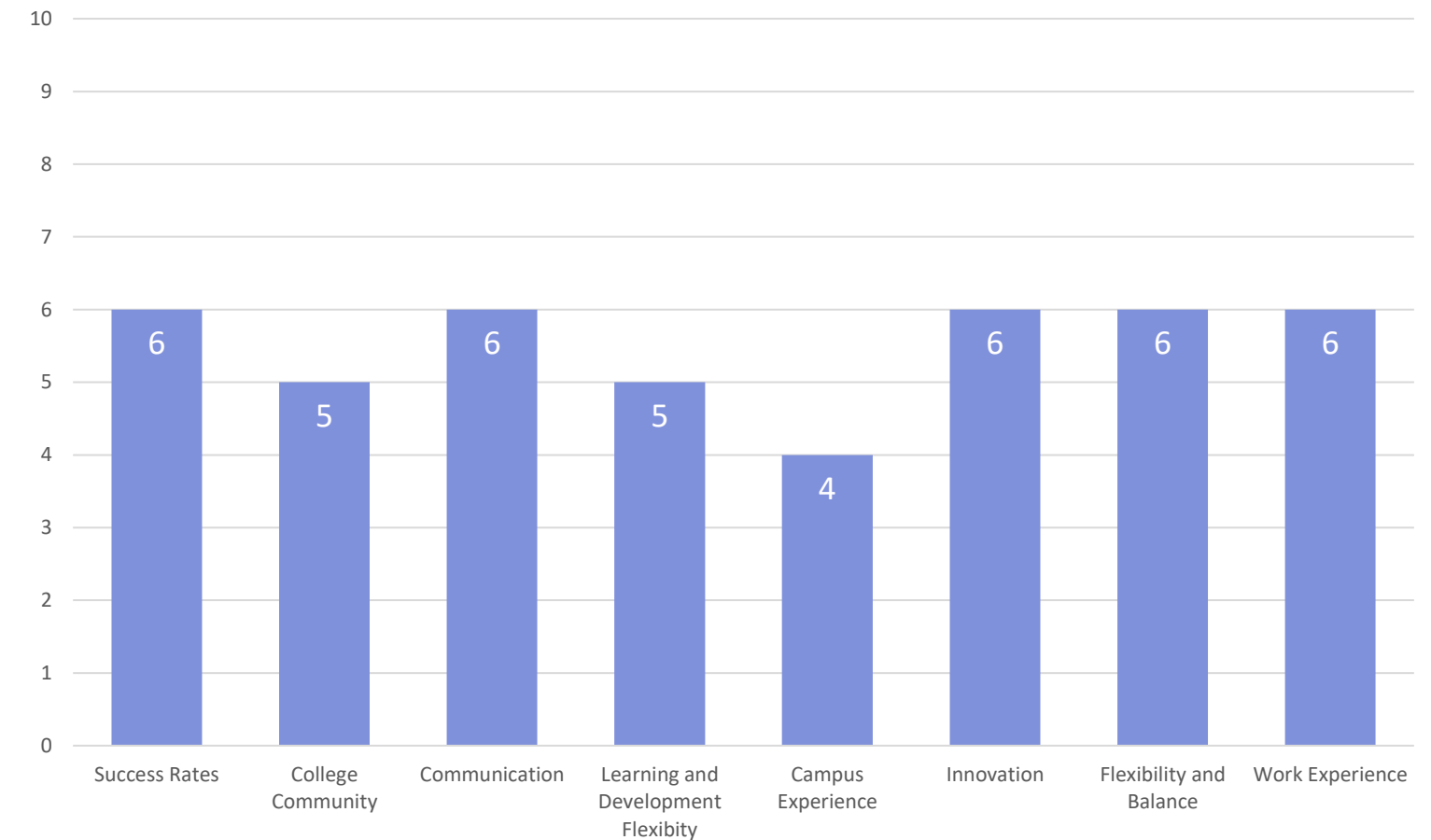
Shift in real estate
None

Scenario One: Welcome + Support Center

Potential outcomes

- College Community is slightly improved by making limited adjustments to walls and enhancing the Welcome Lobby to encourage connection between Students and Staff
- Scenario One introduces a slightly expanded hybrid program and allows for all offices and workstations to remain as existing on a 1:1 ratio which moderately increases Flexibility + Balance
- Innovation and Work Experience have the potential to increase due to the introduction of places for Staff to connect and work together
- Communication will be enhanced by opening up the space and incorporating more digital and analog signage and branding
- Campus Experience is not significantly impacted as this stand-alone facility focuses on supporting Student Services without connection to learning or social spaces

**Welcome + Support Center Experience
Scenario One**



The chart above indicates how the Scenario supports the Pillars ranked by ARC Executive Team. The Pillars are rated from 1-10 in each scenario.

Scenario Two: Welcome + Support Center

Welcome + Support Center redefined for enhanced employee experience

Scenario Two further enhances experience and utilization of department, program and Student areas. By introducing moderate adjustments to the existing infrastructure/walls and opening up more spaces, it will allow better interconnection within departments.

This Scenario further evolves the Hybrid solution by introducing the Remote worker type and the sharing of offices and workstations. Also, the percentage of the population in each worker type evolves from Scenario One and Temporary Classified workers have a fixed sharing ratio.

The Welcome Lobby is further evolved to encourage interaction and community within and across departments and with Students.

This hybrid solution will free up space to evolve and enhance the community concept introduced in Scenario One, potentially offering a broader range of settings for individual and group activities.

Scenario Two will provide Employees and Students with an upgraded work experience that:

- Provides access to shared/unassigned spaces by hybrid workers
- Builds stronger community within departments
- Supports increased density during peak periods
- Optimizes square footage utilization with a variety of spaces

Design Characteristics in addition to Scenario One

- Private offices and workstations are assigned or shared based on worker profiles
- Introduces activity-based working and desk sharing
- Hybrid and Remote workers have access to shared workstations or offices on a **1.5:1** and **10:1** sharing ratio + Temporary Classified workers sharing ratio is **3:1**
- Percentage of Group space **moderately** increases to support team activity and Hybrid workers when they are in the office
- Enhanced Welcome Lobby
- Moderate structural changes to existing walls and infrastructure
- Increased settings and technologies to support a higher volume of virtual meetings
- Protocols, social contracts and processes are developed within and between departments to address the new way of working and ensure connections and team effectiveness
- New processes and protocols will be introduced as appropriate to support new workstyles and sharing

40% Resident Workers (non temp)
in office 4/5 days a week in non-peak periods
(1:1 ratio)

50% Hybrid Workers (non temp)
in office 3 days a week in non-peak periods
(1.5:1 ratio)

10% Remote Workers (non temp)
(10:1 sharing ratio)

Temporary Classified Workers
(3:1 sharing ratio)

Significant level
of Change Management effort required

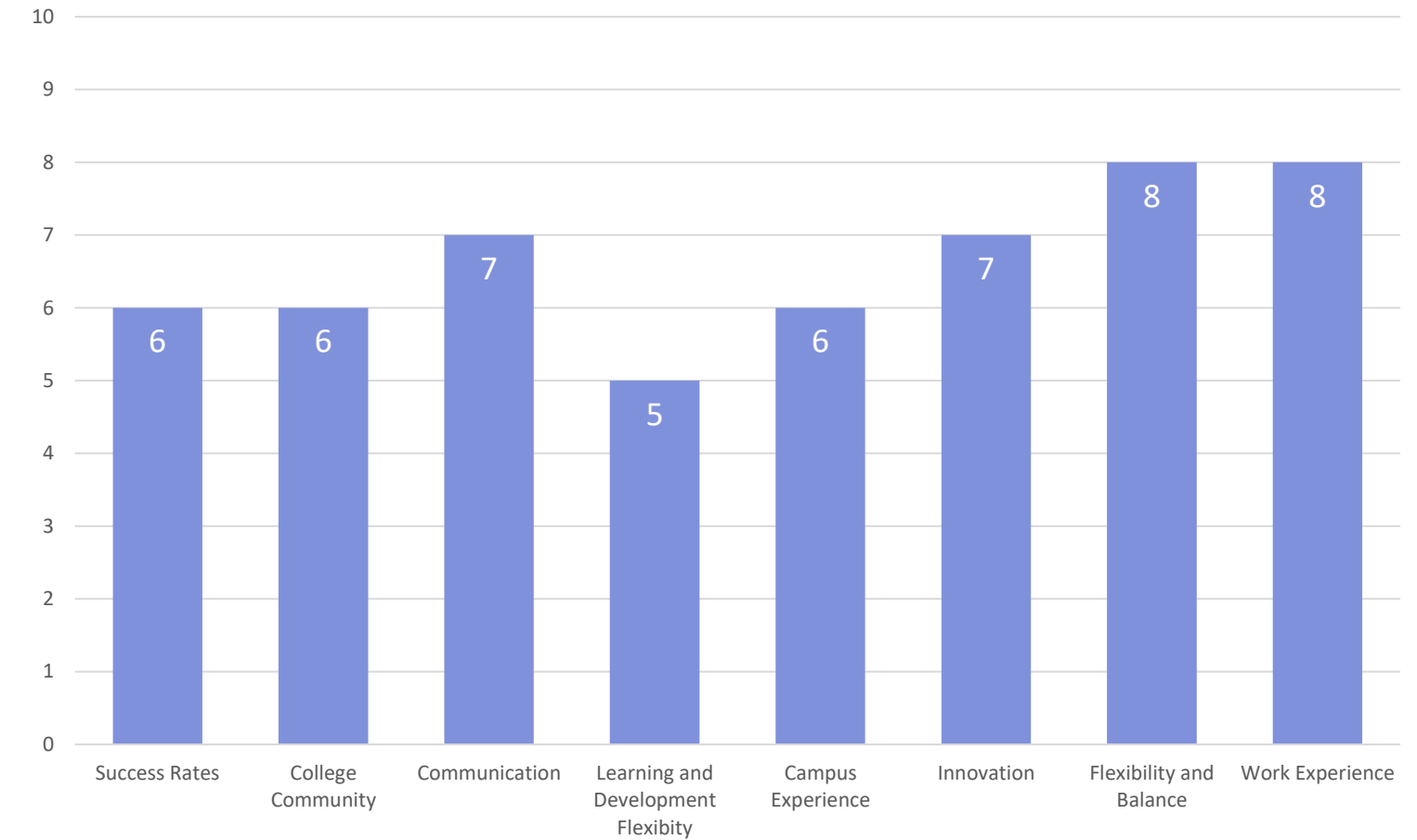
Shift in real estate
No saving in real estate

Scenario Two: Welcome + Support Center

Potential outcomes

- College Community is moderately improved by making additional adjustments to walls and further enhancing the Welcome Lobby to encourage connection between Students and Staff
- Scenario Two expands the hybrid program and introduces sharing of space which increases Flexibility and Balance
- Innovation and Work Experience will increase due to space reallocation and opportunities for additional places for Staff to connect and work together
- Communication will be further enhanced by removal of additional walls and incorporating increased digital and analog signage and branding
- Campus Experience is not significantly impacted as this stand-alone facility focuses on supporting Student Services without connection to learning or social spaces

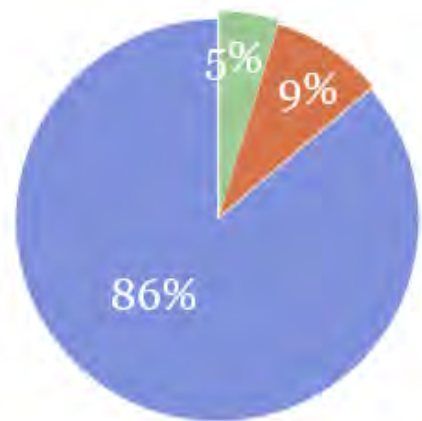
**Welcome + Support Center Experience
Scenario Two**



The chart above indicates how the Scenario supports the Pillars ranked by ARC Executive Team. The Pillars are rated from 1-10 in each scenario.

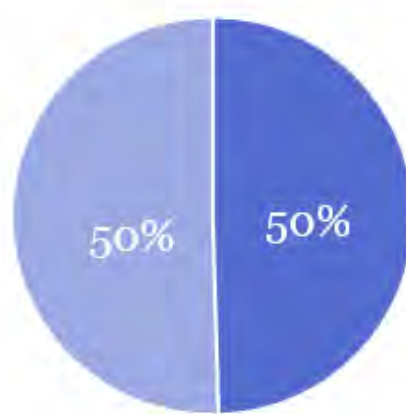
Scenario Two: Welcome + Support Center

Concept Zones



■ CONNECTION ■ LEARNING ■ COMMUNITY

I + We Space



■ I Space ■ We Space

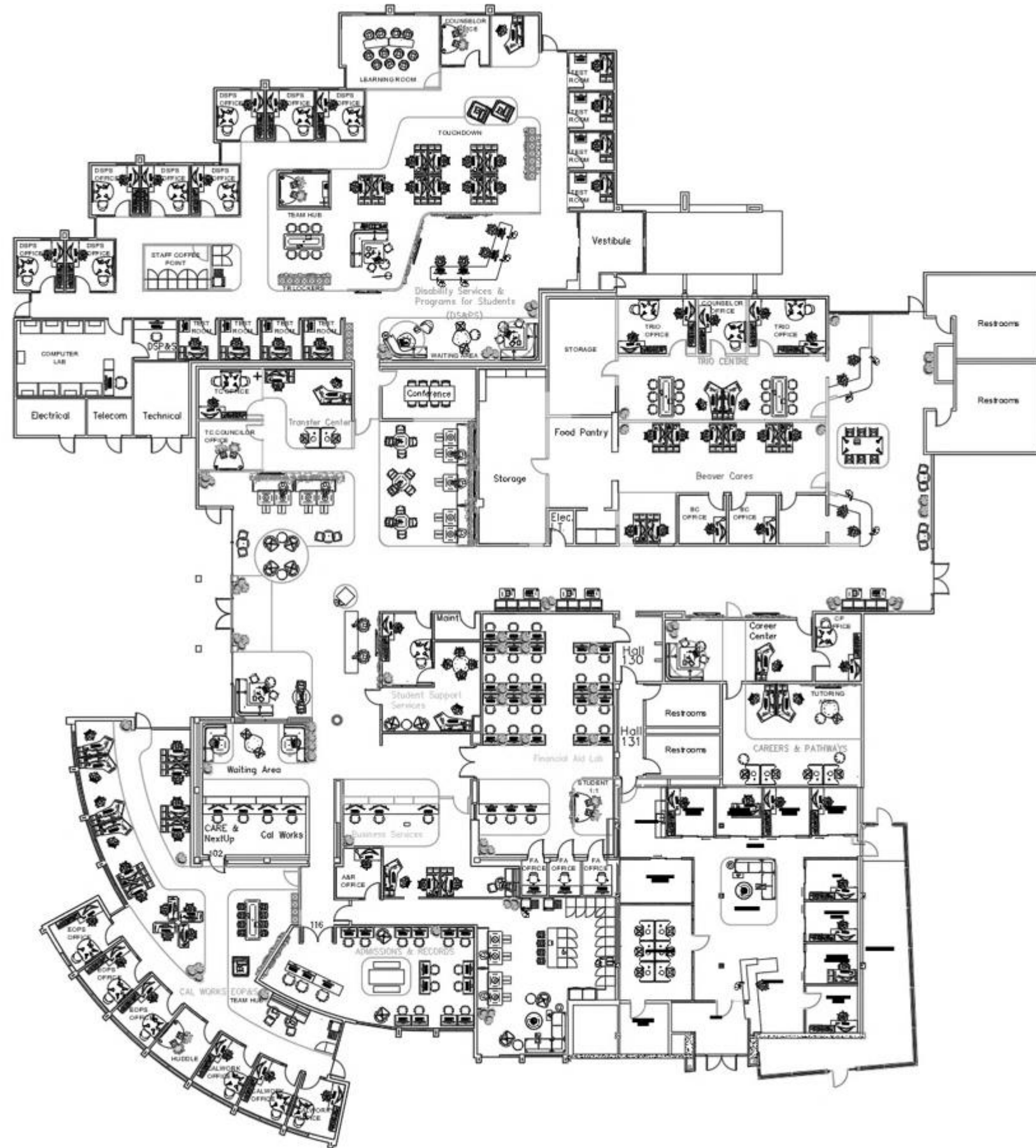


Scenario Two: Welcome + Support Center

Scenario 2

	Number People	% non temp Population	Sharing Ratio	Req. Seats	% People
Resident	22.8	40%	1	22.8	13%
Hybrid	28.5	50%	1.5	19.0	16%
Temporary	120	N/A	3	40.0	68%
Remote	5.7	10%	10	0.6	3%
	177	100%		82.4	100%

Offices	28.0
Workstations	15.0
Swing Seats	46.0
Actual	89.0



Scenario Two: Welcome + Support Center



Scenario Three: Welcome + Support Center

Welcome + Support Center transformed for an optimal hybrid experience

Scenario Three introduces a **more advanced** Hybrid solution and policy with a higher percentage of Hybrid workers and increased sharing ratios. This evolved hybrid solution will free up more space than Scenario Two and will further improve the amount of group space and enhance the overall experience.

By introducing significant modifications to the existing infrastructure e.g., removing walls, the space within and between departments will be more open. This will potentially provide better access, connection and integration within and across Teams and Programs.

Scenario Three will provide people with an upgraded work experience that:

- Ensures a hybrid program which recognizes and supports unique work patterns
- Provides enhanced access to shared/unassigned spaces by hybrid workers
- Builds stronger community within and between departments
- Further supports increased density during peak periods and possibly accommodates future growth
- Maximizes square footage utilization with a variety of spaces

Design Characteristics in addition to Scenario Two

- Further reinforces activity-based working and desk sharing
- Hybrid and Remote workers will have access to either shared offices or workstations on a **2.5:1** and **10:1** sharing ratio + Temporary Classified workers sharing ratio is increased to **5:1**
- Percentage of Group space **significantly** increases to support team activity and Hybrid workers when they are in the office
- Non-structural walls are removed or repositioned
- Front porches to Departments and transition zones between departments will be included
- All settings and technologies support a higher volume of virtual meetings

20% Resident Workers (non temp)
in office 4/5 days a week in non-peak periods
(1:1 ratio)

70% Hybrid Workers (non temp)
in office 3 days a week in non-peak periods
(2.5:1 ratio)

10% Remote Workers (non temp)
(10:1 sharing ratio)

Temporary Classified Workers
(5:1 sharing ratio)

Significant level
of Change Management effort required

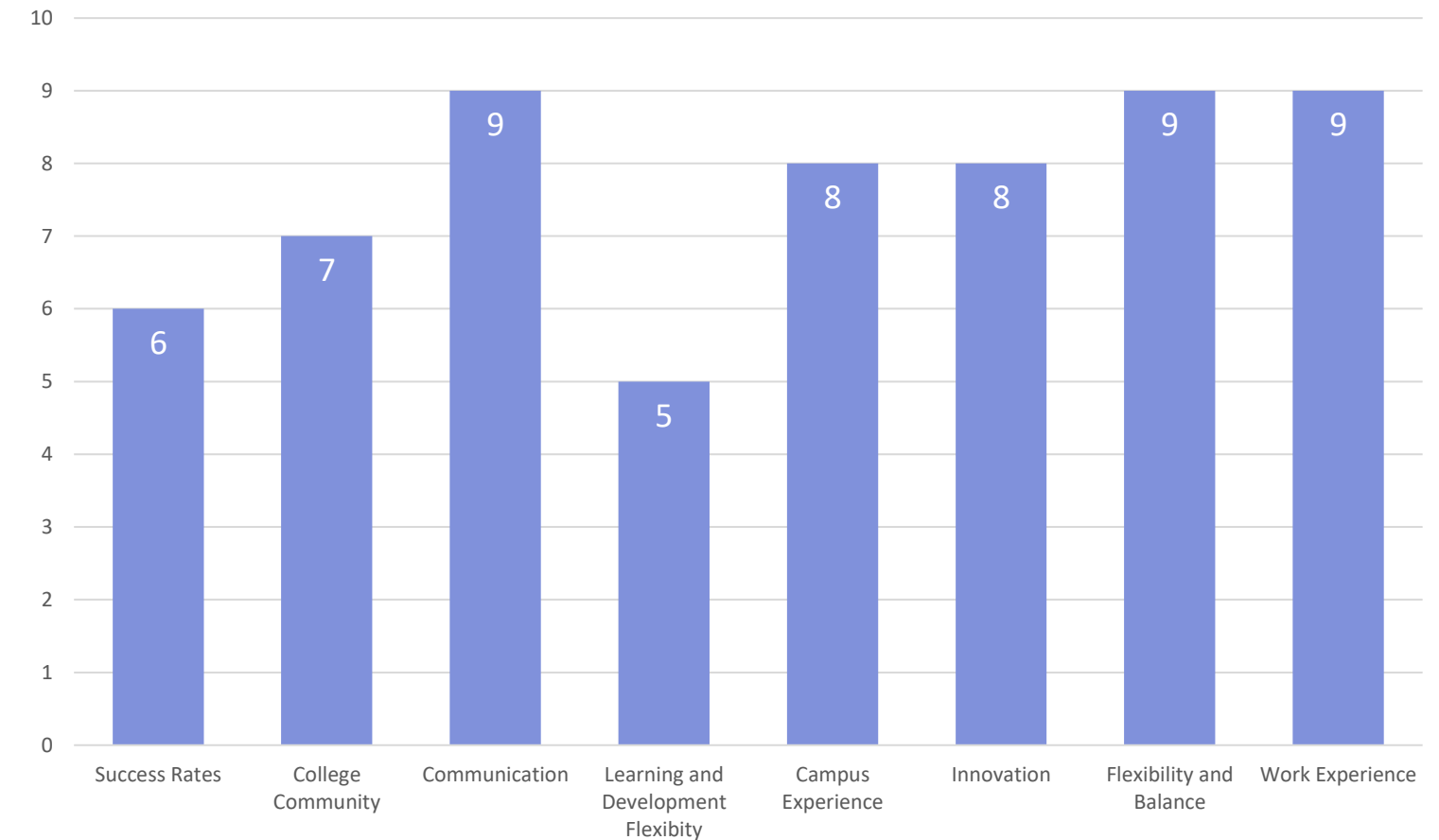
Shift in real estate
11% Real Estate Saving

Scenario Three: Welcome + Support Center

Potential outcomes

- College Community is significantly improved by making further adjustments to walls and the Welcome Lobby to encourage greater connection between Students and Staff
- Scenario Three represents a more proactive approach to Flexibility + Balance by having a higher percentage of hybrid workers operating within a sharing ratio of 2.5:1 + Temporary Classified workers sharing ratio is increased to 5:1
- The significant increase in group space to support individual and team activities through the introduction of open transition zones between and within departments will significantly increase Innovation and Work Experience
- Communication will be further enhanced by removal of additional walls and incorporating increased digital and analog signage and branding
- Campus Experience is not significantly impacted as this stand-alone facility focuses on supporting Student Services without connection to learning or social spaces

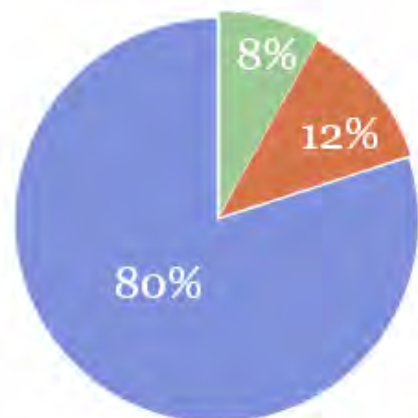
**Welcome + Support Center Experience
Scenario Three**



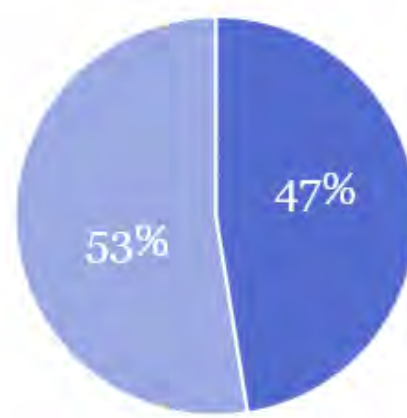
The chart above indicates how the Scenario supports the Pillars ranked by ARC Executive Team. The Pillars are rated from 1-10 in each scenario.

Scenario Three: Welcome + Support Center

Concept Zones



I + We Space



■ CONNECTION ■ LEARNING ■ COMMUNITY ■ I Space ■ We Space

Space Saving = 2,712 sq ft

11% Real Estate Savings

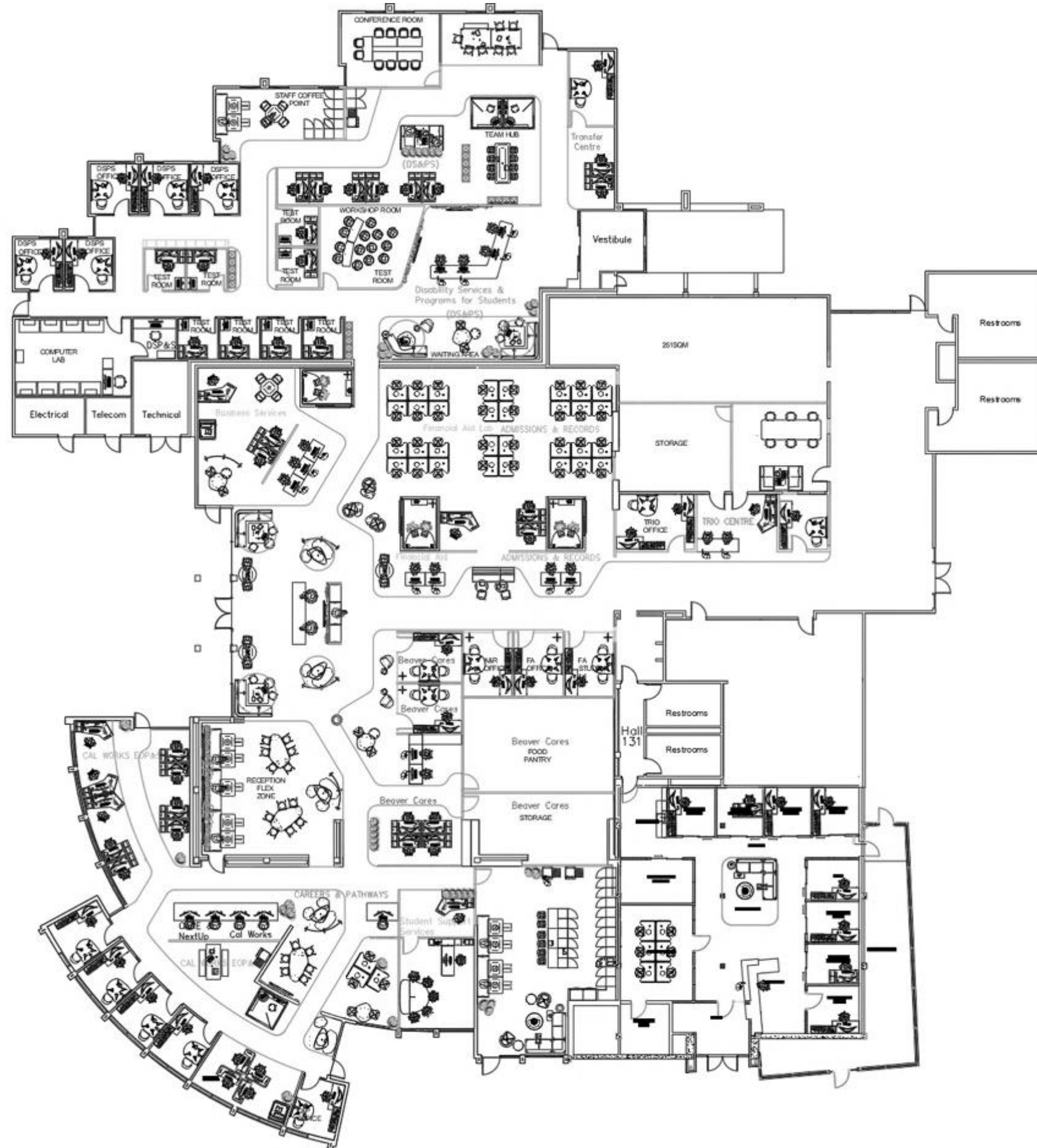


Scenario Three: Welcome + Support Center

Scenario 3

	Number People	% non temp Population	Sharing Ratio	Req. Seats	% People
Resident	11.4	20%	1	11.4	6%
Hybrid	39.9	70%	2.5	15.96	23%
Temporary	120	N/A	5	24	68%
Remote	5.7	10%	10	0.57	3%
	177	100%		51.93	100%

Offices	22.0
Workstations	8.0
Swing Seats	31.0
Actual	61.0



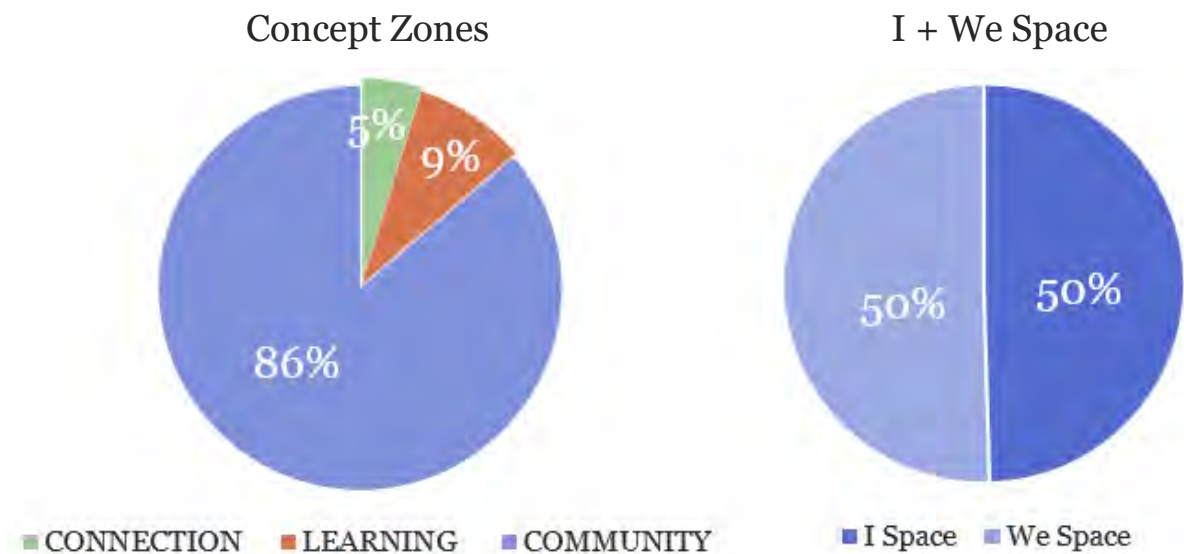
Scenario Comparisons: Welcome + Support Center

Scenario Two

Scenario 2

	Number	% non temp	Sharing	Req.	%
	People	Population	Ratio	Seats	People
Resident	22.8	40%	1	22.8	13%
Hybrid	28.5	50%	1.5	19.0	16%
Temporary	120	N/A	3	40.0	68%
Remote	5.7	10%	10	0.6	3%
	177	100%		82.4	100%

Offices	28.0
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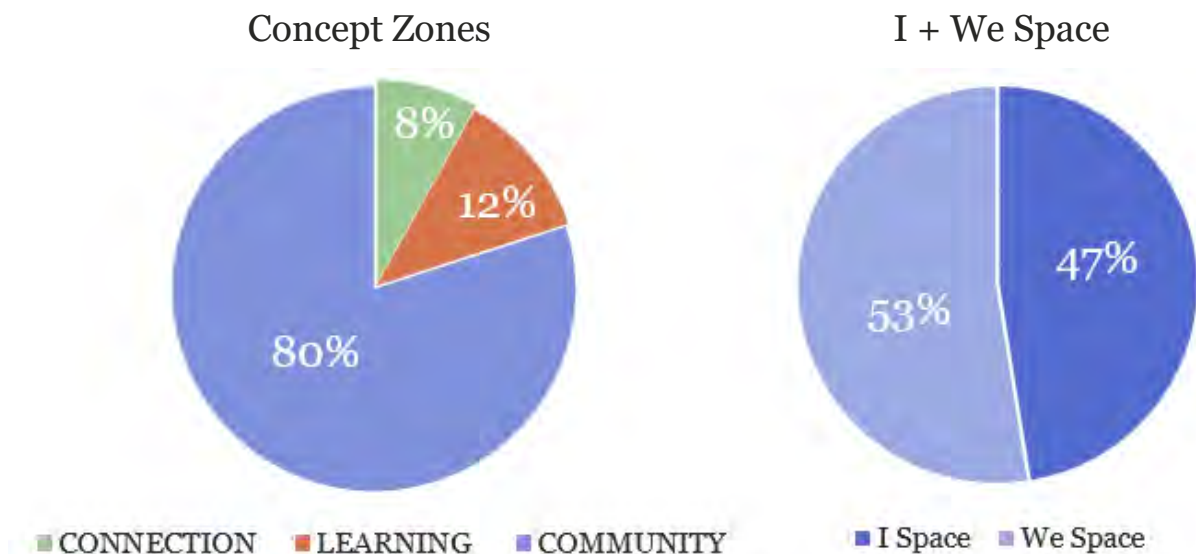


Scenario Three

Scenario 3

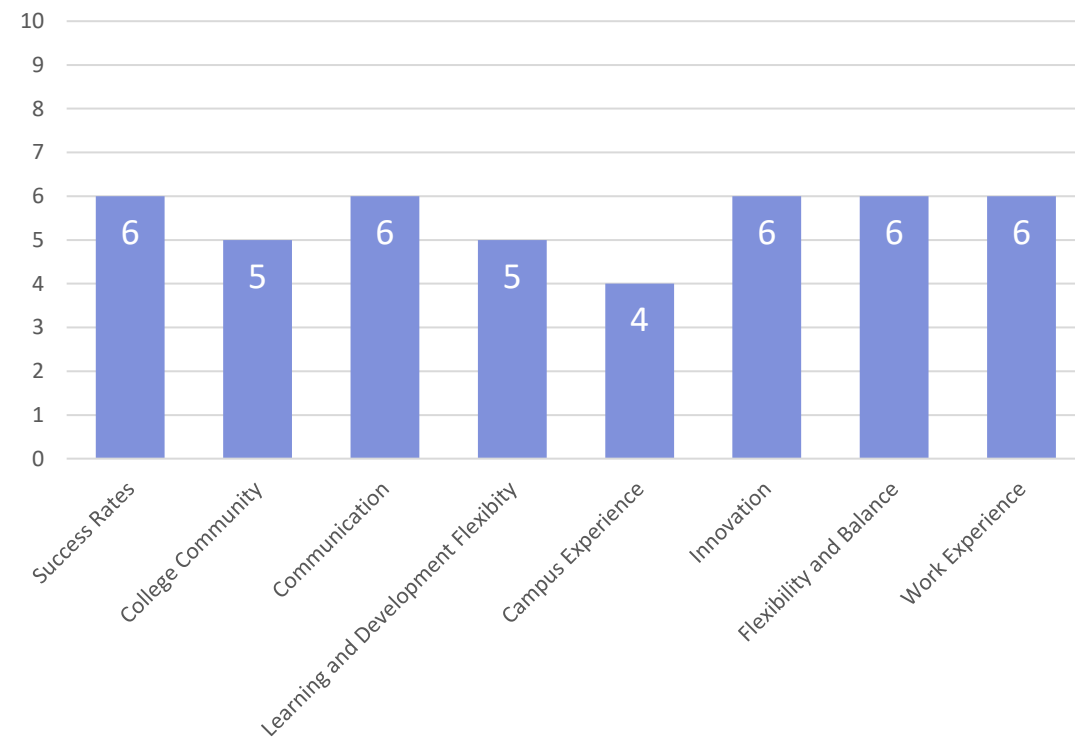
	Number	% non temp	Sharing	Req.	%
	People	Population	Ratio	Seats	People
Resident	11.4	20%	1	11.4	6%
Hybrid	39.9	70%	2.5	15.96	23%
Temporary	120	N/A	5	24	68%
Remote	5.7	10%	10	0.57	3%
	177	100%		51.93	100%

Offices	22.0
Workstations	8.0
Swing Seats	31.0
Actual	61.0

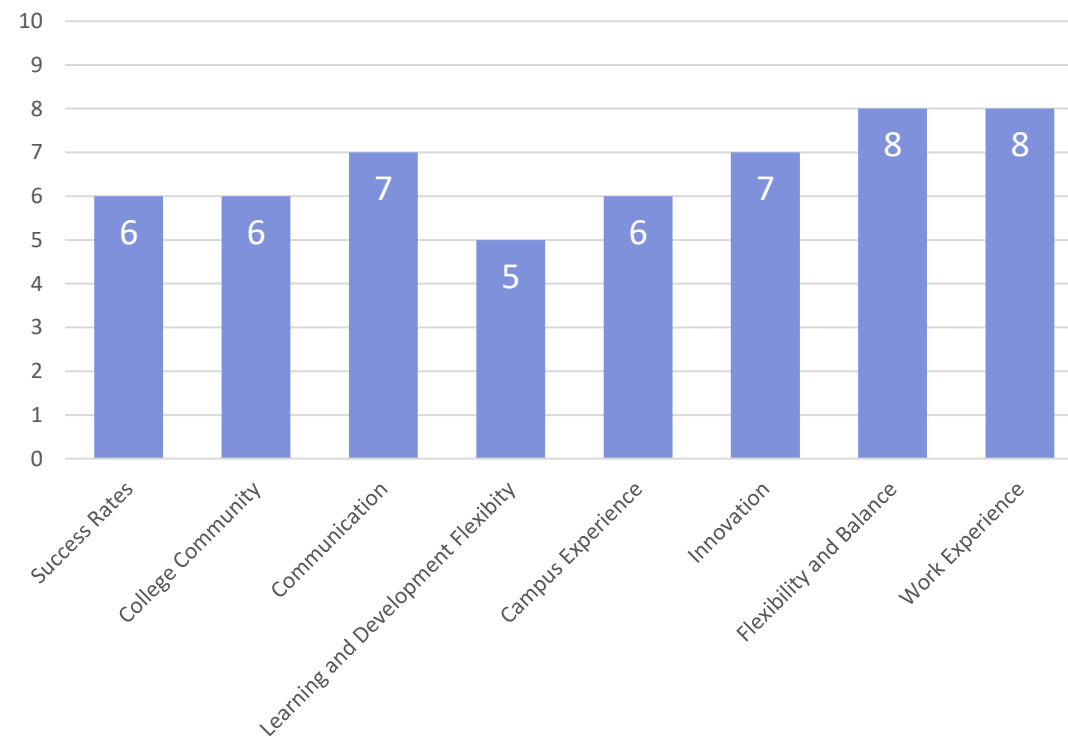


Scenario Comparison: Welcome + Support Center

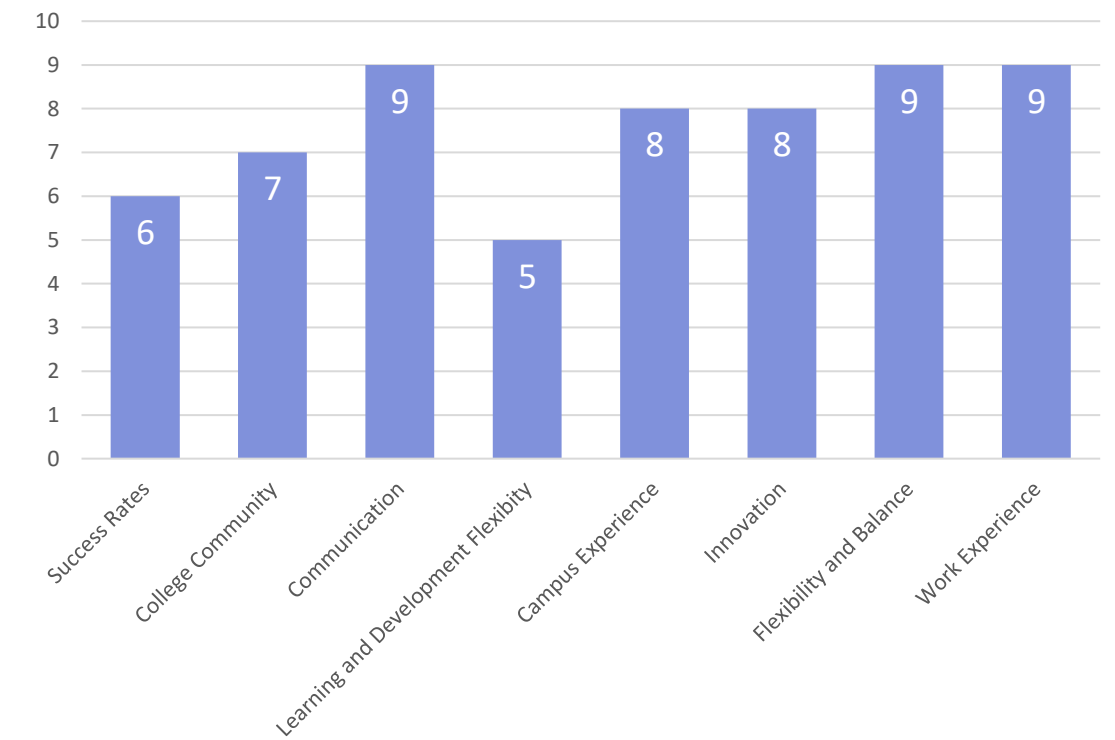
Scenario One



Scenario Two



Scenario Three



The charts above indicate how each Scenario supports the Pillars ranked by ARC Leadership Team. The Pillars are rated from 1-10 in each scenario.

Steelcase

Applied Research + Consulting

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Applied Research + Consulting

06.

Appendix

- Classroom Utilization Findings
- Work Modes Study Key Findings
- Space Utilization Survey Key Findings
- Observation Key Findings
 - Classrooms
 - Classified Professionals Workspaces
 - Faculty Workspaces
 - Student Spaces
- Workshop Key Findings
 - Classified Professionals Workshop Key Findings
 - Faculty Workshop Key Findings
 - Student Workshop Key Findings

06. Appendix

Classroom Utilization Key Findings

Classroom Usage

Patterns, Constraints + Opportunities

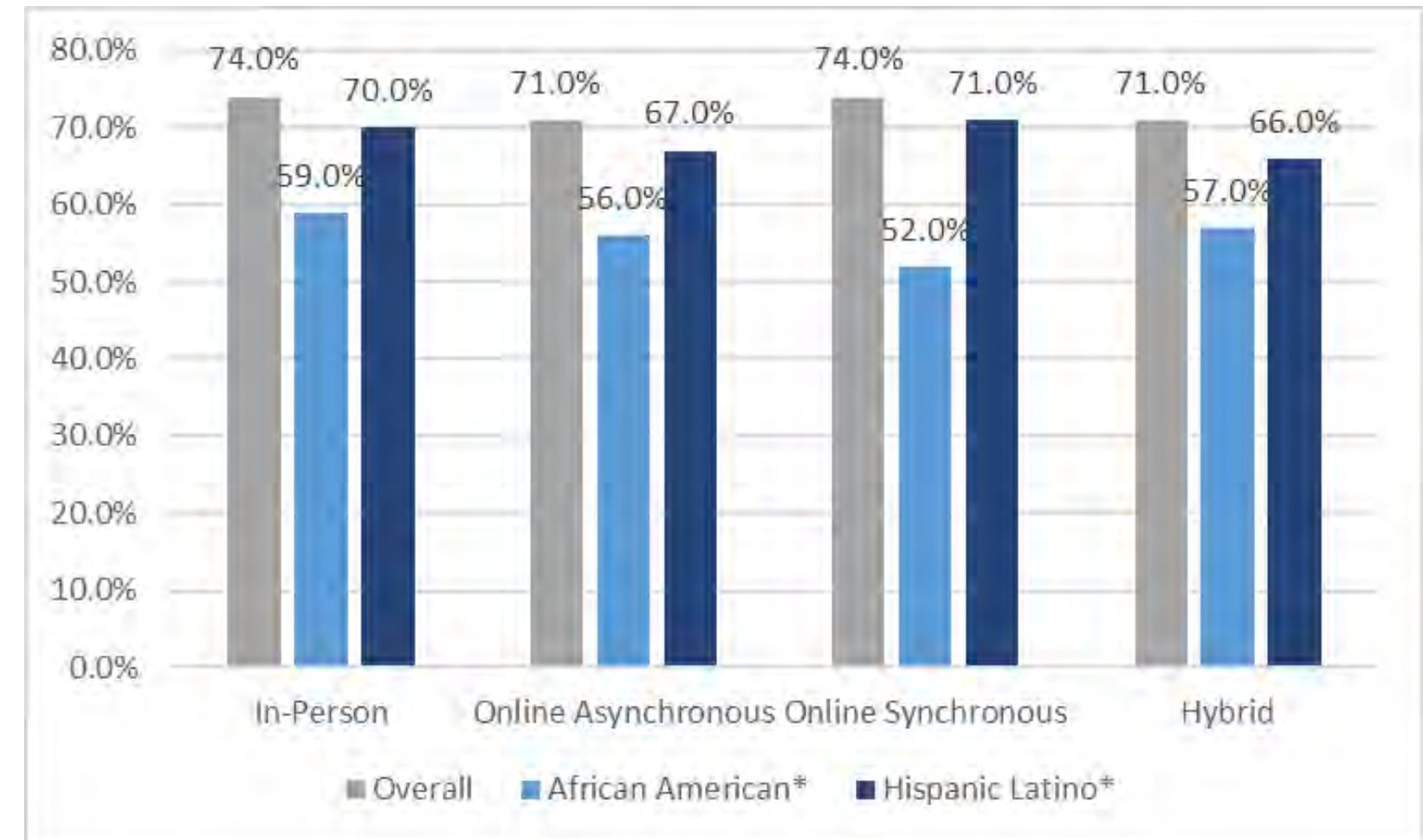
This section explores classroom usage patterns, evolving modalities, ARC Executive Team perspective on the longer-term modality mix, Student success rates by modality and three scenarios based on varying levels of scheduling targets and Student demand. The data that underlies the analysis presented here is derived from a number of sources, which include:

- Census reports for Fall 2018, Fall 2019, Fall 2022, Fall 2023 and Spring 2024
- Classroom scheduling data for Fall 2019 and Spring 2024
- ARC Leader workshop results from long term modality exercise
- ARC modality success report

The opportunities indicated by analysis of the data in this section and the associated three classroom scenarios could be significant for repurposed or reduced space. However, there are a number of potential realities, which will need to be considered before the full impact can be determined. These include but are not limited to:

- Constancy of Student interest in the current modality mix
- Appropriateness of encouraging Students in lower success categories to emphasize on-ground classes
- Operational implications of shifting some instruction to other than Monday – Friday or to Non-Peak times
- Willingness and appropriateness of Faculty to teach other than Monday – Thursday and in the afternoon / evening
- Timing and transportation constraints of Adjunct Faculty who teach on multiple campuses
- Ability of support capabilities to clean, service and maintain facilities and technology

ARC Success Rates by Modality Spring 2024



Classroom Usage

Key Findings

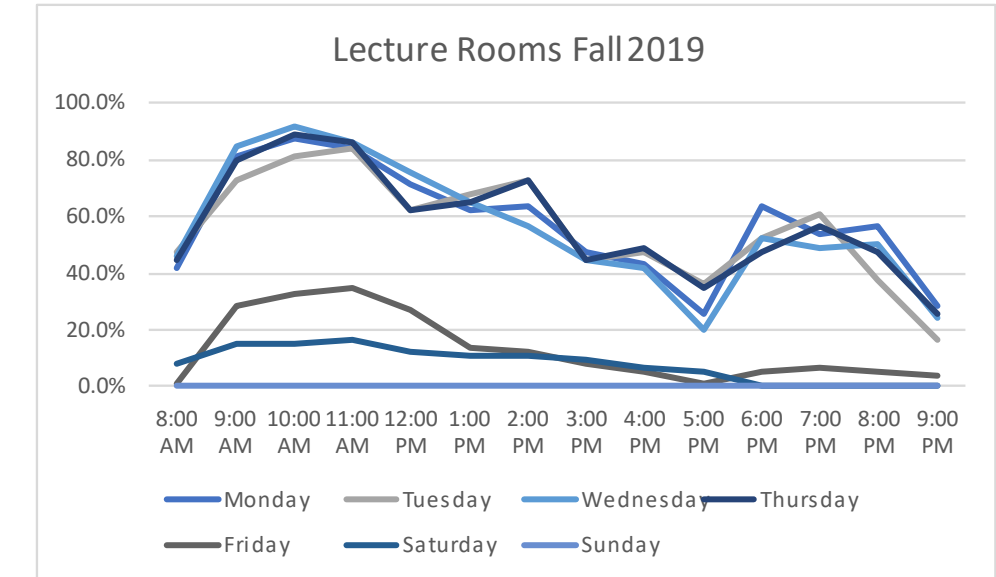
- There has been a **significant shift in modalities** between 2018 and 2024; on-ground has shifted from approximately 80% to the mid 50s% and there does not appear to be a catalyst to change the current levels of modality
- A **significant reduction in the stock of classrooms** has occurred between 2019 and 2024 (126 to 95) yet utilization is still low
 - ✓ Lecture room number decreased by 40.5%
 - ✓ Combo room number decreased by 5.9%
 - ✓ Lab room number remained the same
- Excess classroom capacity is indicated for all classroom types regardless of combination of course days considered
 - ✓ **Monday – Sunday** average utilization by room type is Lecture 27.1%, Combo 21.3% and Lab 29.5%
 - ✓ **Monday - Thursday** average utilization by room type is Lecture 42.8%, Combo 35.9% and Lab 47.1%
 - ✓ Utilization levels for **Friday, Saturday and Sunday** are all low for all classroom types – Sunday 0%, Saturday 6.1% or less and Friday 15.1% or less
- **Peak utilization** of all classroom types tends to be in earlier in the day hours **9am – 2pm**
- ARC Leader response to **ideal long-term modality mix** varied but when the statistics from the 2 teams were averaged the result was **on-ground 60% and online 40%** which is similar to the Spring 2024 Weekly Enrollment Census statistics report where Section data indicates on-ground 54% and online 46%
- Student success by modality generally indicates that on-ground has higher success than online, however online synchronous has equal or higher success rates than in-person in 2 of the 3 groups
- **Scenario and demand modeling indicates excess capacity in classrooms exist** and it appears Scenario 3 (which is generally similar to Fall 2019 scheduling and demand patterns) would be a potential target for further investigation and implementation

Usage Patterns Lecture Fall 2019 vs Spring 2024

Lecture Rooms Percent Scheduled - Fall 2019

Rooms 74

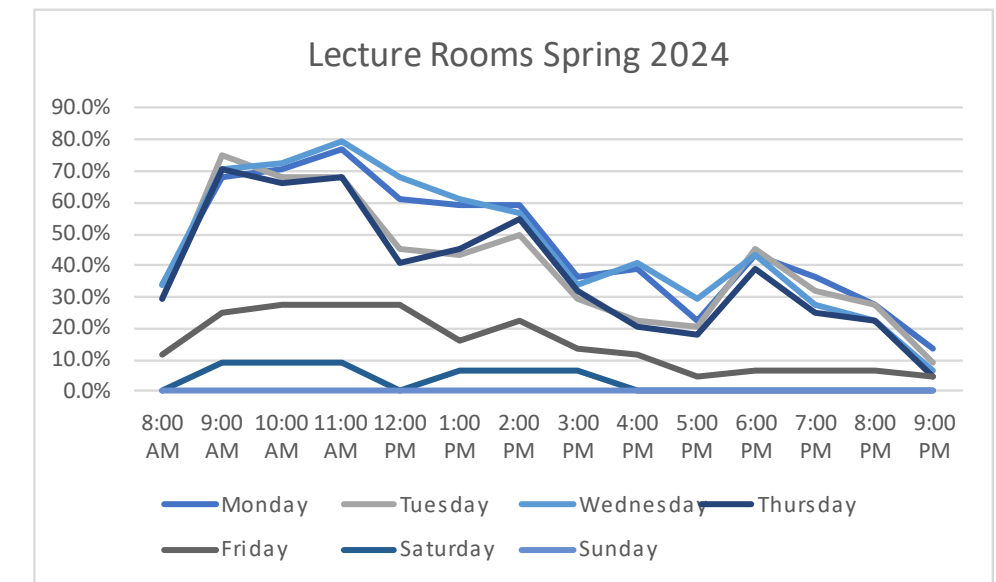
	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Monday	41.9%	81.1%	87.8%	83.8%	71.6%	62.2%	63.5%	47.3%	43.2%	25.7%	63.5%	54.1%	56.8%	28.4%
Tuesday	47.3%	73.0%	81.1%	83.8%	62.2%	67.6%	73.0%	44.6%	47.3%	36.5%	52.7%	60.8%	37.8%	16.2%
Wednesday	45.9%	85.1%	91.9%	86.5%	75.7%	64.9%	56.8%	44.6%	41.9%	20.3%	52.7%	48.6%	50.0%	24.3%
Thursday	44.6%	79.7%	89.2%	86.5%	62.2%	64.9%	73.0%	44.6%	48.6%	35.1%	47.3%	56.8%	47.3%	25.7%
Friday	1.4%	28.4%	32.4%	35.1%	27.0%	13.5%	12.2%	8.1%	5.4%	1.4%	5.4%	6.8%	5.4%	4.1%
Saturday	8.1%	14.9%	14.9%	16.2%	12.2%	10.8%	10.8%	9.5%	6.8%	5.4%	0.0%	0.0%	0.0%	0.0%
Sunday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Lecture Rooms Percent Scheduled - Spring 2024

Rooms 44

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Monday	34.1%	68.2%	70.5%	77.3%	61.4%	59.1%	59.1%	36.4%	38.6%	22.7%	43.2%	36.4%	27.3%	13.6%
Tuesday	29.5%	75.0%	68.2%	68.2%	45.5%	43.2%	50.0%	29.5%	22.7%	20.5%	45.5%	31.8%	27.3%	9.1%
Wednesday	34.1%	70.5%	72.7%	79.5%	68.2%	61.4%	56.8%	34.1%	40.9%	29.5%	43.2%	27.3%	22.7%	6.8%
Thursday	29.5%	70.5%	65.9%	68.2%	40.9%	45.5%	54.5%	31.8%	20.5%	18.2%	38.6%	25.0%	22.7%	4.5%
Friday	11.4%	25.0%	27.3%	27.3%	27.3%	15.9%	22.7%	13.6%	11.4%	4.5%	6.8%	6.8%	6.8%	4.5%
Saturday	0.0%	9.1%	9.1%	9.1%	0.0%	6.8%	6.8%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sunday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



This slide contrasts usage patterns of Lecture rooms for Fall semester of 2019 vs Spring semester of 2024. For a broader view of aggregate usage by day and by hour please see analyses on the slides titled Usage Patterns Lecture Fall 2019, Usage Patterns Combo Fall 2019, Usage Patterns Lab Fall 2019, Usage Patterns Lecture Spring 2024, Usage Patterns Combo Spring 2024 Fall and Usage Patterns Lab Spring 2024.

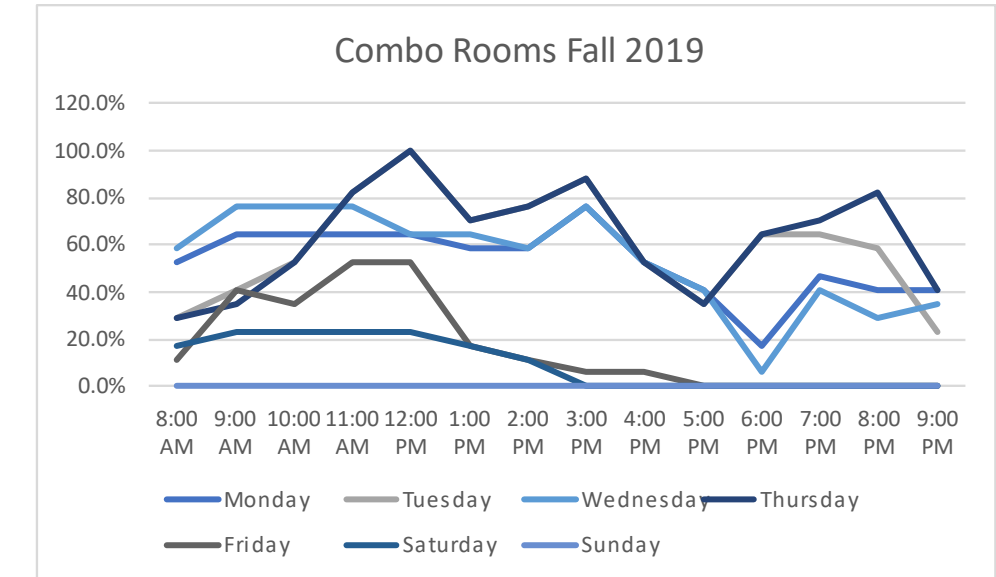
Note: numbers in the matrices above represent percentage of time rooms used.

Usage Patterns Combo Fall 2019 vs Spring 2024

Combo Rooms Percent Scheduled - Fall 2019

Rooms 17

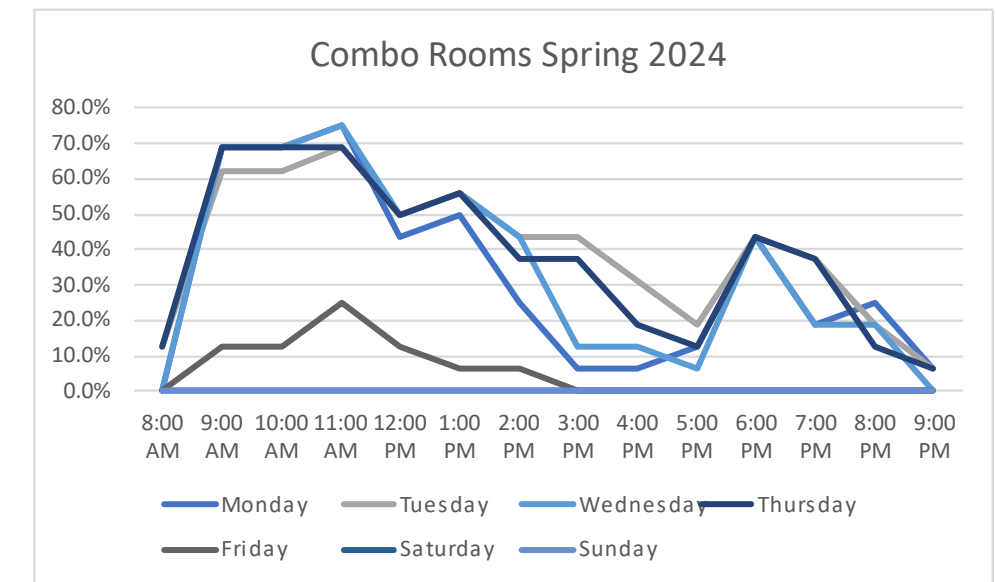
	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Monday	52.9%	64.7%	64.7%	64.7%	64.7%	58.8%	58.8%	76.5%	52.9%	41.2%	17.6%	47.1%	41.2%	41.2%
Tuesday	29.4%	41.2%	52.9%	82.4%	100.0%	70.6%	76.5%	88.2%	52.9%	35.3%	64.7%	64.7%	58.8%	23.5%
Wednesday	58.8%	76.5%	76.5%	76.5%	64.7%	64.7%	58.8%	76.5%	52.9%	41.2%	5.9%	41.2%	29.4%	35.3%
Thursday	29.4%	35.3%	52.9%	82.4%	100.0%	70.6%	76.5%	88.2%	52.9%	35.3%	64.7%	70.6%	82.4%	41.2%
Friday	11.8%	41.2%	35.3%	52.9%	52.9%	17.6%	11.8%	5.9%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Saturday	17.6%	23.5%	23.5%	23.5%	23.5%	17.6%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sunday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Combo Rooms Percent Scheduled - Spring 2024

Rooms 16

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Monday	0.0%	68.8%	68.8%	75.0%	43.8%	50.0%	25.0%	6.3%	6.3%	12.5%	43.8%	18.8%	25.0%	6.3%
Tuesday	12.5%	62.5%	62.5%	68.8%	50.0%	56.3%	43.8%	43.8%	31.3%	18.8%	43.8%	37.5%	18.8%	6.3%
Wednesday	0.0%	68.8%	68.8%	75.0%	50.0%	56.3%	43.8%	12.5%	12.5%	6.3%	43.8%	18.8%	18.8%	0.0%
Thursday	12.5%	68.8%	68.8%	68.8%	50.0%	56.3%	37.5%	37.5%	18.8%	12.5%	43.8%	37.5%	12.5%	6.3%
Friday	0.0%	12.5%	12.5%	25.0%	12.5%	6.3%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Saturday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sunday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



This slide contrasts usage patterns of Combo rooms for Fall semester of 2019 vs Spring semester of 2024. For a broader view of aggregate usage by day and by hour please see analyses on the slides titled Usage Patterns Lecture Fall 2019, Usage Patterns Combo Fall 2019, Usage Patterns Lab Fall 2019, Usage Patterns Lecture Spring 2024, Usage Patterns Combo Spring 2024 Fall and Usage Patterns Lab Spring 2024.

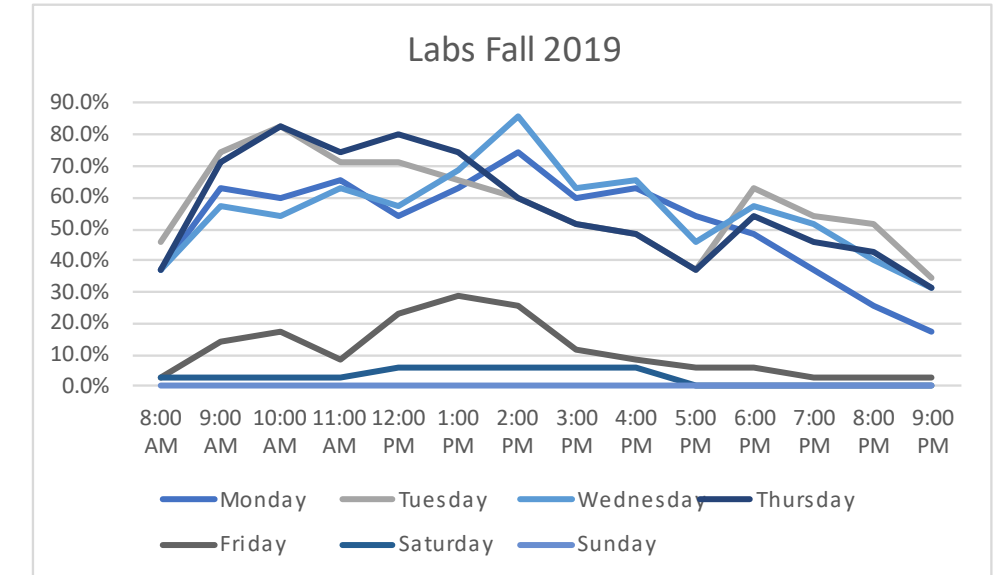
Note: numbers in the matrices above represent percentage of time rooms used.

Usage Patterns Lab Fall 2019 vs Spring 2024

Lab Rooms Percent Scheduled - Fall 2019

Rooms

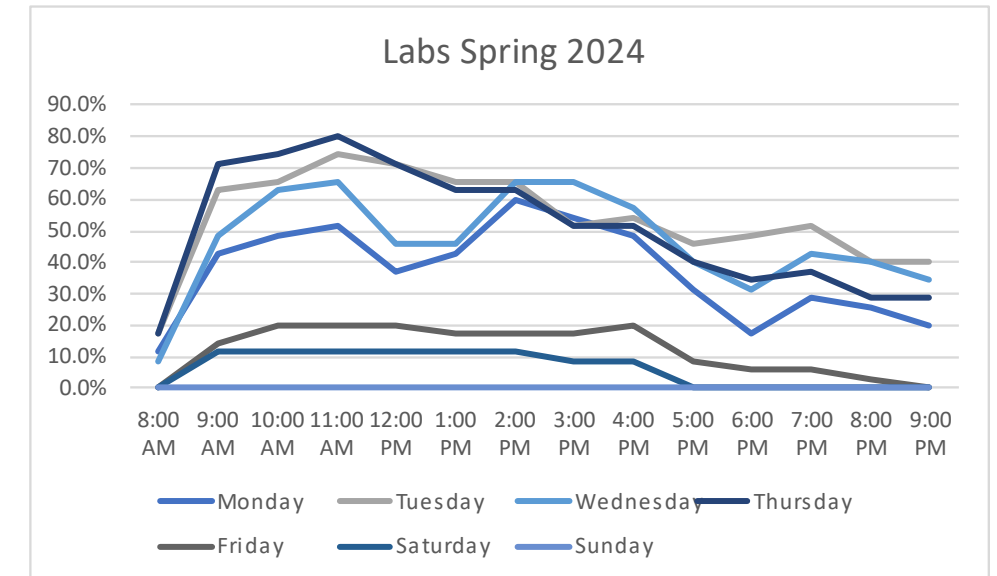
	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Monday	37.1%	62.9%	60.0%	65.7%	54.3%	62.9%	74.3%	60.0%	62.9%	54.3%	48.6%	37.1%	25.7%	17.1%
Tuesday	45.7%	74.3%	82.9%	71.4%	71.4%	65.7%	60.0%	51.4%	48.6%	37.1%	62.9%	54.3%	51.4%	34.3%
Wednesday	37.1%	57.1%	54.3%	62.9%	57.1%	68.6%	85.7%	62.9%	65.7%	45.7%	57.1%	51.4%	40.0%	31.4%
Thursday	37.1%	71.4%	82.9%	74.3%	80.0%	74.3%	60.0%	51.4%	48.6%	37.1%	54.3%	45.7%	42.9%	31.4%
Friday	2.9%	14.3%	17.1%	8.6%	22.9%	28.6%	25.7%	11.4%	8.6%	5.7%	5.7%	2.9%	2.9%	2.9%
Saturday	2.9%	2.9%	2.9%	2.9%	5.7%	5.7%	5.7%	5.7%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Sunday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Lab Rooms Percent Scheduled - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Monday	11.4%	42.9%	48.6%	51.4%	37.1%	42.9%	60.0%	54.3%	48.6%	31.4%	17.1%	28.6%	25.7%	20.0%
Tuesday	17.1%	62.9%	65.7%	74.3%	71.4%	65.7%	65.7%	51.4%	54.3%	45.7%	48.6%	51.4%	40.0%	40.0%
Wednesday	8.6%	48.6%	62.9%	65.7%	45.7%	45.7%	65.7%	65.7%	57.1%	40.0%	31.4%	42.9%	40.0%	34.3%
Thursday	17.1%	71.4%	74.3%	80.0%	71.4%	62.9%	62.9%	51.4%	51.4%	40.0%	34.3%	37.1%	28.6%	28.6%
Friday	0.0%	14.3%	20.0%	20.0%	20.0%	17.1%	17.1%	17.1%	20.0%	8.6%	5.7%	5.7%	2.9%	0.0%
Saturday	0.0%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	8.6%	8.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Sunday	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



This slide contrasts usage patterns of Lab rooms for Fall semester of 2019 vs Spring semester of 2024. For a broader view of aggregate usage by day and by hour please see analyses on the slides titled Usage Patterns Lecture Fall 2019, Usage Patterns Combo Fall 2019, Usage Patterns Lab Fall 2019, Usage Patterns Lecture Spring 2024, Usage Patterns Combo Spring 2024 Fall and Usage Patterns Lab Spring 2024.

Note: numbers in the matrices above represent percentage of time rooms used.

Usage Patterns Lecture Fall 2019

Lecture Rooms Scheduled Hours - Fall 2019

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	31.0	60.0	65.0	62.0	53.0	46.0	47.0	35.0	32.0	19.0	47.0	40.0	42.0	21.0	600.0	1036	57.9%
Tuesday	35.0	54.0	60.0	62.0	46.0	50.0	54.0	33.0	35.0	27.0	39.0	45.0	28.0	12.0	580.0	1036	56.0%
Wednesday	34.0	63.0	68.0	64.0	56.0	48.0	42.0	33.0	31.0	15.0	39.0	36.0	37.0	18.0	584.0	1036	56.4%
Thursday	33.0	59.0	66.0	64.0	46.0	48.0	54.0	33.0	36.0	26.0	35.0	42.0	35.0	19.0	596.0	1036	57.5%
Friday	1.0	21.0	24.0	26.0	20.0	10.0	9.0	6.0	4.0	1.0	4.0	5.0	4.0	3.0	138.0	1036	13.3%
Saturday	6.0	11.0	11.0	12.0	9.0	8.0	8.0	7.0	5.0	4.0	0.0	0.0	0.0	0.0	81.0	1036	7.8%
Sunday	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1036	0.0%
Total Hrs	140.0	268.0	294.0	290.0	230.0	210.0	214.0	147.0	143.0	92.0	164.0	168.0	146.0	73.0	2,579.0		
Capacity Hrs	518	518	518	518	518	518	518	518	518	518	518	518	518	518	7,252.0		
Utilization Per Hour	27.0%	51.7%	56.8%	56.0%	44.4%	40.5%	41.3%	28.4%	27.6%	17.8%	31.7%	32.4%	28.2%	14.1%	35.6%		

Lecture Rooms Scheduled Hours - Fall 2019

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	31.0	60.0	65.0	62.0	53.0	46.0	47.0	35.0	32.0	19.0	47.0	40.0	42.0	21.0	600.0	1036	57.9%
Tuesday	35.0	54.0	60.0	62.0	46.0	50.0	54.0	33.0	35.0	27.0	39.0	45.0	28.0	12.0	580.0	1036	56.0%
Wednesday	34.0	63.0	68.0	64.0	56.0	48.0	42.0	33.0	31.0	15.0	39.0	36.0	37.0	18.0	584.0	1036	56.4%
Thursday	33.0	59.0	66.0	64.0	46.0	48.0	54.0	33.0	36.0	26.0	35.0	42.0	35.0	19.0	596.0	1036	57.5%
Friday															0.0	1036	0.0%
Saturday															0.0	1036	0.0%
Sunday															0.0	1036	0.0%
Total Hrs	133.0	236.0	259.0	252.0	201.0	192.0	197.0	134.0	134.0	87.0	160.0	163.0	142.0	70.0	2,360.0		
Capacity Hrs	296	296	296	296	296	296	296	296	296	296	296	296	296	296	4,144.0		
Utilization Per Hour	44.9%	79.7%	87.5%	85.1%	67.9%	64.9%	66.6%	45.3%	45.3%	29.4%	54.1%	55.1%	48.0%	23.6%	56.9%		

This slide documents usage patterns of the 74 Lecture rooms in this category for the Fall semester of 2019. Utilization statistics are complex and vary based on the number of days and hours during which classes are conducted. For purpose of this analysis, it was assumed courses can be conducted starting from 8 am and concluding no later than 10 pm. The tables above also consider two options for days courses are scheduled which include Monday – Sunday and Monday – Thursday. Key statistics for these hours and days are shown to the right of this slide.

Note: numbers in the matrices above represent hours rooms are used.

Monday - Sunday

- Average utilization is 35.6%
- Peak times for utilization are 9 am – 2 pm where utilization is between 56.8% and 40.5%
- Friday, Saturday and Sunday utilization is very low

Monday – Thursday

- Average utilization is 56.9%
- Peak times for utilization are 9 am – 2 pm where utilization is between 87.5% and 64.9%
- Utilization levels shown were not factored up for the courses conducted on Sunday, Saturday and Friday

Usage Patterns Combo Fall 2019

Combo Rooms Scheduled Hours - Fall 2019

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	9.0	11.0	11.0	11.0	11.0	10.0	10.0	13.0	9.0	7.0	3.0	8.0	7.0	7.0	127.0	238	53.4%
Tuesday	5.0	7.0	9.0	14.0	17.0	12.0	13.0	15.0	9.0	6.0	11.0	11.0	10.0	4.0	143.0	238	60.1%
Wednesday	10.0	13.0	13.0	13.0	11.0	11.0	10.0	13.0	9.0	7.0	1.0	7.0	5.0	6.0	129.0	238	54.2%
Thursday	5.0	6.0	9.0	14.0	17.0	12.0	13.0	15.0	9.0	6.0	11.0	12.0	14.0	7.0	150.0	238	63.0%
Friday	2.0	7.0	6.0	9.0	9.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	40.0	238	16.8%
Saturday	3.0	4.0	4.0	4.0	4.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	238	10.1%
Sunday	0.0	4.0	4.0	4.0	4.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	238	8.8%
Total Hrs	34.00	52.00	56.00	69.00	73.00	54.00	52.00	57.00	37.00	26.00	26.00	38.00	36.00	24.00	634.0		
Capacity Hrs	119	119	119	119	119	119	119	119	119	119	119	119	119	119	1,666.0		
Utilization Per Hour	28.6%	43.7%	47.1%	58.0%	61.3%	45.4%	43.7%	47.9%	31.1%	21.8%	21.8%	31.9%	30.3%	20.2%	38.1%		

Combo Rooms Scheduled Hours - Fall 2019

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	9.0	11.0	11.0	11.0	11.0	10.0	10.0	13.0	9.0	7.0	3.0	8.0	7.0	7.0	127.0	238	53.4%
Tuesday	5.0	7.0	9.0	14.0	17.0	12.0	13.0	15.0	9.0	6.0	11.0	11.0	10.0	4.0	143.0	238	60.1%
Wednesday	10.0	13.0	13.0	13.0	11.0	11.0	10.0	13.0	9.0	7.0	1.0	7.0	5.0	6.0	129.0	238	54.2%
Thursday	5.0	6.0	9.0	14.0	17.0	12.0	13.0	15.0	9.0	6.0	11.0	12.0	14.0	7.0	150.0	238	63.0%
Friday															0.0	238	0.0%
Saturday															0.0	238	0.0%
Sunday															0.0	238	0.0%
Total Hrs	29.00	37.00	42.00	52.00	56.00	45.00	46.00	56.00	36.00	26.00	26.00	38.00	36.00	24.00	549.0		
Capacity Hrs	68	68	68	68	68	68	68	68	68	68	68	68	68	68	952.0		
Utilization Per Hour	42.6%	54.4%	61.8%	76.5%	82.4%	66.2%	67.6%	82.4%	52.9%	38.2%	38.2%	55.9%	52.9%	35.3%	57.7%		

This slide documents usage patterns of the 17 Combo rooms in this category for the Fall semester of 2019. Utilization statistics are complex and vary based on the number of days and hours during which classes are conducted. For purpose of this analysis, it was assumed courses can be conducted starting from 8 am and concluding no later than 10 pm. The tables above also consider two options for days courses are scheduled which include Monday – Sunday and Monday – Thursday. Key statistics for these hours and days are shown to the right of this slide.

Note: numbers in the matrices above represent hours rooms are used.

Monday - Sunday

- Average utilization is 38.1%
- Peak times for utilization are 9 am – 3 pm where utilization is between 61.3% and 43.7%
- Friday, Saturday and Sunday utilization is very low

Monday – Thursday

- Average utilization is 57.7%
- Peak times for utilization are 9 am – 4 pm where utilization is between 82.4% and 52.9%
- Utilization levels shown were not factored up for the courses conducted on Sunday, Saturday and Friday

Usage Patterns Labs Fall 2019

Lab Rooms Scheduled Hours - Fall 2019

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	13.0	22.0	21.0	23.0	19.0	22.0	26.0	21.0	22.0	19.0	17.0	13.0	9.0	6.0	253.0	490	51.6%
Tuesday	16.0	26.0	29.0	25.0	25.0	23.0	21.0	18.0	17.0	13.0	22.0	19.0	18.0	12.0	284.0	490	58.0%
Wednesday	13.0	20.0	19.0	22.0	20.0	24.0	30.0	22.0	23.0	16.0	20.0	18.0	14.0	11.0	272.0	490	55.5%
Thursday	13.0	25.0	29.0	26.0	28.0	26.0	21.0	18.0	17.0	13.0	19.0	16.0	15.0	11.0	277.0	490	56.5%
Friday	1.0	5.0	6.0	3.0	8.0	10.0	9.0	4.0	3.0	2.0	2.0	1.0	1.0	1.0	56.0	490	11.4%
Saturday	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	14.0	490	2.9%
Sunday	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	490	0.0%
Total Hrs	57.0	99.0	105.0	100.0	102.0	107.0	109.0	85.0	84.0	63.0	80.0	67.0	57.0	41.0	1,156.0		
Capacity Hrs	245	245	245	245	245	245	245	245	245	245	245	245	245	245	3,430.0		
Utilization Per Hour	23.3%	40.4%	42.9%	40.8%	41.6%	43.7%	44.5%	34.7%	34.3%	25.7%	32.7%	27.3%	23.3%	16.7%	33.7%		

Lab Rooms Scheduled Hours - Fall 2019

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	13.0	22.0	21.0	23.0	19.0	22.0	26.0	21.0	22.0	19.0	17.0	13.0	9.0	6.0	253.0	490	51.6%
Tuesday	16.0	26.0	29.0	25.0	25.0	23.0	21.0	18.0	17.0	13.0	22.0	19.0	18.0	12.0	284.0	490	58.0%
Wednesday	13.0	20.0	19.0	22.0	20.0	24.0	30.0	22.0	23.0	16.0	20.0	18.0	14.0	11.0	272.0	490	55.5%
Thursday	13.0	25.0	29.0	26.0	28.0	26.0	21.0	18.0	17.0	13.0	19.0	16.0	15.0	11.0	277.0	490	56.5%
Friday															0.0	490	0.0%
Saturday															0.0	490	0.0%
Sunday															0.0	490	0.0%
Total Hrs	55.0	93.0	98.0	96.0	92.0	95.0	98.0	79.0	79.0	61.0	78.0	66.0	56.0	40.0	1,086.0		
Capacity Hrs	140	140	140	140	140	140	140	140	140	140	140	140	140	140	1,960.0		
Utilization Per Hour	39.3%	66.4%	70.0%	68.6%	65.7%	67.9%	70.0%	56.4%	56.4%	43.6%	55.7%	47.1%	40.0%	28.6%	55.4%		

This slide documents usage patterns of the 35 Lab rooms in this category for the Fall semester of 2019. Utilization statistics are complex and vary based on the number of days and hours during which classes are conducted. For purpose of this analysis, it was assumed courses can be conducted starting from 8 am and concluding no later than 10 pm. The tables above also consider two options for days courses are scheduled which include Monday – Saturday and Monday – Thursday. Key statistics for these hours and days are shown to the right of this slide.

Note: numbers in the matrices above represent hours rooms are used.

Monday - Sunday

- Average utilization is 33.7%
- Peak times for utilization are 9 am – 2 pm where utilization is between 44.5% and 40.4%
- Friday, Saturday and Sunday utilization is very low

Monday – Thursday

- Average utilization is 55.4%
- Peak times for utilization are 9 am – 2 pm where utilization is between 70.0% and 66.4%
- Utilization levels shown were not factored up for the courses conducted on Sunday, Saturday and Friday

Usage Patterns Lecture Spring 2024

Lecture Rooms Scheduled Hours - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	15.0	30.0	31.0	34.0	27.0	26.0	26.0	16.0	17.0	10.0	19.0	16.0	12.0	6.0	285.0	616	46.3%
Tuesday	13.0	33.0	30.0	30.0	20.0	19.0	22.0	13.0	10.0	9.0	20.0	14.0	12.0	4.0	249.0	616	40.4%
Wednesday	15.0	31.0	32.0	35.0	30.0	27.0	25.0	15.0	18.0	13.0	19.0	12.0	10.0	3.0	285.0	616	46.3%
Thursday	13.0	31.0	29.0	30.0	18.0	20.0	24.0	14.0	9.0	8.0	17.0	11.0	10.0	2.0	236.0	616	38.3%
Friday	5.0	11.0	12.0	12.0	12.0	7.0	10.0	6.0	5.0	2.0	3.0	3.0	3.0	2.0	93.0	616	15.1%
Saturday	0.0	4.0	4.0	4.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	616	3.4%
Sunday	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	616	0.0%
Total Hrs	61.0	140.0	138.0	145.0	107.0	102.0	110.0	67.0	59.0	42.0	78.0	56.0	47.0	17.0	1,169.0		
Capacity Hrs	308	308	308	308	308	308	308	308	308	308	308	308	308	308	4,312.0		
Utilization Per Hour	19.8%	45.5%	44.8%	47.1%	34.7%	33.1%	35.7%	21.8%	19.2%	13.6%	25.3%	18.2%	15.3%	5.5%	27.1%		

Lecture Rooms Scheduled Hours - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	15.0	30.0	31.0	34.0	27.0	26.0	26.0	16.0	17.0	10.0	19.0	16.0	12.0	6.0	285.0	616	46.3%
Tuesday	13.0	33.0	30.0	30.0	20.0	19.0	22.0	13.0	10.0	9.0	20.0	14.0	12.0	4.0	249.0	616	40.4%
Wednesday	15.0	31.0	32.0	35.0	30.0	27.0	25.0	15.0	18.0	13.0	19.0	12.0	10.0	3.0	285.0	616	46.3%
Thursday	13.0	31.0	29.0	30.0	18.0	20.0	24.0	14.0	9.0	8.0	17.0	11.0	10.0	2.0	236.0	616	38.3%
Friday															0.0	616	0.0%
Saturday															0.0	616	0.0%
Sunday															0.0	616	0.0%
Total Hrs	56.0	125.0	122.0	129.0	95.0	92.0	97.0	58.0	54.0	40.0	75.0	53.0	44.0	15.0	1,055.0		
Capacity Hrs	176	176	176	176	176	176	176	176	176	176	176	176	176	176	2,464.0		
Utilization Per Hour	31.8%	71.0%	69.3%	73.3%	54.0%	52.3%	55.1%	33.0%	30.7%	22.7%	42.6%	30.1%	25.0%	8.5%	42.8%		

This slide documents usage patterns of the 44 Lecture rooms in this category for the Spring semester of 2024 (this is 30 less Lecture rooms than in 2019). Utilization statistics are complex and vary based on the number of days and hours during which classes are conducted. For purpose of this analysis, it was assumed courses can be conducted starting from 8 am and concluding no later than 10 pm. The tables above also consider two options for days courses are scheduled which include Monday – Sunday and Monday – Thursday. Key statistics for these hours and days are shown to the right of this slide.

Note: numbers in the matrices above represent hours rooms are used.

Monday - Sunday

- Average utilization is 27.1%
- Peak times for utilization are 9 am – 2 pm where utilization is between 45.5% and 33.1%
- Friday, Saturday and Sunday utilization is very low

Monday – Thursday

- Average utilization is 42.8%
- Peak times for utilization are 9 am – 2 pm where utilization is between 73.3% and 52.3%
- Utilization levels shown were not factored up for the courses conducted on Sunday, Saturday and Friday

Usage Patterns Combo Spring 2024

Combo Rooms Scheduled Hours - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	0.0	11.0	11.0	12.0	7.0	8.0	4.0	1.0	1.0	2.0	7.0	3.0	4.0	1.0	72.0	224	32.1%
Tuesday	2.0	10.0	10.0	11.0	8.0	9.0	7.0	7.0	5.0	3.0	7.0	6.0	3.0	1.0	89.0	224	39.7%
Wednesday	0.0	11.0	11.0	12.0	8.0	9.0	7.0	2.0	2.0	1.0	7.0	3.0	3.0	0.0	76.0	224	33.9%
Thursday	2.0	11.0	11.0	11.0	8.0	9.0	6.0	6.0	3.0	2.0	7.0	6.0	2.0	1.0	85.0	224	37.9%
Friday	0.0	2.0	2.0	4.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	224	5.4%
Saturday	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224	0.0%
Sunday	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224	0.0%
Total Hrs	4.00	45.00	45.00	50.00	33.00	36.00	25.00	16.00	11.00	8.00	28.00	18.00	12.00	3.00	334.0		
Capacity Hrs	112	112	112	112	112	112	112	112	112	112	112	112	112	112	1,568.0		
Utilization Per Hour	3.6%	40.2%	40.2%	44.6%	29.5%	32.1%	22.3%	14.3%	9.8%	7.1%	25.0%	16.1%	10.7%	2.7%	21.3%		

Combo Rooms Scheduled Hours - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	0.0	11.0	11.0	12.0	7.0	8.0	4.0	1.0	1.0	2.0	7.0	3.0	4.0	1.0	72.0	224	32.1%
Tuesday	2.0	10.0	10.0	11.0	8.0	9.0	7.0	7.0	5.0	3.0	7.0	6.0	3.0	1.0	89.0	224	39.7%
Wednesday	0.0	11.0	11.0	12.0	8.0	9.0	7.0	2.0	2.0	1.0	7.0	3.0	3.0	0.0	76.0	224	33.9%
Thursday	2.0	11.0	11.0	11.0	8.0	9.0	6.0	6.0	3.0	2.0	7.0	6.0	2.0	1.0	85.0	224	37.9%
Friday															0.0	224	0.0%
Saturday															0.0	224	0.0%
Sunday															0.0	224	0.0%
Total Hrs	4.00	43.00	43.00	46.00	31.00	35.00	24.00	16.00	11.00	8.00	28.00	18.00	12.00	3.00	322.0		
Capacity Hrs	64	64	64	64	64	64	64	64	64	64	64	64	64	64	896.0		
Utilization Per Hour	6.3%	67.2%	67.2%	71.9%	48.4%	54.7%	37.5%	25.0%	17.2%	12.5%	43.8%	28.1%	18.8%	4.7%	35.9%		

This slide documents usage patterns of the 16 Combo rooms in this category for the Spring semester of 2024 (this is 1 less Combo room than in 2019). Utilization statistics are complex and vary based on the number of days and hours during which classes are conducted. For purpose of this analysis, it was assumed courses can be conducted starting from 8 am and concluding no later than 10 pm. The tables above also consider two options for days courses are scheduled which include Monday – Sunday and Monday – Thursday. Key statistics for these hours and days are shown to the right of this slide.

Note: numbers in the matrices above represent hours rooms are used.

Monday - Sunday

- Average utilization is 21.3%
- Peak times for utilization are 9 am – 2 pm where utilization is between 44.6% and 22.3%
- Friday, Saturday and Sunday utilization is very low

Monday – Thursday

- Average utilization is 35.9%
- Peak times for utilization are 9 am – 2 pm where utilization is between 71.9% and 37.5%
- Utilization levels shown were not factored up for the courses conducted on Sunday, Saturday and Friday

Usage Patterns Labs Spring 2024

Lab Rooms Scheduled Hours - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	4.0	15.0	17.0	18.0	13.0	15.0	21.0	19.0	17.0	11.0	6.0	10.0	9.0	7.0	182.0	490	37.1%
Tuesday	6.0	22.0	23.0	26.0	25.0	23.0	23.0	18.0	19.0	16.0	17.0	18.0	14.0	14.0	264.0	490	53.9%
Wednesday	3.0	17.0	22.0	23.0	16.0	16.0	23.0	23.0	20.0	14.0	11.0	15.0	14.0	12.0	229.0	490	46.7%
Thursday	6.0	25.0	26.0	28.0	25.0	22.0	22.0	18.0	18.0	14.0	12.0	13.0	10.0	10.0	249.0	490	50.8%
Friday	0.0	5.0	7.0	7.0	7.0	6.0	6.0	6.0	7.0	3.0	2.0	2.0	1.0	0.0	59.0	490	12.0%
Saturday	0.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	30.0	490	6.1%
Sunday	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	490	0.0%
Total Hrs	19.0	88.0	99.0	106.0	90.0	86.0	99.0	87.0	84.0	58.0	48.0	58.0	48.0	43.0	1,013.0		
Capacity Hrs	245	245	245	245	245	245	245	245	245	245	245	245	245	245	3,430.0		
Utilization Per Hour	7.8%	35.9%	40.4%	43.3%	36.7%	35.1%	40.4%	35.5%	34.3%	23.7%	19.6%	23.7%	19.6%	17.6%	29.5%		

Lab Rooms Scheduled Hours - Spring 2024

Rooms

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total Hrs	Capacity Hrs	Utilization Per Day
Monday	4.0	15.0	17.0	18.0	13.0	15.0	21.0	19.0	17.0	11.0	6.0	10.0	9.0	7.0	182.0	490	37.1%
Tuesday	6.0	22.0	23.0	26.0	25.0	23.0	23.0	18.0	19.0	16.0	17.0	18.0	14.0	14.0	264.0	490	53.9%
Wednesday	3.0	17.0	22.0	23.0	16.0	16.0	23.0	23.0	20.0	14.0	11.0	15.0	14.0	12.0	229.0	490	46.7%
Thursday	6.0	25.0	26.0	28.0	25.0	22.0	22.0	18.0	18.0	14.0	12.0	13.0	10.0	10.0	249.0	490	50.8%
Friday															0.0	490	0.0%
Saturday															0.0	490	0.0%
Sunday															0.0	490	0.0%
Total Hrs	19.0	79.0	88.0	95.0	79.0	76.0	89.0	78.0	74.0	55.0	46.0	56.0	47.0	43.0	924.0		
Capacity Hrs	140	140	140	140	140	140	140	140	140	140	140	140	140	140	1,960.0		
Utilization Per Hour	13.6%	56.4%	62.9%	67.9%	56.4%	54.3%	63.6%	55.7%	52.9%	39.3%	32.9%	40.0%	33.6%	30.7%	47.1%		

This slide documents usage patterns of the 19 Lab rooms in this category for the Spring semester of 2024 (same number of Labs rooms as in 2019). Utilization statistics are complex and vary based on the number of days and hours during which classes are conducted. For purpose of this analysis, it was assumed courses can be conducted starting from 8 am and concluding no later than 10 pm. The tables above also consider two options for days courses are scheduled which include Monday – Sunday and Monday – Thursday. Key statistics for these hours and days are shown to the right of this slide.

Note: numbers in the matrices above represent hours rooms are used.

Monday - Sunday

- Average utilization is 29.5%
- Peak times for utilization are 9 am – 2 pm where utilization is between 43.3% and 35.1%
- Friday, Saturday and Sunday utilization is very low

Monday – Thursday

- Average utilization is 47.1%
- Peak times for utilization are 9 am – 4 pm where utilization is between 67.6% and 52.9%
- Utilization levels shown were not factored up for the courses conducted on Sunday, Saturday and Friday

Usage Patterns Fall 2019 vs Spring 2024

Monday - Friday

**Classroom Utilization By Time of Day
Monday - Friday**

		8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Aggerate
Lecture Rooms	2019 Fall	36.2%	69.5%	76.5%	75.1%	59.7%	54.6%	55.7%	37.8%	37.3%	23.8%	44.3%	45.4%	39.5%	19.7%	48.2%
	2024 Spring	27.7%	61.8%	60.9%	64.1%	48.6%	45.0%	48.6%	29.1%	26.8%	19.1%	35.5%	25.5%	21.4%	7.7%	37.3%
	Net Change	-8.5%	-7.6%	-15.6%	-11.0%	-11.1%	-9.6%	-7.0%	-8.7%	-10.5%	-4.7%	-8.9%	-20.0%	-18.1%	-12.0%	-11.0%
	% Change	-23.4%	-11.0%	-20.4%	-14.7%	-18.6%	-17.6%	-12.6%	-23.1%	-28.1%	-19.7%	-20.0%	-43.9%	-45.9%	-60.8%	-22.7%
Combo Rooms	2019 Fall	36.5%	51.8%	56.5%	71.8%	76.5%	56.5%	56.5%	67.1%	43.5%	30.6%	30.6%	44.7%	42.4%	28.2%	49.5%
	2024 Spring	5.0%	56.3%	56.3%	62.5%	41.3%	45.0%	31.3%	20.0%	13.8%	10.0%	35.0%	22.5%	15.0%	3.8%	29.8%
	Net Change	-31.5%	4.5%	-0.2%	-9.3%	-35.2%	-11.5%	-25.2%	-47.1%	-29.8%	-20.6%	4.4%	-22.2%	-27.4%	-24.5%	-19.7%
	% Change	-86.3%	8.7%	-0.4%	-12.9%	-46.1%	-20.3%	-44.7%	-70.2%	-68.4%	-67.3%	14.4%	-49.7%	-64.6%	-86.7%	-39.7%
Lab Rooms	2019 Fall	32.0%	56.0%	59.4%	56.6%	57.1%	60.0%	61.1%	47.4%	46.9%	36.0%	45.7%	38.3%	32.6%	23.4%	46.6%
	2024 Spring	10.9%	48.0%	54.3%	58.3%	49.1%	46.9%	54.3%	48.0%	46.3%	33.1%	27.4%	33.1%	27.4%	24.6%	40.1%
	Net Change	-21.1%	-8.0%	-5.1%	1.7%	-8.0%	-13.1%	-6.9%	0.6%	-0.6%	-2.9%	-18.3%	-5.1%	-5.1%	1.1%	-6.5%
	% Change	-66.1%	-14.3%	-8.7%	3.0%	-14.0%	-21.9%	-11.2%	1.2%	-1.2%	-7.9%	-40.0%	-13.4%	-15.8%	4.9%	-13.9%

This slide documents changes in usage patterns between Fall 2019 and Spring 2024 for each of the 3 classroom types. The focus is on Monday – Friday across all potential course times (Saturdays and Sundays are not included due to very low usage levels).

Net Change is defined as the utilization difference between Fall 2019 and Spring 2024. % Change is defined as the percent of net change relative to the Fall 2019 utilization number. Select details for each classroom type are shown in the text box to the right.

Lecture

- Utilization decreased for all times in the range
- The average utilization reduction is 22.7%

Combo

- Utilization decreased for all but 2 time slots
- The average utilization reduction is 39.7%

Labs

- Utilization decreases in all but 3 time slots
- The average reduction is 13.9%

Usage Patterns Fall 2019 vs Spring 2024

Monday - Thursday

Classroom Utilization By Time of Day
Monday - Thursday

		8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Aggerate
Lecture Rooms	2019 Fall	44.9%	79.7%	87.5%	85.1%	67.9%	64.9%	66.6%	45.3%	45.3%	29.4%	54.1%	55.1%	48.0%	23.6%	56.9%
	2024 Spring	31.8%	71.0%	69.3%	73.3%	54.0%	52.3%	55.1%	33.0%	30.7%	22.7%	42.6%	30.1%	25.0%	8.5%	42.8%
	Net Change	-13.1%	-8.7%	-18.2%	-11.8%	-13.9%	-12.6%	-11.4%	-12.3%	-14.6%	-6.7%	-11.4%	-25.0%	-23.0%	-15.1%	-14.1%
	% Change	-29.2%	-10.9%	-20.8%	-13.9%	-20.5%	-19.4%	-17.2%	-27.2%	-32.2%	-22.7%	-21.2%	-45.3%	-47.9%	-64.0%	-24.8%
Combo Rooms	2019 Fall	42.6%	54.4%	61.8%	76.5%	82.4%	66.2%	67.6%	82.4%	52.9%	38.2%	38.2%	55.9%	52.9%	35.3%	57.7%
	2024 Spring	6.3%	67.2%	67.2%	71.9%	48.4%	54.7%	37.5%	25.0%	17.2%	12.5%	43.8%	28.1%	18.8%	4.7%	35.9%
	Net Change	-36.4%	12.8%	5.4%	-4.6%	-33.9%	-11.5%	-30.1%	-57.4%	-35.8%	-25.7%	5.5%	-27.8%	-34.2%	-30.6%	-21.7%
	% Change	-85.3%	23.5%	8.8%	-6.0%	-41.2%	-17.4%	-44.6%	-69.6%	-67.5%	-67.3%	14.4%	-49.7%	-64.6%	-86.7%	-37.7%
Lab Rooms	2019 Fall	39.3%	66.4%	70.0%	68.6%	65.7%	67.9%	70.0%	56.4%	56.4%	43.6%	55.7%	47.1%	40.0%	28.6%	55.4%
	2024 Spring	13.6%	56.4%	62.9%	67.9%	56.4%	54.3%	63.6%	55.7%	52.9%	39.3%	32.9%	40.0%	33.6%	30.7%	47.1%
	Net Change	-25.7%	-10.0%	-7.1%	-0.7%	-9.3%	-13.6%	-6.4%	-0.7%	-3.6%	-4.3%	-22.9%	-7.1%	-6.4%	2.1%	-8.3%
	% Change	-65.5%	-15.1%	-10.2%	-1.0%	-14.1%	-20.0%	-9.2%	-1.3%	-6.3%	-9.8%	-41.0%	-15.2%	-16.1%	7.5%	-14.9%

This slide documents changes in usage patterns between Fall 2019 and Spring 2024 for each of the 3 room types. The focus is on Monday – Thursday across all potential course times (Fridays, Saturdays and Sundays are not included due to very low usage levels).

Net change is defined as the utilization difference between Fall 2019 and Spring 2024. % change is defined as the percent of net change relative to the Fall 2019 utilization number. Select details for each classroom type are shown in the text box to the right.

Lecture

- Utilization decreased for all times in the range
- The average utilization reduction is 24.8%

Combo

- Utilization decreased for all but 3 time slots
- The average utilization reduction is 37.7%

Labs

- Utilization decreased for all but 1 time slot
- The average utilization reduction is 14.9%

Classroom Numbers vs Usage by Year

Classroom Numbers

	2019 Fall	2024 Spring	% Change
Lecture Rooms	74	44	-40.5%
Combo Rooms	17	16	-5.9%
Lab Rooms	35	35	0.0%
Total	126	95	-24.6%

Classroom Utilization Daily Average

	Fall 2019		Spring 2024	
	Mon - Fri	Mon - Thur	Mon - Fri	Mon - Thur
Lecture Rooms	48.2%	56.9%	37.3%	42.8%
Combo Rooms	49.5%	57.7%	29.8%	35.9%
Lab Rooms	46.6%	55.4%	40.1%	47.1%

This slide documents the changes in the number of rooms between Fall 2019 and Spring 2024. It further considers the overall utilization of the 3 room types when the days of instruction are varied from Monday – Friday to Monday – Thursday.

Lecture

- Rooms were reduced in number by 40.5% between Fall 2019 and Spring 2024
- Utilization statistics declined between Fall 2019 and Spring 2024 for both instruction day combinations

Combo

- Rooms were reduced in number by 5.9% between Fall 2019 and Spring 2024
- Utilization statistics declined between Fall 2019 and Spring for both combinations

Labs

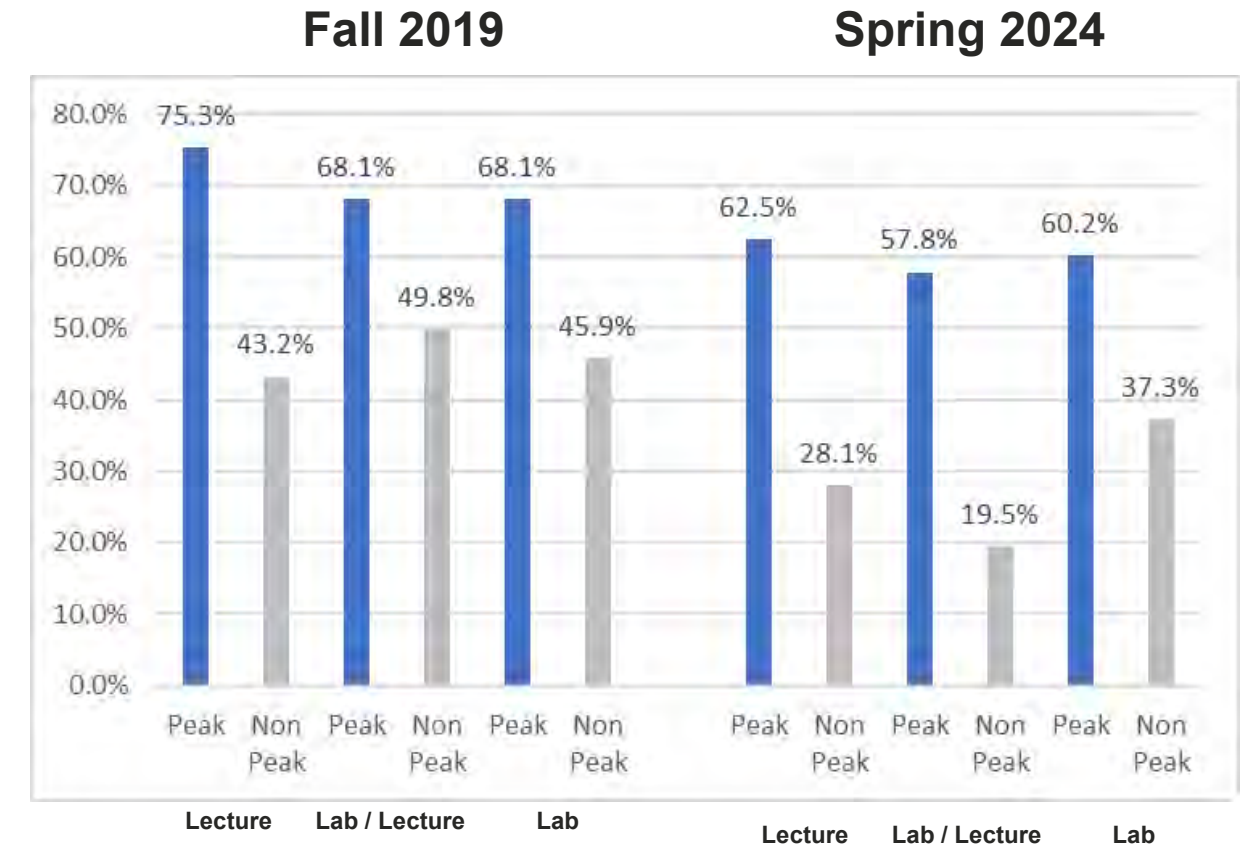
- Rooms remained constant but utilization declined for both instruction day combinations

Peak + Non-Peak Utilization

Monday - Thursday

Fall 2019						Spring 2024					
Lecture		Combo		Lab		Lecture		Combo		Lab	
Peak	Non Peak	Peak	Non Peak	Peak	Non Peak	Peak	Non Peak	Peak	Non Peak	Peak	Non Peak
75.3%	43.2%	68.1%	49.8%	68.1%	45.9%	62.5%	28.1%	57.8%	19.5%	60.2%	37.3%

Peak is 9 am - 2 pm
 Non Peak is 8 - 9 am and 3 - 10 pm



This slide documents and contrasts the change in Peak and Non-Peak utilization for each of the three classroom types for the Fall 2019 and Spring 2024 semesters. Fall 2019 Peak and Non-Peak utilization for Lecture rooms appears as best in class at ARC and will serve as the basis for Scenario 3 later in this section.

As noted earlier in this section utilization fell for Peak and Non-Peak for all room types between Fall 2019 and Spring 2024.

Utilization + Course Requirement / Demand Changes

Fall 2019 Utilization & Requirement Change vs Spring 2024

Monday - Thursday (4 days)

	Classroom						Total
	Lecture		Combo		Lab		
	Peak	Non-Peak	Peak	Non-Peak	Peak	Non-Peak	
Fall 2019 Utilization	75.3%	43.2%	68.1%	49.8%	68.1%	45.9%	
Spring 2024 Utilization	62.5%	28.1%	57.8%	19.5%	60.2%	37.3%	
Fall 2019 Course Requirement / Demand	2360.0		549.0		1086.0		3995.0
Spring 2024 Course Requirement / Demand	1055.0		322.0		924.0		2301.0
Percent Change	-55.3%		-41.3%		-14.9%		-42.4%

This slide examines and compares utilization levels and course requirements for each classroom type for Fall 2019 and Spring 2024. Between 2019 and 2024 requirements fell significantly for Lecture and Combo rooms and fell by a moderate amount for Lab rooms. This indicates the current inventory of rooms has capacity to support significant growth in the Student population, an increase in on ground modality and / or a reduction in space.

Notes:

- Utilization numbers above are from ARC Fall 2019 and Spring 2024 utilization reports
- Fall 2019 and Spring 2024 requirements are calculated in this section on the 6 pages titled Usage Patterns *ROOM TYPE YEAR* Fall and examine only Monday – Thursday data (as the other days have very low utilization)

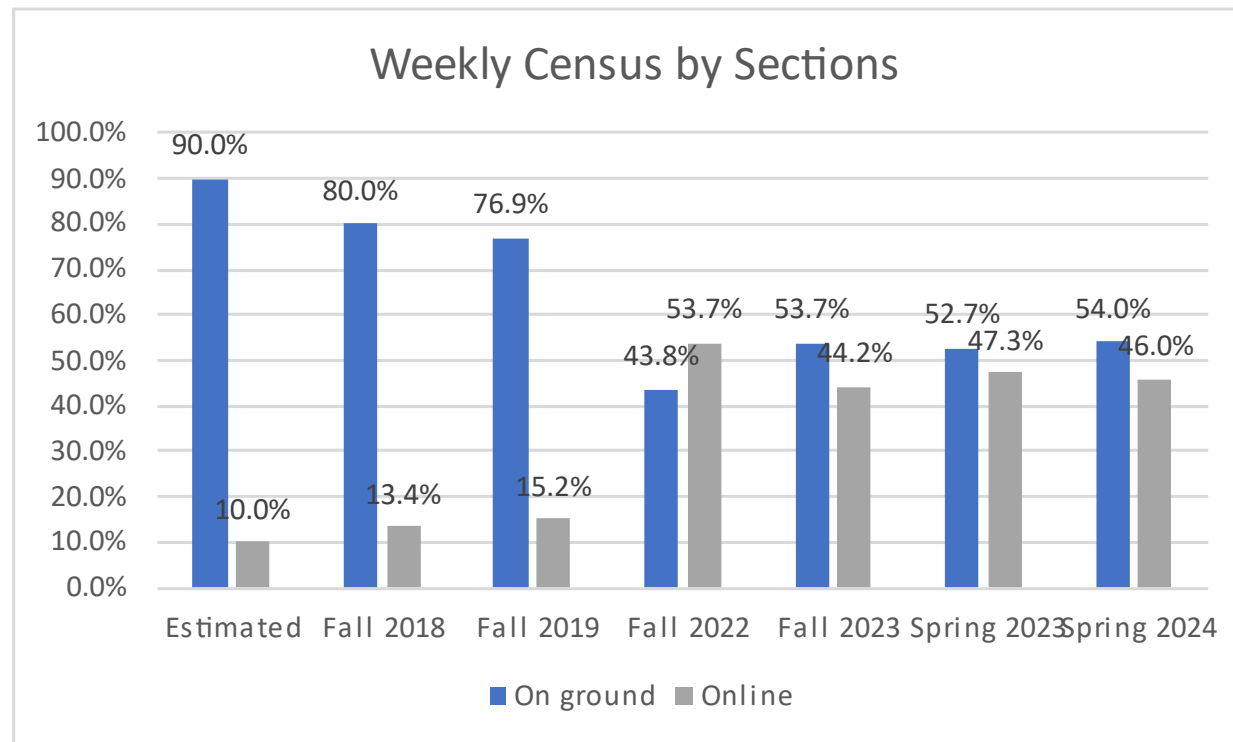
Evolution - Online vs On-Ground

On Ground vs Online Class Mix Evolution

Weekly Enrollment Census Statistics

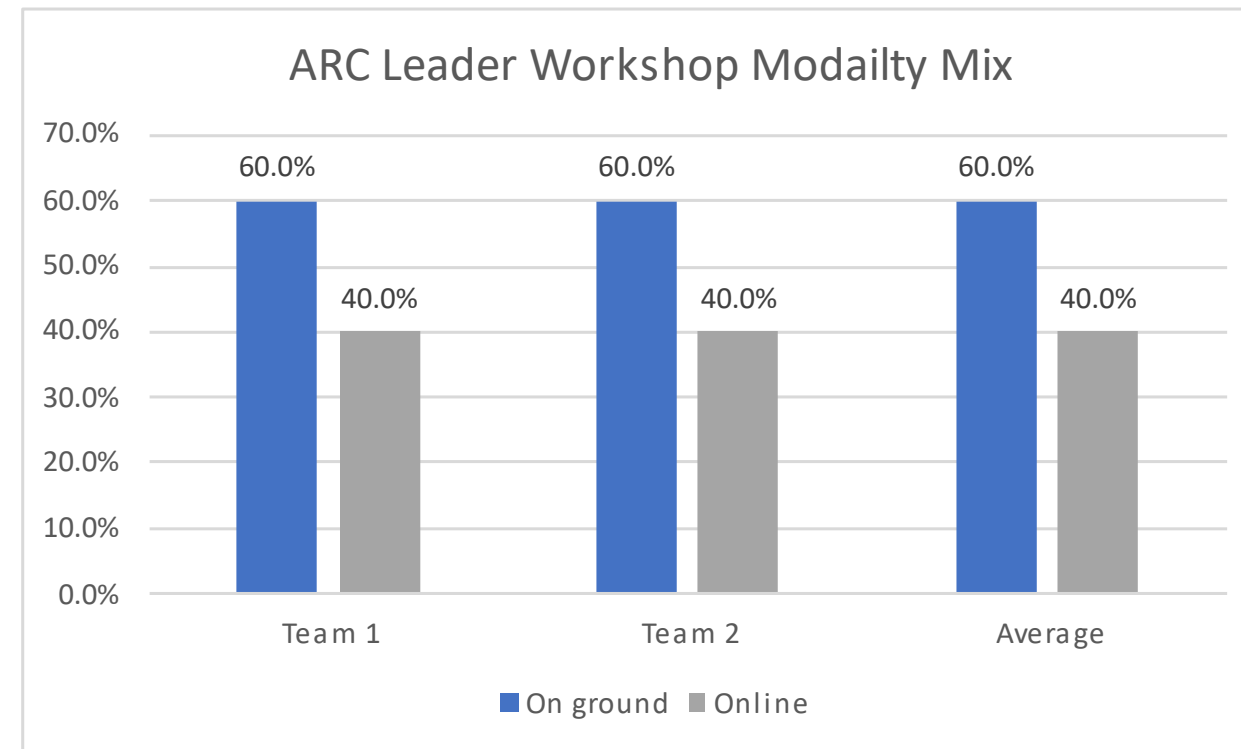
	Estimated	Fall 2018	Fall 2019	Fall 2022	Fall 2023	Spring 2023	Spring 2024
On ground	90.0%	80.0%	76.9%	43.8%	53.7%	52.7%	54.0%
Online	10.0%	13.4%	15.2%	53.7%	44.2%	47.3%	46.0%

Note: for 2018 and 2019 hybrid is included in online and for 2022, 2023 and 2024 it is included in on-ground



Leader Workshop Long Term Modality Exercise Results

	ARC Leaders		Workshop
	Team 1	Team 2	Average
On ground	60.0%	60.0%	60.0%
Online	40.0%	40.0%	40.0%



The above graphic documents the evolution in modality from Pre Covid to Spring 2024 (Sections data is used here however the WSCH data is almost identical). While the data is limited there are two trends which are apparent.

- Prior to Covid on-ground courses were slowly declining over time as a percentage of the modality mix
- After Covid on-ground courses have varied between 43.8% and 54.0% of the modality mix

The above graphic is from the ARC Leader workshop where each team was asked to suggest what they thought was the long-term modality mix that would be ideal for their students. The graphic indicates the results of each team for this exercise and the average of the responses.

Of particular interest the average from this exercise is similar to the Spring 2024 modality numbers from Sections data contained in the Enrollment Census Statistics.

Success Rates by Modality

ARC Success Rates by Modality - Spring 2024

	Overall	African American*	Hispanic Latino*
In-Person	74.0%	59.0%	70.0%
Online Asynchronous	71.0%	56.0%	67.0%
Online Synchronous	74.0%	52.0%	71.0%
Hybrid	71.0%	57.0%	66.0%
In-Person v Online Asynchronous	-3.0%	-3.0%	-3.0%
In-Person v Online Synchronous	0.0%	-7.0%	1.0%

This slide documents Student success statistics by modality for various Student groups. The consulting team are not in a position to comment on the statistical significance of these numbers; however, it does appear that:

- In all cases online asynchronous success rates are below in-person success rates
- Online synchronous has equal or higher success rates than in-person in 2 of the 3 groups
- In all but one case online synchronous has better success rates than online asynchronous
- African American and Hispanic Latino students have lower success rates than the overall average all modalities

Classroom Scenarios

This and the following slide explore a range of scenarios which vary target utilization levels and demand for courses based on post pandemic patterns. The analysis also estimates the resulting impact on the inventory of classrooms. The three scenarios considered are:

- Scenario 1 – Peak utilization is set to 80% and Non-Peak is based on Spring 2024 actual course demand hours
- Scenario 2 – Peak utilization is set to 80% and Non-Peak is set to 35% of course demand hours specified
- Scenario 3 – Peak utilization is set to 85% and Non-Peak is set to 40% of course demand hours specified

For each Scenario a range of course demand hours is considered for each classroom type. Here the changing demand represents growth / decline in Student population and / or changes in modality. The course demand levels considered include:

- Current demand less 10%
- Current demand (Spring 2024)
- Current demand increased by 10%
- Current demand increased by 20%

Scenario 3 has slightly higher utilization for Lecture rooms than was the case in Fall 2019 and was used as proof of concept (utilization levels realistically achievable). There is potential that a “**universal classroom**” could support higher levels of utilization but was not explored in this analysis.

Scenario 3 for current course demand hours indicates there is a 28.8% excess in total classrooms based on the current inventory of classrooms (Spring 2024).

The opportunities illustrated by the modeling indicate the potential for significant reductions in classrooms and / or repurposing of the associated space. As in all modeling situations, there are potential realities, constraints and leadership decisions which will need to be considered before the full impact can be determined.

Classroom Scenarios

	Classroom Utilization Scenario 1 Monday - Thursday (4 days)				Classroom Utilization Scenario 2 Monday - Thursday (4 days)				Classroom Utilization Scenario 3 Monday - Thursday (4 days)			
	Peak @ 80% utilization, Non Peak @ actual scheduled course demand				Peak @ 80% utilization, Non Peak @ 35% course demand specified				Peak @ 85% utilization, Non Peak @ 40% of course demand specified			
	Lecture	Combo	Lab	Total	Lecture	Combo	Lab	Total	Lecture	Combo	Lab	Total
Current Hours Course Demand Less 10%	949.5	289.8	831.6	2070.9	949.5	289.8	831.6	2070.9	949.5	289.8	831.6	2070.9
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	30.9	10.4	23.7	65.1	32.1	9.8	28.2	70.1	27.9	8.5	24.5	60.9
Excess # Rooms	13.1	5.6	11.3	29.9	11.9	6.2	6.8	24.9	16.1	7.5	10.5	34.1
% Excess	29.7%	35.0%	32.2%	31.5%	26.9%	38.7%	19.6%	26.2%	36.5%	46.7%	30.1%	35.9%
Current Hours Course Demand	1055	322	924	2301	1055	322	924	2301	1055	322	924	2301
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	34.4	11.6	26.4	72.3	35.7	10.9	31.3	77.9	31.0	9.5	27.2	67.7
Excess # Rooms	9.6	4.4	8.6	22.7	8.3	5.1	3.7	17.1	13.0	6.5	7.8	27.3
% Excess	21.9%	27.7%	24.7%	23.9%	18.8%	31.9%	10.6%	18.0%	29.5%	40.8%	22.4%	28.8%
Current Hours Course Demand Plus 10%	1160.5	354.2	1016.4	2531.1	1160.5	354.2	1016.4	2531.1	1160.5	354.2	1016.4	2531.1
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	37.8	12.7	29.0	79.5	39.3	12.0	34.4	85.7	34.1	10.4	29.9	74.4
Excess # Rooms	6.2	3.3	6.0	15.5	4.7	4.0	0.6	9.3	9.9	5.6	5.1	20.6
% Excess	14.1%	20.5%	17.2%	16.3%	10.7%	25.1%	1.7%	9.8%	22.4%	34.9%	14.6%	21.6%
Current Hours Course Demand Plus 20%	1266	386.4	1108.8	2761.2	1266	386.4	1108.8	2761.2	1266	386.4	1108.8	2761.2
Current # Rooms	44	16	35	95	44	16	35	95	44	16	35	95
Required # Rooms	41.3	13.9	31.6	86.8	42.9	13.1	37.5	93.5	37.2	11.4	32.6	81.2
Excess # Rooms	2.8	2.1	3.4	8.3	1.1	2.9	-2.5	1.5	6.8	4.6	2.4	13.8
% Excess	6.3%	13.3%	9.6%	8.7%	2.6%	18.2%	-7.3%	1.6%	15.4%	29.0%	6.8%	14.5%

06. Appendix

Work Modes Study Key Findings

Hybrid Approach

Hybrid, Worker Profiles and Work Modes

Traditionally, workplaces have been planned so that each person is assigned a personal workspace, reflecting a 1:1 person to seat ratio. In a hybrid workplace for many employees work can occur at home, in the office and other places. For some of these team members, individual workspaces in the office are unassigned, and when in the office these people select work settings that match their current mode of work and their personal preference.

The key underlying factor for most effective hybrid workplace strategies is the definition of worker profiles and types. These are based on how individuals work and their level of mobility/choice today and in the future. Other factors that should be considered when developing a hybrid strategy are:

- Cultural strengths and weakness of the organization
- Job function requirements
- Current and desired degree of choice
- Personal suitability or situation
- Resources to train and develop the hybrid worker
- Availability of mobile technology and infrastructure

The profiles developed for this engagement are based on a deep understanding of the time Classified Professionals spend in a range of work modes. The work modes employed, and their definition were first developed by workplace researchers Nonaka and Takeuchi. Steelcase's Workspace Futures team have expanded the knowledge associated with the concept of work modes and we have leveraged that information in this engagement.

Alone
Routine Tasks

Working by yourself doing tasks that don't require significant focus and/or privacy including email or casual correspondence.

Alone
Deep Focus Work

Working by yourself doing tasks that require significant focus and/or privacy as in creating content, building spreadsheets or reading documents.

Collaborate
Sharing information

Working with at least one other person and sharing information which could be a typical meeting to update people or reviewing project progress.

Collaborate
Creating content

Working with at least one other person and creating content, idea sharing, brainstorming or innovation as in a product development meeting, or a problem-solving session.

Socialize
Building connections

Spending time with others in a relaxed setting as in planned or chance encounters, team bonding exercises, or celebrations.

Other

This mode captures activities such as taking personal time, exercising, taking a mental break, lunch, etc. that occur throughout the workday.

Work Mode Study

Key Findings

- ARC's response rates to this study were below what is typical. Due to this a number of filters of the results had insufficient data to be presented in this document. This limited the findings and also suggests that while the broad direction of the findings are valid, they should not be viewed as definitive.
- Across the organization the predominant work mode is alone 64% with alone routine 31% and alone deep focus 33%.
- The predominant worker profiles are profile 3 and 4 which are characterized by a high percentage of alone work
- All 8 worker profiles are present, and their distribution varies by department, location and level (as would be expected).
- When considering the effectiveness of work, alone work has a higher percentage of time targeted at home than collaborative work or socialization.
- Calculated days in the office vary between 1.49 and 2.38.
- Calculated time in the office varies by department (data for other views is not available) which is to be expected. However, the lower range of days in the office do not seem to be appropriate for Student facing positions.
- Based on the low response rate and work with similar clients we suggest 3 days a week or 24 hours a week in the office be targeted for hybrid workers.

Alone
Routine Tasks

Alone
Deep Focus Work

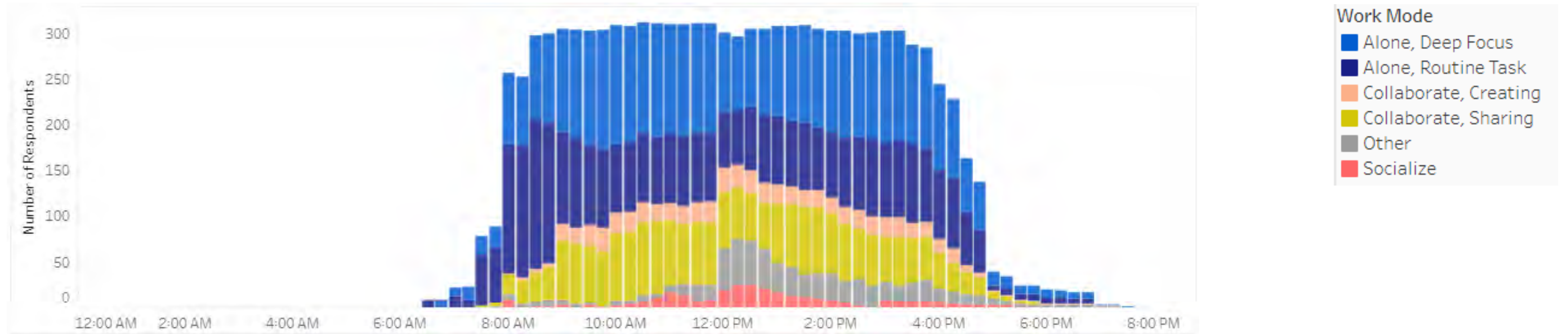
Collaborate
Sharing information

Collaborate
Creating content

Socialize
Building connections

Other

ARC Work Mode Study



The work mode effort for this engagement involved one execution of the Applied Research + Consulting team's Work Mode Study for 281 Classified Professionals and Classified Supervisors at ARC. 61 responses were received which represents a response rate of 21.7%. This response rate is lower than is typical and while the results for the broader population are usable, some of the subcategories (locations beyond the main campus and Classified Supervisors) have insufficient information and were excluded from reporting.

The graph on this page documents the aggregate flow of work over a typical day at ARC across all team members and locations. For a specific individual, the flow and blend of activities varies depending on job role, department, and level. Personal work style and preferences will also impact the blend of work modes for a given person

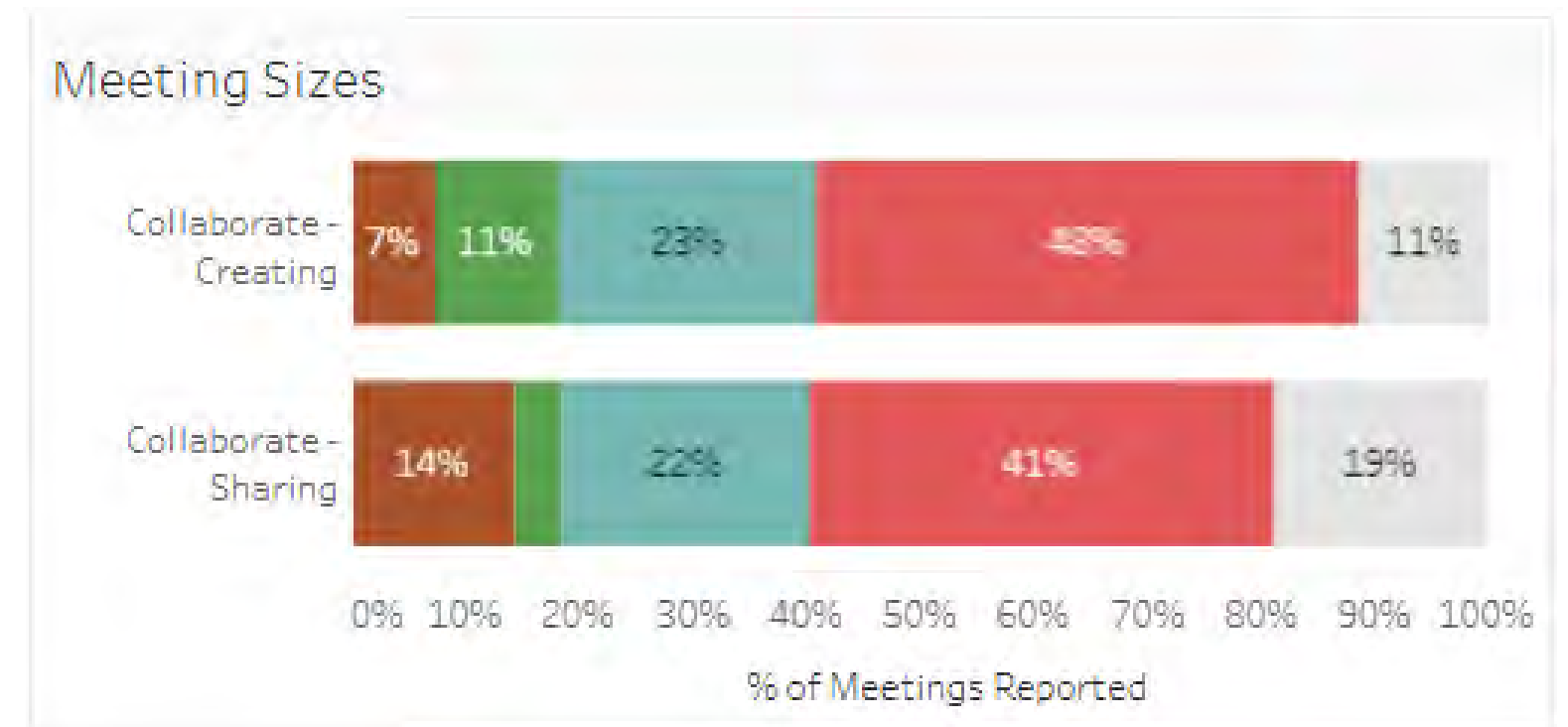
Please note, all work modes are important for an individual to be successful in their job and in general one work mode should not be unduly emphasized over another when considering the design of the workplace.

Collaborative Meeting Sizes

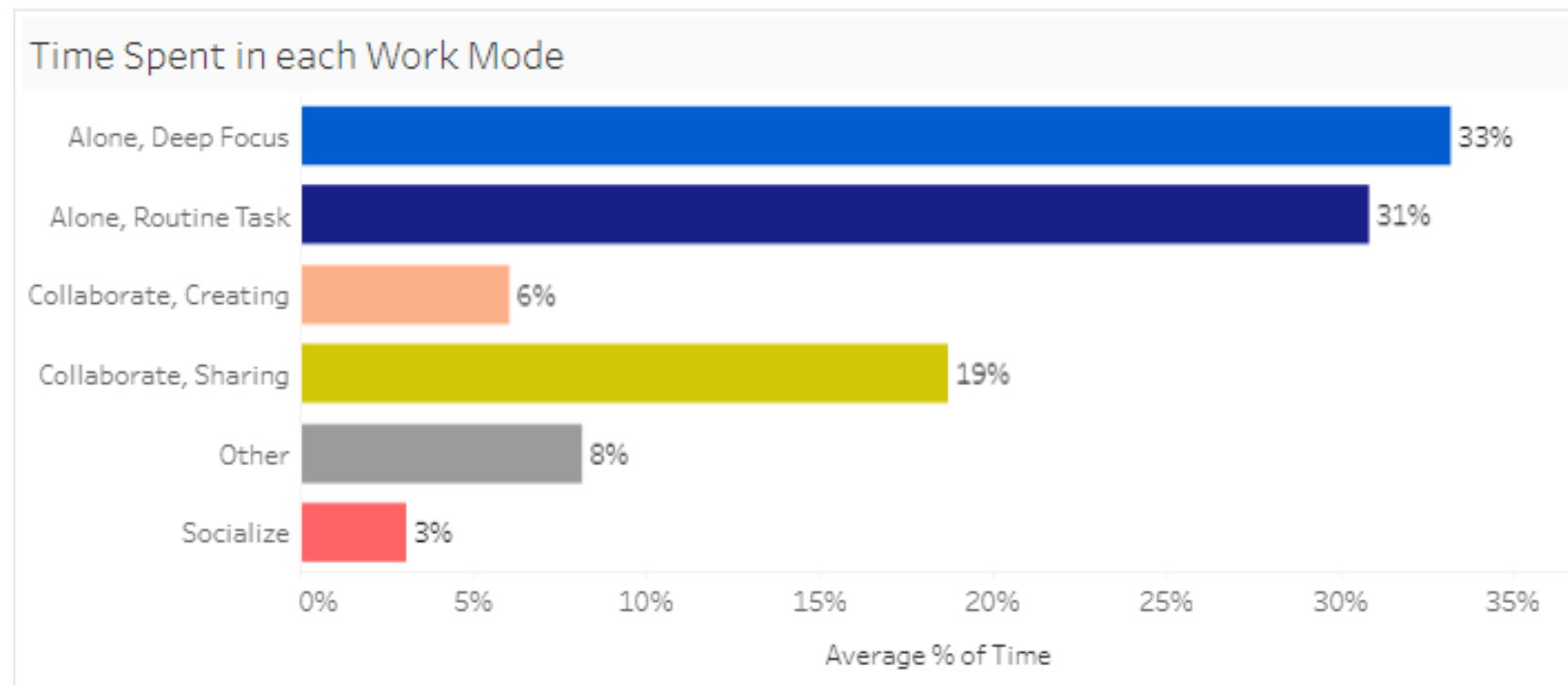
The work mode capability collects information from each collaborative activity including the number of people in each session. This chart documents the size of meetings for both collaborative work modes. At ARC, in general meetings tend to be small.

- The most frequent meeting size is 2 – 3 participants
- The second most frequent meeting size is 4 - 6 participants
- Approx. 79.7% of collaborative creating sessions include 2 to 6 participants
- Approx. 77.7% of collaborative sharing sessions include 2 to 6 participants

Note in calculating percentages above “No amount specified” was removed from the total.



Work Mode Aggregate Profile



This chart indicates the average percentage of time respondents spend in each work mode (data here is aggregated across all departments, locations and levels). Items of note at the aggregate level are:

- The predominant work mode is alone deep focus
- 64% of time is spent in alone work
- The predominant collaborative activity is sharing
- 25% of time is spent in collaborative work
- 3% of time is spent in socializing

The following four pages break ARC's work mode results into 8 unique profiles. This is sufficiently detailed to see unique aspects of how work is done without introducing undue and unwarranted complexity.

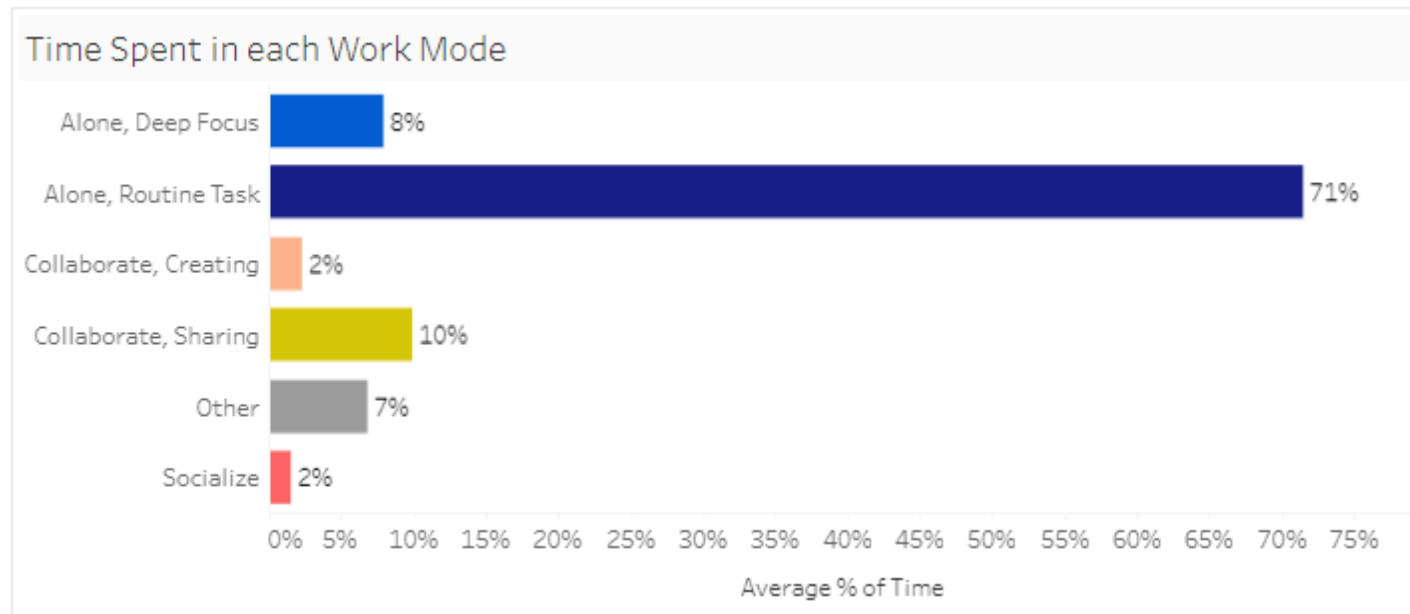
It should be noted that the various subdivisions (department, level and location) analyzed may or may not have all profiles and the percentage of time in each work mode will vary based on the unique work patterns associated with a given profile in a specific subdivision.

Work Mode Profiles

Detail

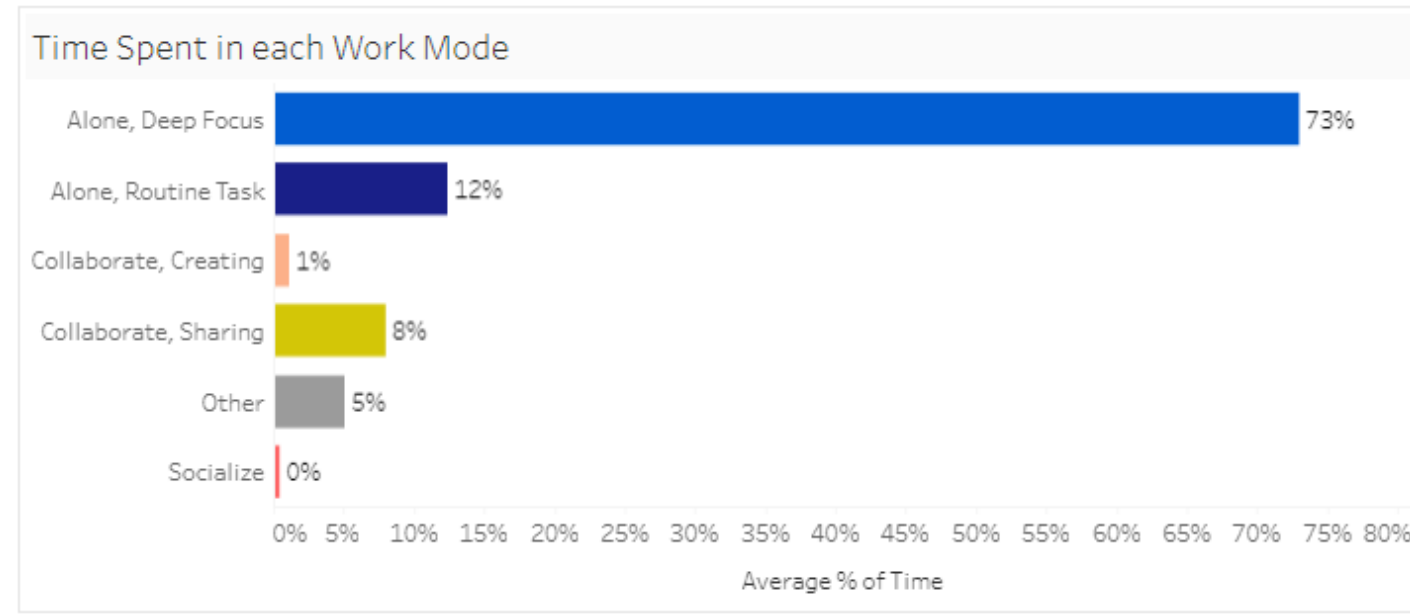
Profile 1

- High percentage of time in alone routine
- 79% of time in alone work
- 12% of time spent in collaborative work
- **4.3% of overall staff**



Profile 2

- High percentage of time spent in alone deep focus
- 85% of time spent in alone work
- 9% of time spent in collaborative work
- **18.3% of overall staff**

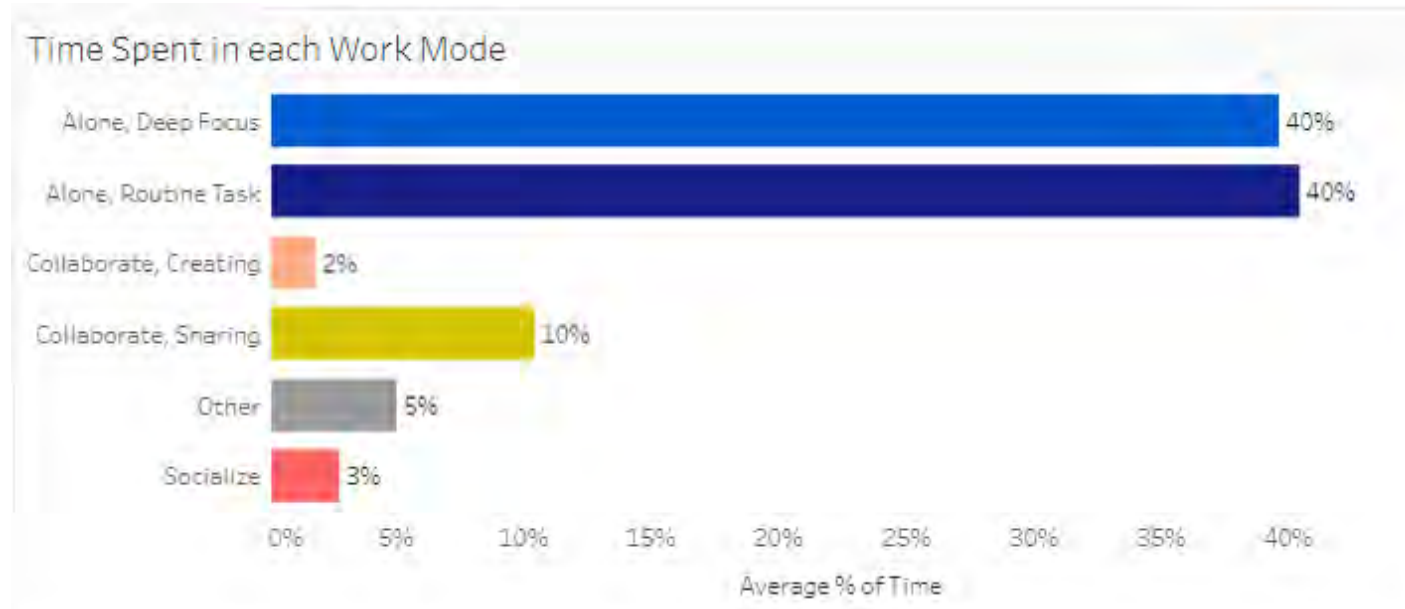


Work Mode Profiles

Detail

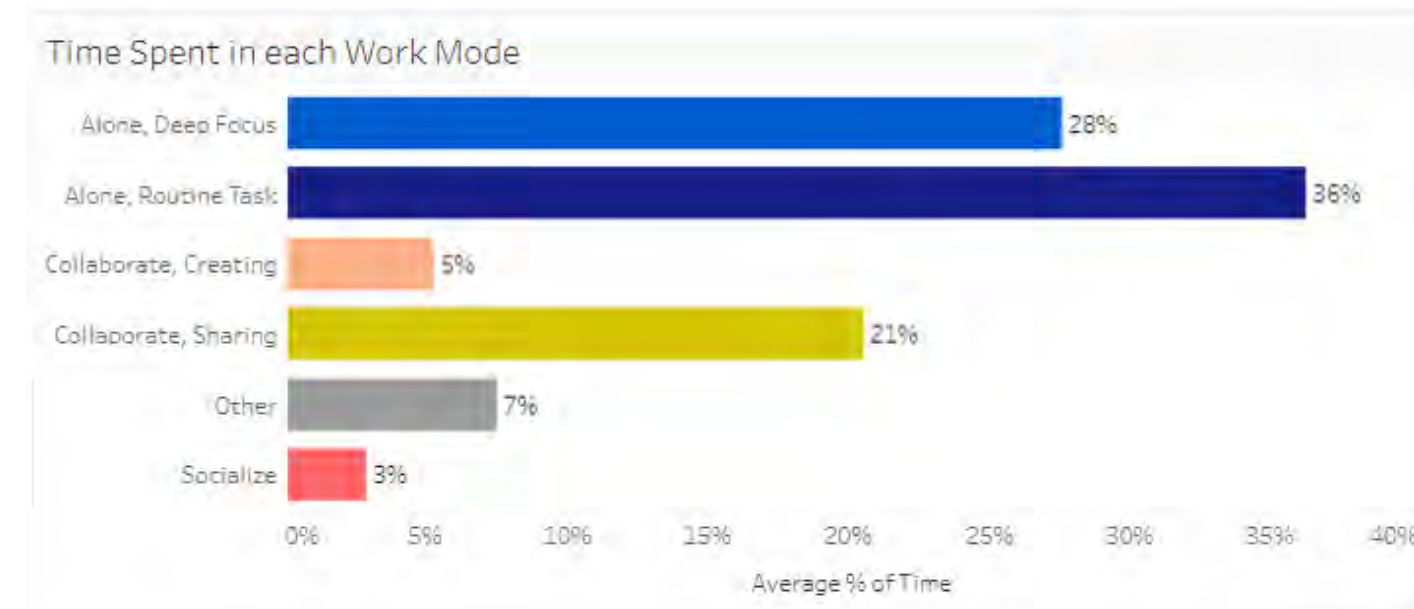
Profile 3

- High percentage of time spent in alone routine and deep focus
- Total of 80% of time spent in alone work
- 12% of time spent in collaborative work
- **27.5% of overall staff**



Profile 4

- High percentage of time spent in alone routine
- Total of 64% of time spent in alone work
- 26% of time spent in collaborative work
- **33.8% of overall staff**

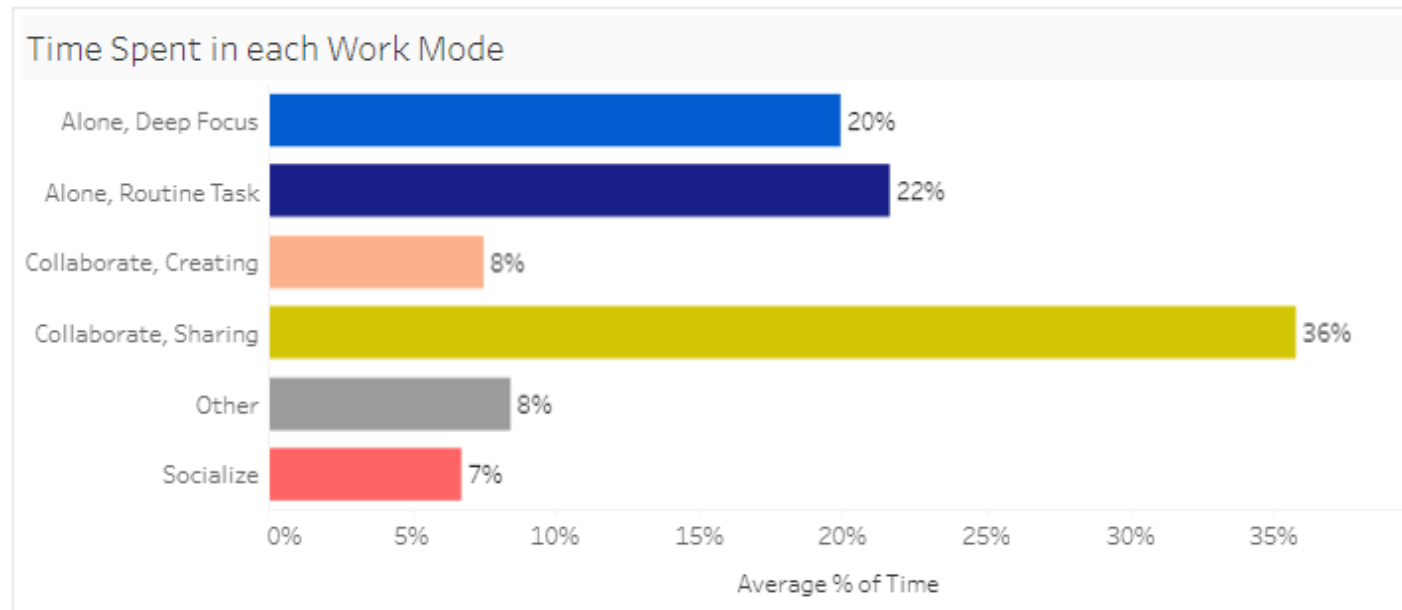


Work Mode Profiles

Detail

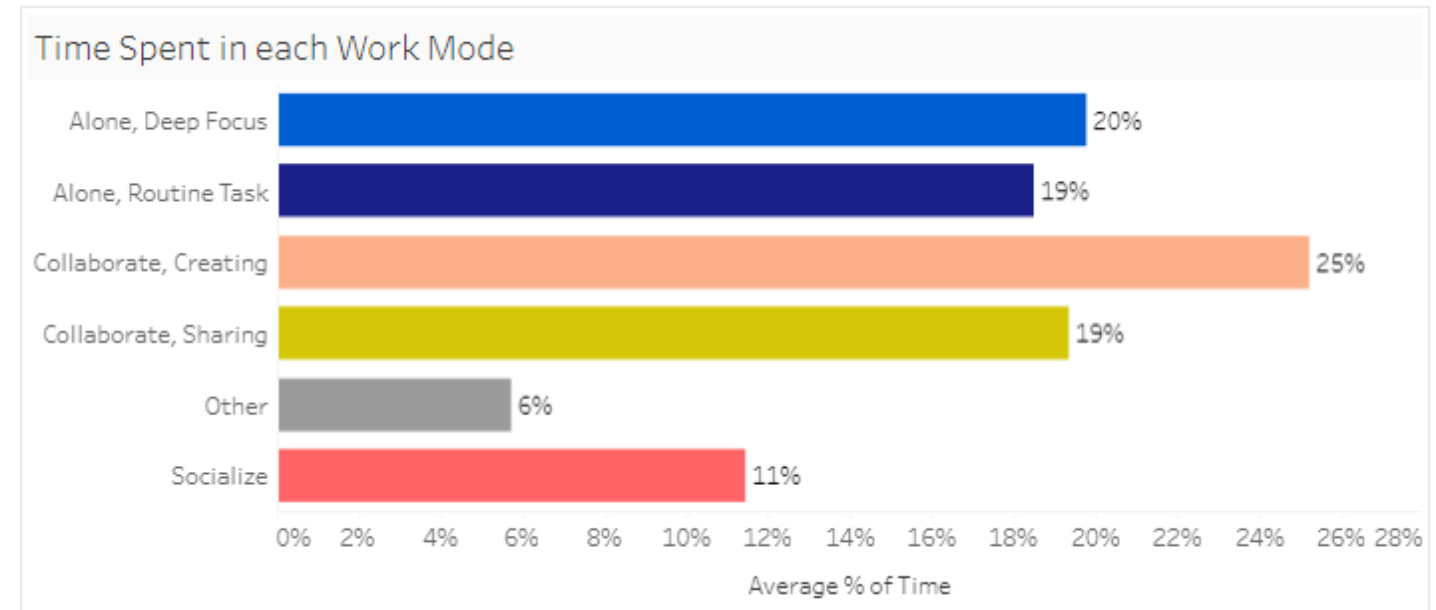
Profile 5

- High percentage of time in collaborative sharing
- 42% of time spent in individual work
- 44% of time spent in collaborative work
- **6.6% of overall staff**



Profile 6

- High percentage of time in collaborative creating
- 39% of time spent in individual work
- 44% of time spent in collaborative work
- **3.4% of overall staff**

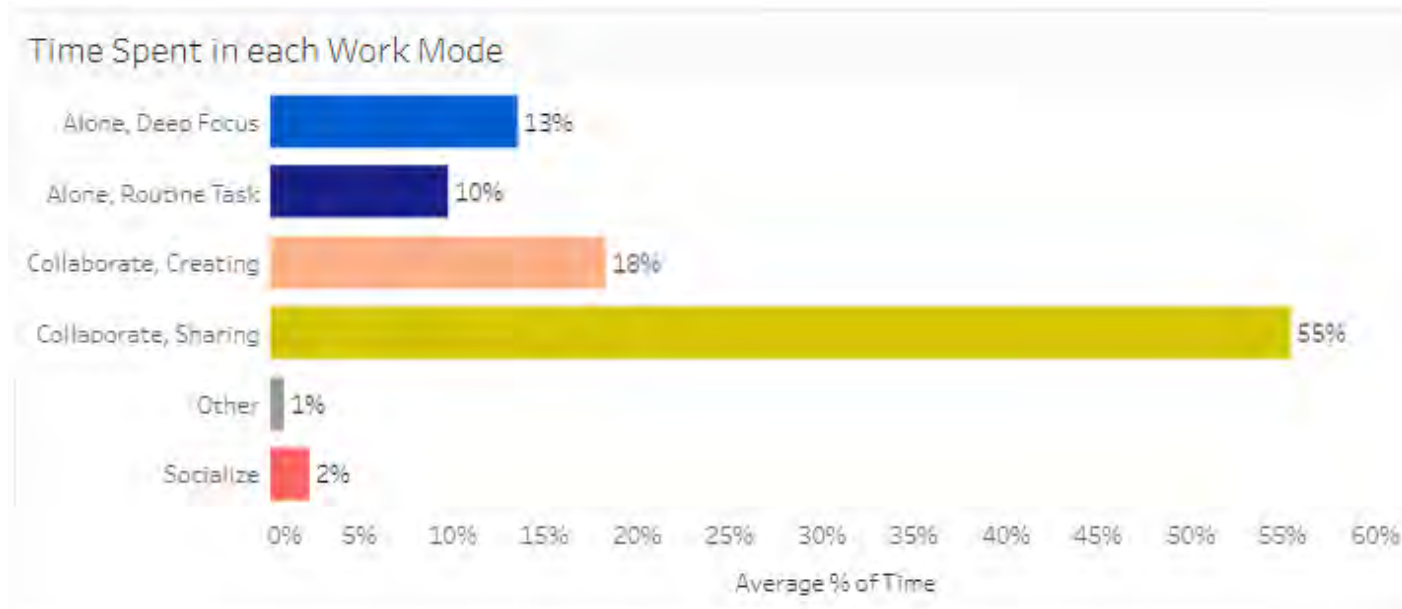


Work Mode Profiles

Detail

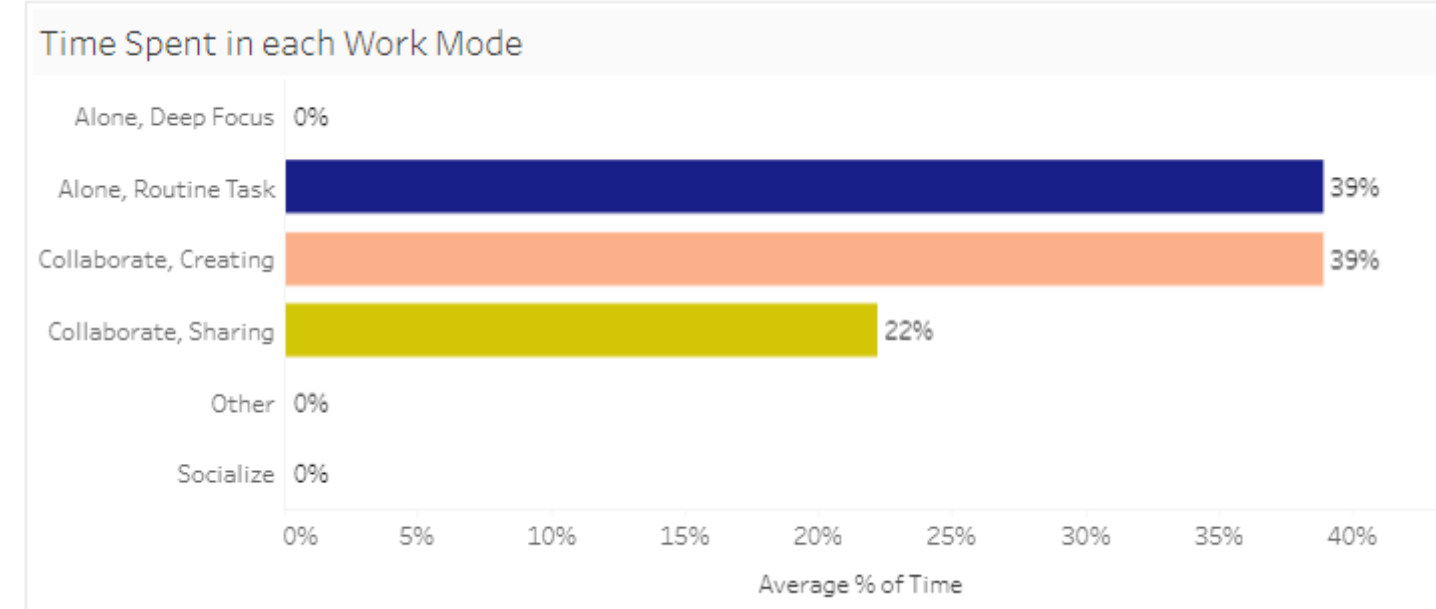
Profile 7

- High percentage of time in collaborative sharing
- 23% of time spent in individual work
- 73% of time spent in collaborative work
- **4.6% of overall staff**



Profile 8

- High percentage of time in collaborative creating and alone deep focus
- 39% of time spent in individual work
- 61% of time spent in collaborative work
- **1.6% of overall staff**

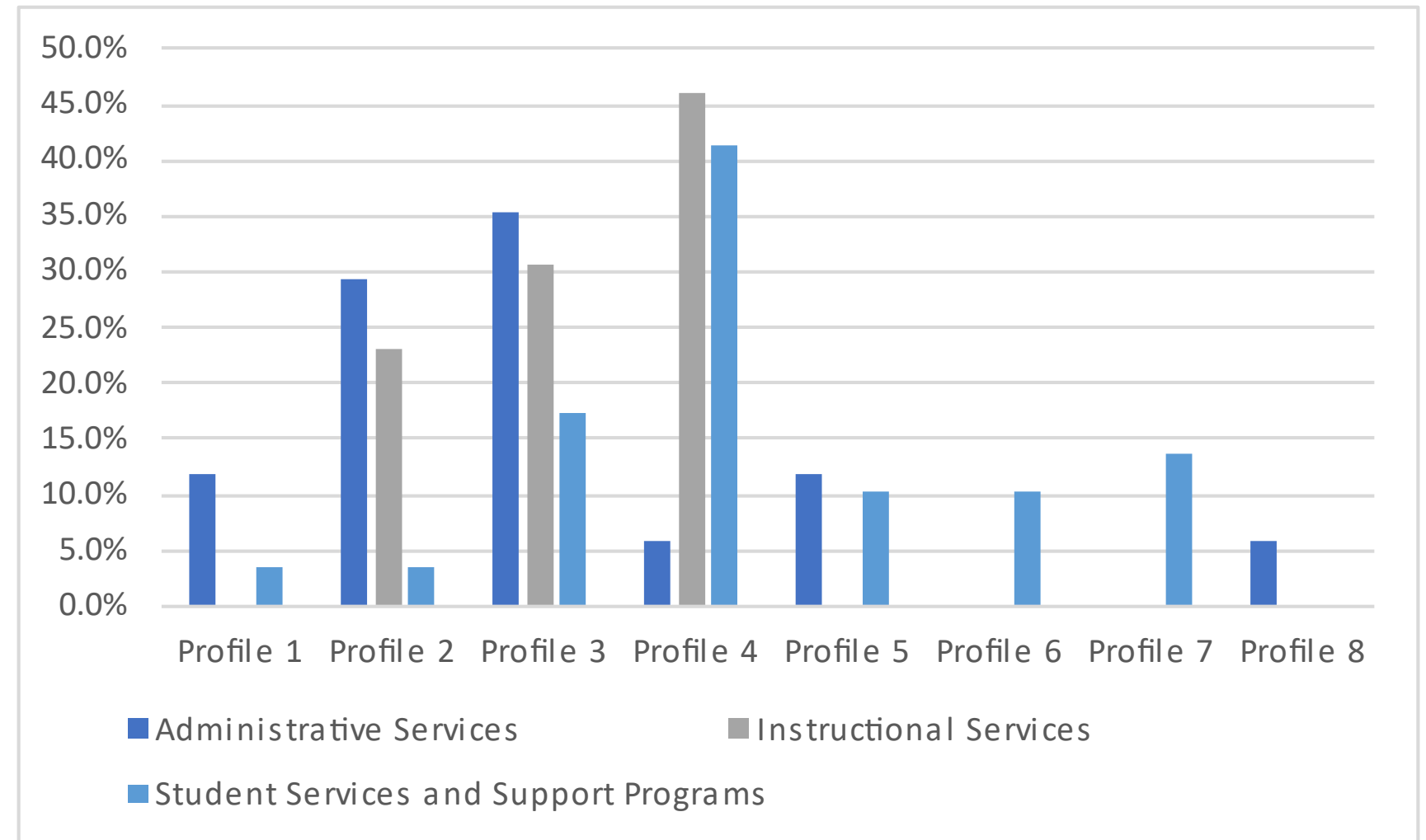


Work Mode Profiles

By Department

The graphic on this page overviews the distribution of profiles by department. The blue cells indicate the predominant profile by department. Profile 3 is predominant for Administrative Services and Profile 4 is predominant for Instructional Services and Student Services and Support Programs.

It should be noted that each department has a range of profiles which represent a diversity of job roles and personal preferences for how to do a specific job.



Department	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
Administrative Services	11.8%	29.4%	35.3%	5.9%	11.8%	0.0%	0.0%	5.9%
Instructional Services	0.0%	23.1%	30.8%	46.2%	0.0%	0.0%	0.0%	0.0%
Student Services and Support Programs	3.4%	3.4%	17.2%	41.4%	10.3%	10.3%	13.8%	0.0%

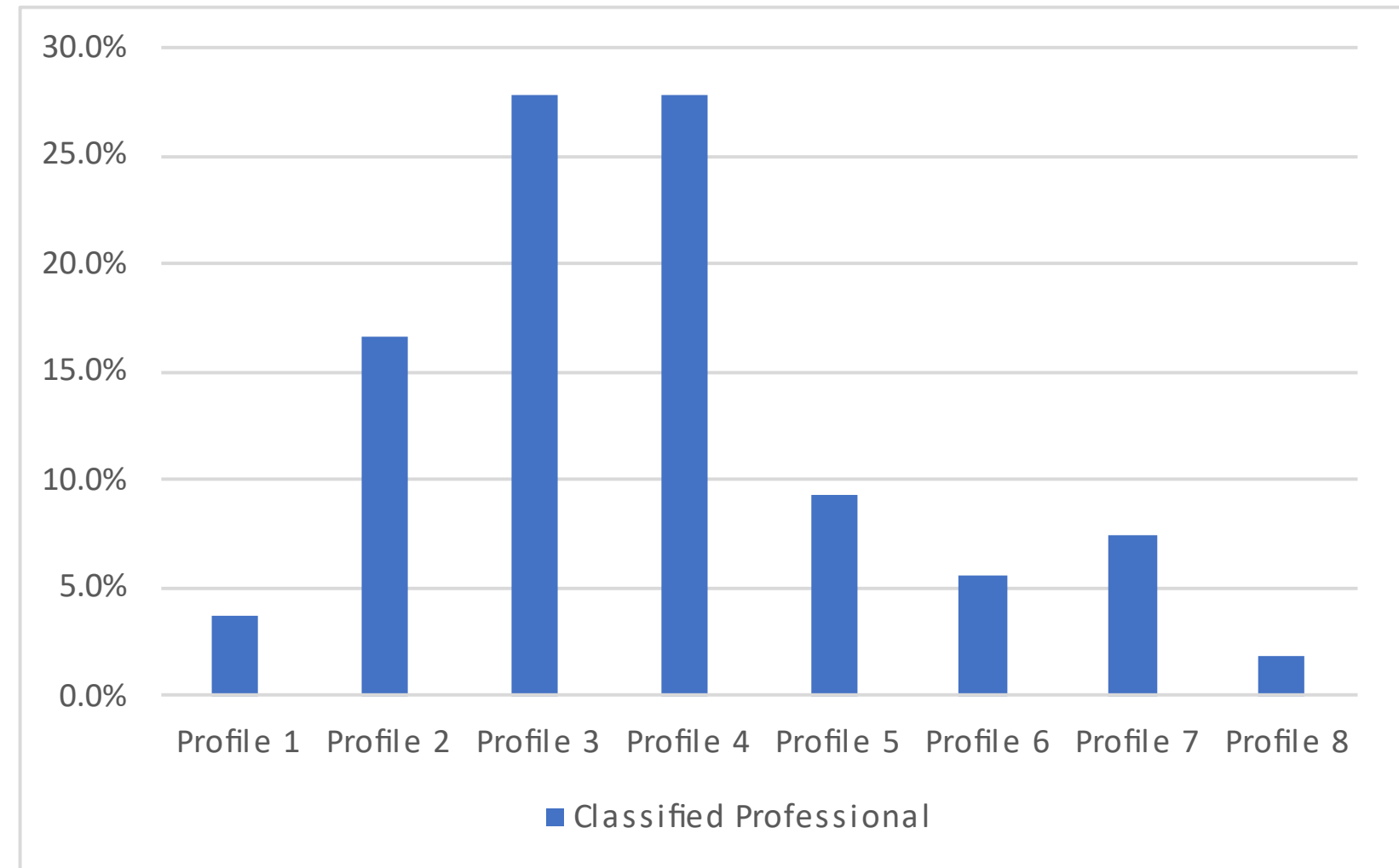
Work Mode Profiles

By Level

The graphics on this slide illustrate the distribution of work profiles for Classified Professionals. The blue cells indicate the predominant profile by level. As job levels increase within the organization the distribution of profiles shift to the right (higher number profiles). In essence this means the higher the level within the organization the greater the tendency to spend time in collaborative activities.

For ARC the response rate was insufficient to provide data for Classified Supervisors which means the distribution shift in profiles by job level is not available here.

- 75.9% of Classified Professional are in profiles 1-4



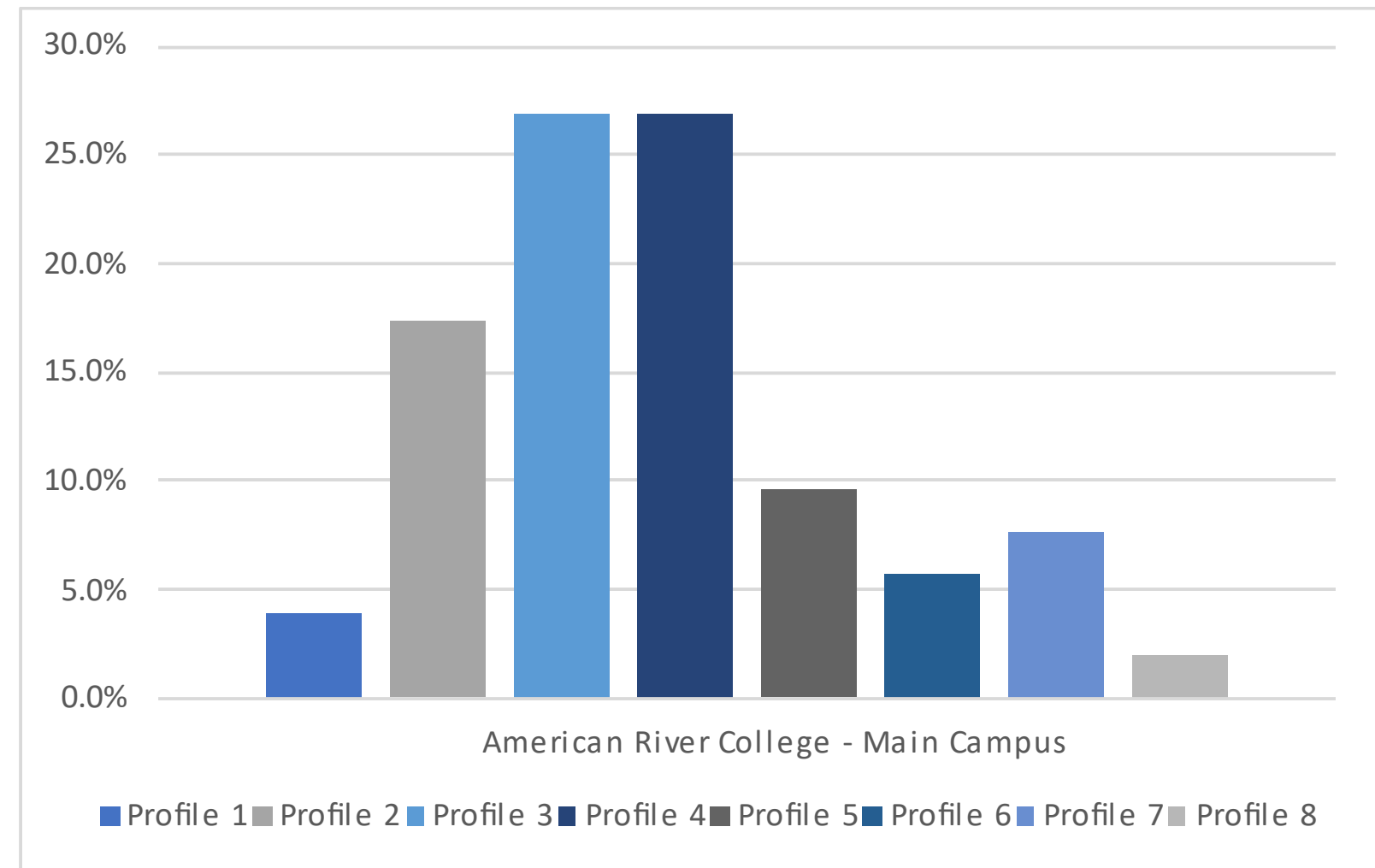
Level	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
Classified Professional	3.7%	16.7%	27.8%	27.8%	9.3%	5.6%	7.4%	1.9%
Note: Classified Supervisor results are not shown due to insufficient data								

Work Mode Profiles

By Location

The graph and table on this slide illustrate the distribution of work profiles by location. The blue cells indicate the predominant profile by location.

Note: the response rate was insufficient to provide data for Natomas Center and Sacramento Regional Public Safety locations.



Location	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
American River College - Main Campus	3.8%	17.3%	26.9%	26.9%	9.6%	5.8%	7.7%	1.9%
Note: Natomas Center and Sacramento Regional Public Safety results are not shown due to insufficient data								

Work Effectiveness

By Department

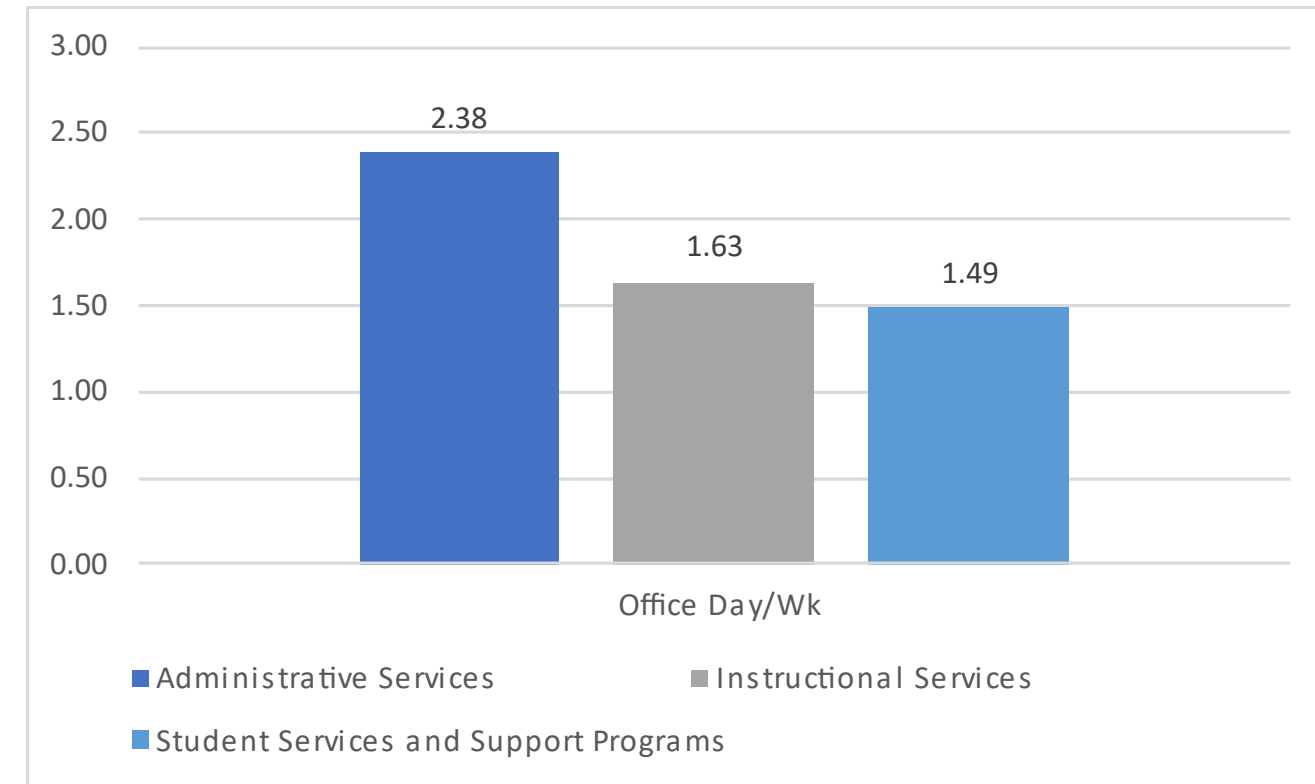
The tables on this page are based on aggregating data by department across all work mode responses to the question “where would you be most effective” office or home?

The data shows that in most instances team members believe from an effectiveness / productivity perspective there is less reason for alone work to be done in the office as compared to collaborative work and socialization. Data from Administrative Services appears to vary from the other two groups with a higher percentage of alone deep focus in the office and a lower percentage of collaborative sharing in the office. This is not typical and is likely due to low response rates for this Study.

For the bar charts on this page, the numbers at the top of each bar represent the days per week by department the average person believes would be most effective to spend in the office. These are derived by weighting headcount “effectiveness” responses by work mode across each profile for each department.

The results from Instructional Services and Student Services and Support are similar. Administrative Services data indicates a higher need to be in the office.

Given the manner work modes overlap during a typical day, it would probably be better to view these “days per week in the office” as “hours per week in the office”.



Administrative Services	Effectiveness	
	% Home	% Office
Alone - deep focus	50.0%	50.0%
Alone - routine task	71.8%	28.2%
Collaborate - sharing	61.9%	38.1%
Collaborate - creating	0.0%	100.0%
Socialize	16.7%	83.3%
No response and no preference removed from calculation		

Instructional Services	Effectiveness	
	% Home	% Office
Alone - deep focus	77.9%	22.1%
Alone - routine task	78.2%	21.8%
Collaborate - sharing	48.4%	51.6%
Collaborate - creating	0.0%	100.0%
Socialize	25.0%	75.0%
No response and no preference removed from calculation		

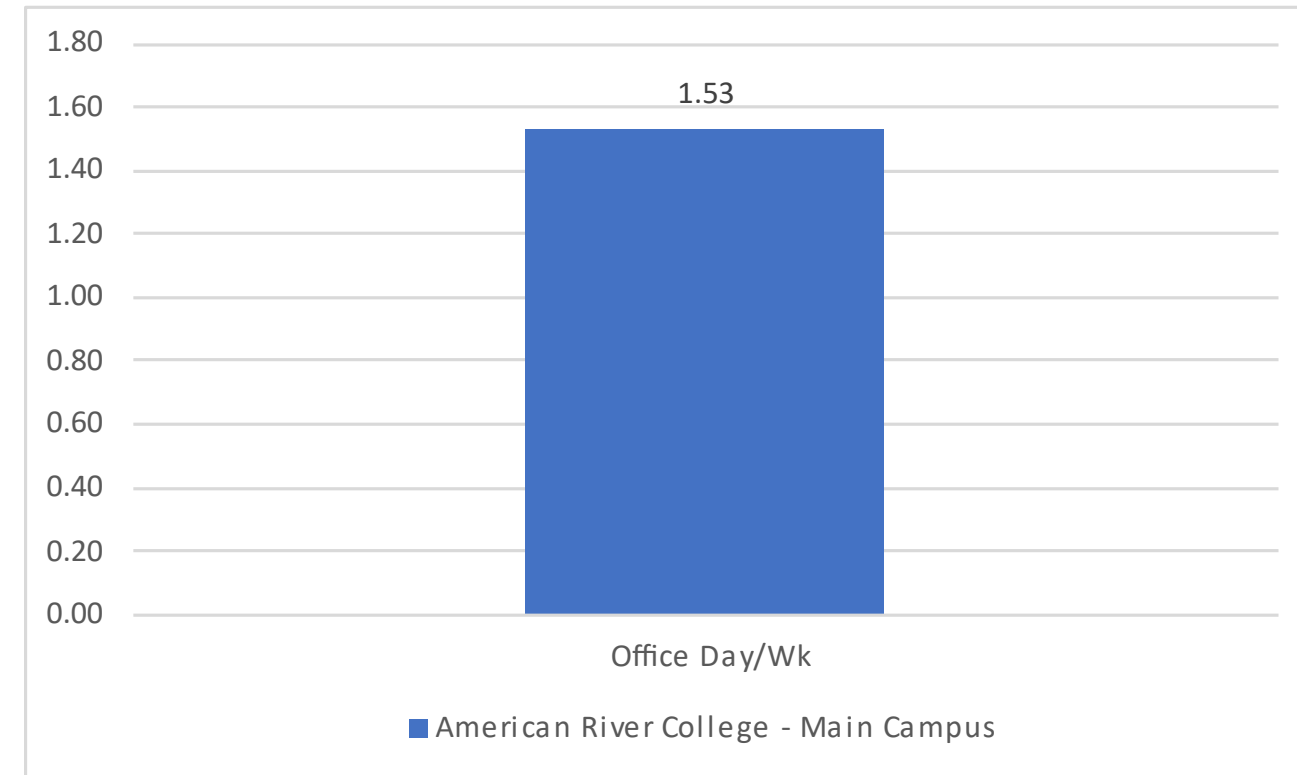
Student Services and Support	Effectiveness	
	% Home	% Office
Alone - deep focus	85.8%	14.2%
Alone - routine task	87.7%	12.3%
Collaborate - sharing	58.3%	41.7%
Collaborate - creating	41.9%	58.1%
Socialize	36.1%	63.9%
No response and no preference removed from calculation		

Work Effectiveness

By Location

The tables and graph on this slide utilize the same logic and analysis used on the Work Effectiveness by department page earlier in this section.

Note: the response rate was insufficient to provide data for Natomas Center and Sacramento Regional Public Safety locations.



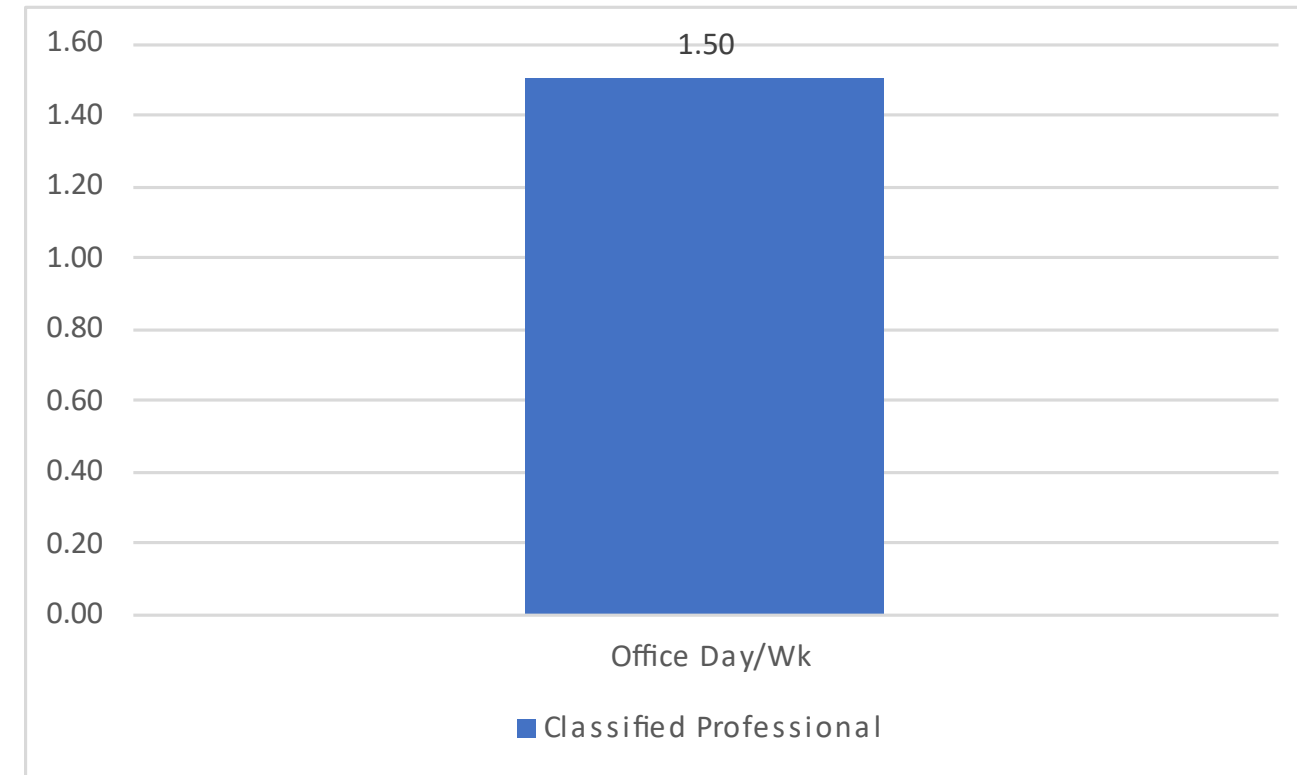
American River College - Main Campus	Effectiveness	
	% Home	% Office
Alone - deep focus	81.3%	18.8%
Alone - routine task	84.9%	15.1%
Collaborate - sharing	60.0%	40.0%
Collaborate - creating	40.3%	59.7%
Socialize	34.1%	65.9%
No response and no preference removed from calculations		

Work Effectiveness

By Level

The tables and graph on this slide utilize the same logic and analysis used on the Work Effectiveness by department page earlier in this section.

Note: Classified Supervisor results are not shown due to insufficient data



Classified Professional	Effectiveness	
	% Home	% Office
Alone - deep focus	79.3%	20.7%
Alone - routine task	83.3%	16.7%
Collaborate - sharing	61.5%	38.5%
Collaborate - creating	44.8%	55.2%
Socialize	33.7%	66.3%
No response and no preference removed from calculations		

06. Appendix

Observation Key Findings

Observation Overview

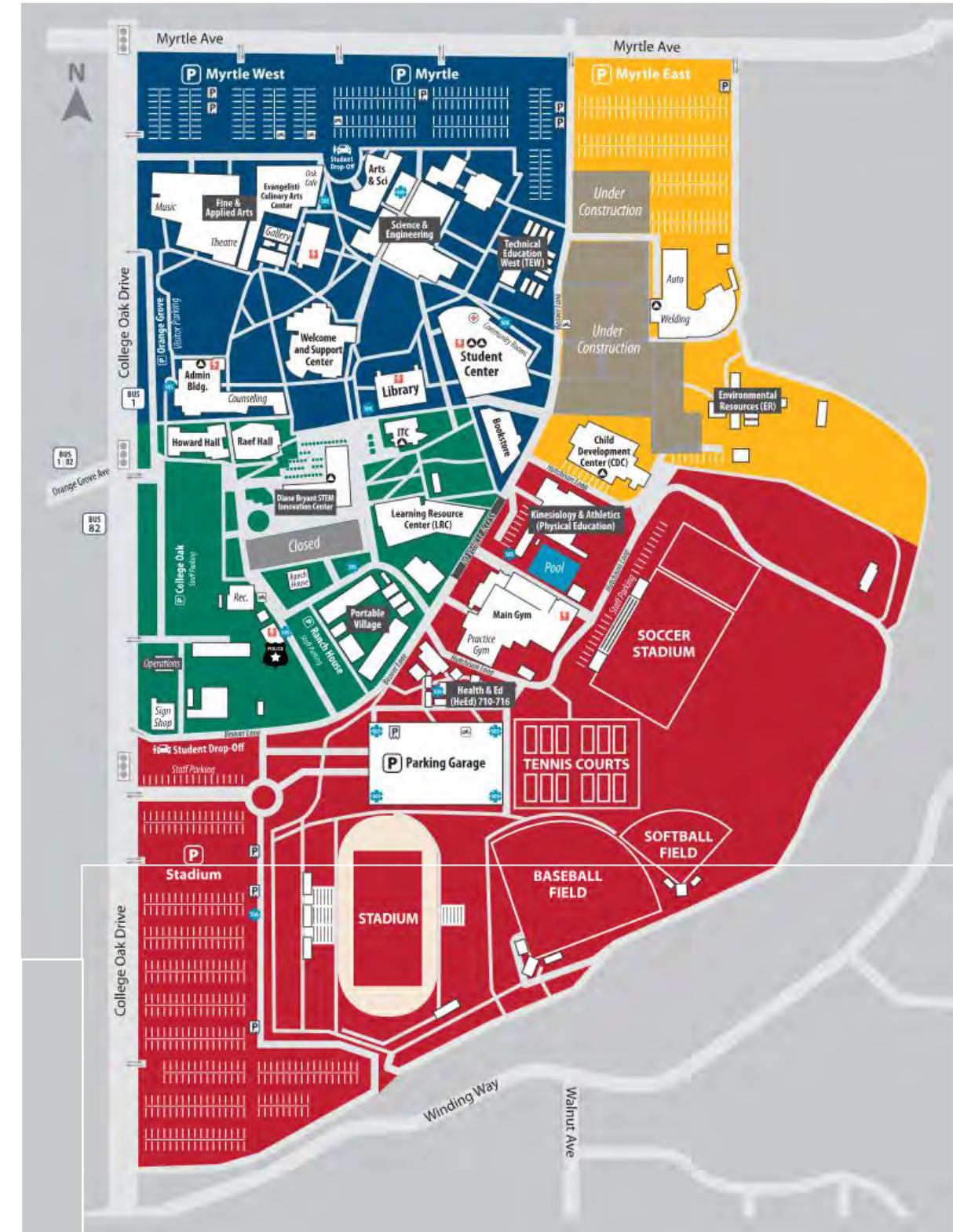
Intent + Overview

This section documents the results from Observation Study conducted by the Applied Research + Consulting team during the Spring semester of 2024 at ARC Main Campus and Natomas Campus.

The intent of this effort was to gain a firsthand understanding of the current state of spaces where learning and work happens, better understand how space is used and the relationship of spaces to one another. The observation effort included 17 Buildings/Portables including approximately 45 Classrooms, 6 Faculty Office areas, 7 Classified Professional work areas and the Natomas Center.

The following pages contain a summary of general observations as well as a summary of learnings for each space type observed:

- Classrooms
- Faculty work areas
- Classified Professional work areas
- Student spaces
- Natomas Center



Observation Study Findings

General



People are the Heart of the Campus

There is a palpable commitment to people – Students, Classified Professionals and Faculty – when on campus. This commitment is both demonstrated directly, through the celebration of people’s roles and achievements and indirectly, through the wide range of services and support offered to individuals.

This observation is well aligned to the mission of ARC.



Food and Beverage Services and Amenities

Cafeteria and food/beverage services are open for limited hours and are not easily accessible on campus. Departments and HomeBases supply shelf stable snacks and beverages. Mini-fridges, kettles, microwaves etc. were observed in offices and workrooms across the Campus possibly in an effort to ensure easy access to these amenities outside of food service hours.

This limited access may result in Students not staying on campus for longer periods of time to study and work, and Faculty and Classified Professionals eating lunch etc. in their work areas.



Analog Communication

Analog appears to be the primary communication medium on campus. Bulletin boards hosting posters, flyers and event announcements were evident on most circulation paths. While this helps to create a sense of community and activity on Campus, these are not ideal as the primary source of information and communication.

With a high proportion of virtual Students, relying on printed analog communication methods may result in some Students not being able to access information in a consistent and reliable way.

Observation Study Findings

General



Disparity of spaces

Many of the spaces across the campus provide a varied experience e.g., Student common areas, Classrooms, Classified Professional workspaces and Faculty offices. Some spaces are well lit, well ventilated and have good temperature regulation while others struggle with one or more of these issues.

There is also a great assortment of furniture components throughout campus. However, some are dated, less comfortable and less ergonomic than others.



Temporary becomes Permanent

Some Portable buildings, which were built to serve as a temporary solution to a space issue, have now been in place for decades. These buildings were observed in various stages of disrepair with issues ranging from inefficient ventilation and temperature control to broken window treatments and dated furniture.

Employing short term solutions over long term can signal inefficiencies and create a sense of a “less than” experience by those who utilize these spaces.



Navigating the Campus

Various methods of branding and signage were observed across campus. Ranging from professionally printed banners and maps to ad hoc paper signs, these are all intended to provide wayfinding for Students and visitors. However, the disparity can be confusing and promote feelings of impermanence. Specifically, Student Service programs are not always prominently advertised resulting in potential lack of awareness of what is available to Students.

Observation Study Findings

General



Refresh + Respite

While the grounds of the ARC campus are well maintained and connect to nature, there is a general lack of wellness facilities across campus. Spaces where Students, Faculty, Staff and visitors can meditate or pray as well as spaces for nursing mother's, were not readily present or easily accessible.

Additionally, some features of the campus that could provide opportunities for rejuvenation are not clearly signed, e.g., the walking trail near Horticulture Department. Providing access to these types of spaces can help individuals in both their mental and physical health journeys.



Ebb and Flow on Campus throughout Semester

Activity levels on campus during the observation period, which was conducted on various days of the week, multiple times over a span of several months, ranged from very quiet to bustling. Higher attendance levels greatly impact the energy level on campus and contribute to a sense of community and connectedness.

It was observed that all buildings and spaces are continuously lit and heated/cooled regardless of attendance levels and in-person activities.



Community Artwork

There were many examples of inspiring, relevant installations of artwork in buildings and across the campus which adds visual interest and beautification to the campus experience. It also evokes feelings of inclusion – as many of the pieces are Student or Instructor designed and created.

Additionally, the existence of the James Kaneko and the Library Stairwell art galleries, demonstrate a commitment to the Arts, supporting ARC's mission "to encourage intellectual, personal and cultural development."

Observation Study Findings

Student Experience



HomeBases are Sought Out as a Destination

Each HomeBase has its own personality: some appeared cohesive and had newer furnishings, while others were more makeshift. This variation in the spaces may impact the quality of the Student experience.

Students in the HomeBases were observed utilizing the lounge furniture, technology provided and enjoying the snacks and drinks offered.

Overall, these spaces appear to be used by Students as intended.



Underutilized Space

Many Student spaces on campus were observed to be vastly underutilized. For example, workstations and individual seating areas in the Library were mostly unoccupied and group study rooms were observed being used by one or two individuals, at most.

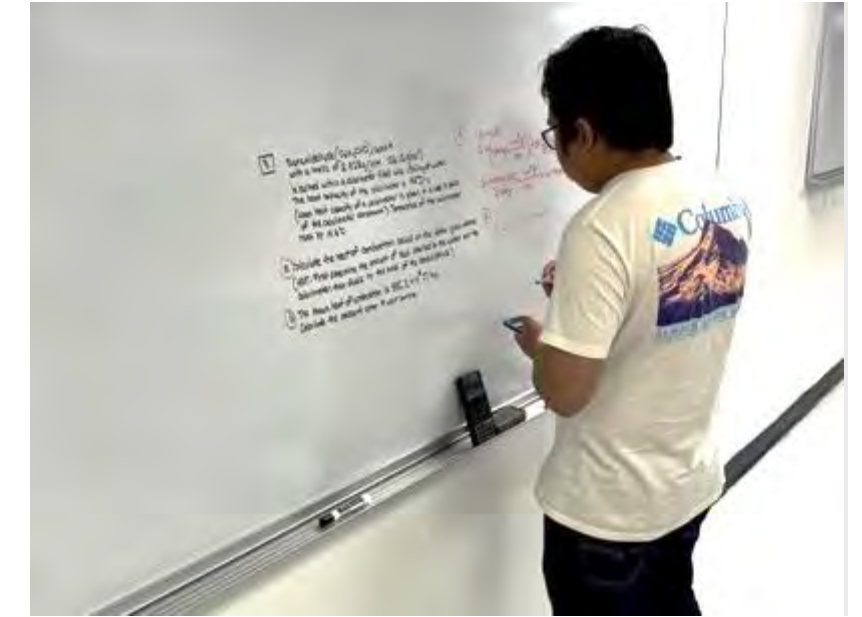
These study rooms were not well equipped with access to power or the ability to share digital content. Individual study carrels in the open areas of the library lacked visual privacy and did not include ergonomic seating. The workstations were often oriented with chair backs to the corridors which could lead to feelings of exposure and increased distractions while in use.



Spaces are Designed for a Moment in Time

Many Student Spaces, such as the Welcome Center, are designed to support the busiest times of the semesters.

The static design of these spaces does not adapt to the changing size of the Student population throughout the year. This results in the underutilization of these spaces and a feeling of low energy during less busy periods in the semester.



Active, On Ground Study Areas

Students seek study areas in close proximity to Classrooms and Faculty.

The study workspaces and whiteboards near Classroom areas (e.g. in the Chemistry building) were observed in use by Students. However, there were also some randomly placed study workspaces that appeared unused. Some of these lacked access to power which may be contributing to underutilization.

Observation Study Findings

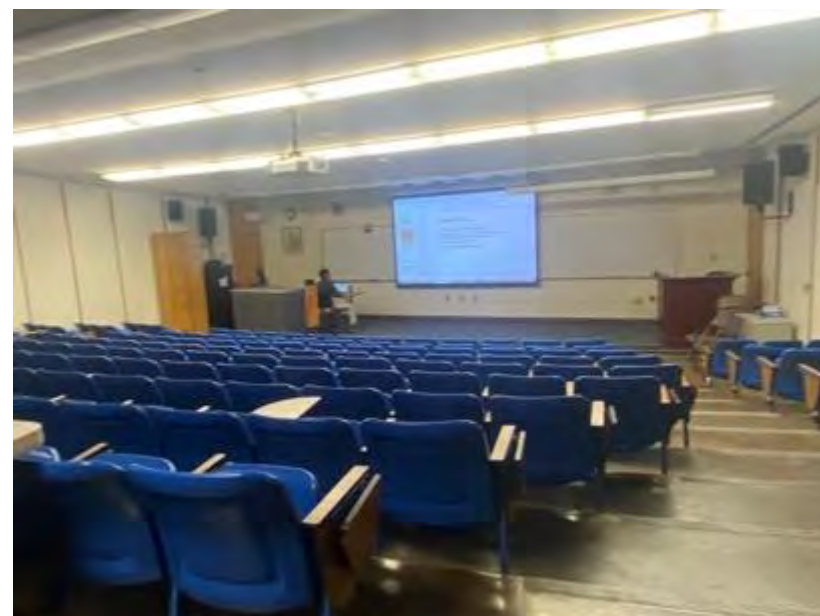
Classroom + Learning Experiences



Keeping Up Appearances

Outdated and unused equipment (e.g., slide and overhead projectors) as well as mismatched furniture give the appearance of disorderliness in many Classrooms. Some of this extra furniture, it was noted, is there to accommodate the increased class size at the onset of the semester; however, observation was performed well into the semester, after class size had reduced and yet this furniture remained.

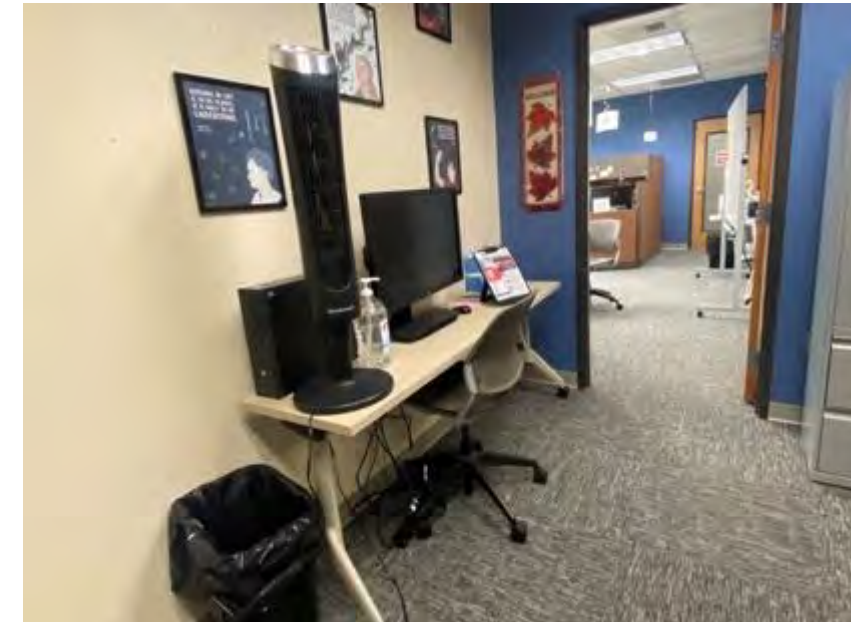
In many of the Classrooms in the Portables, broken and bent mini-blinds contribute to a sense of disrepair and neglect.



More than a Classroom

In addition to being used for teaching and learning, Classrooms were also observed being used by Faculty for office hours and ad hoc meetings with Students following class. These conversations are often an extension of the learning experience.

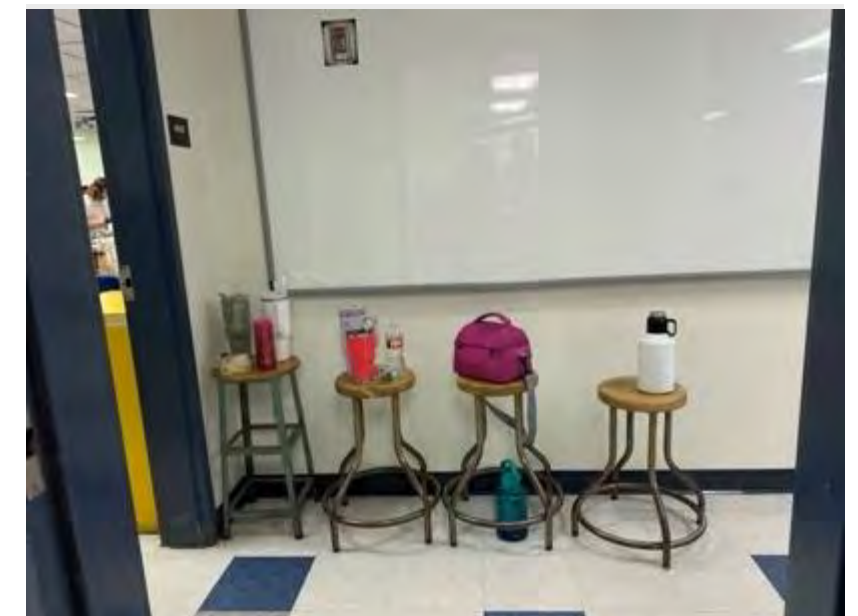
Students were observed working in Classrooms or labs outside of class hours; a practice noted as typically not being allowed. They were often utilizing workspace, supplies, or technologies they may not otherwise have access to. This demonstrates a potential unmet need.



Temperature Variation + Indoor Air Quality

During observation, there were noticeable swings in temperature from building to building and even between spaces within the same building. While some spaces in older buildings, e.g., the Portables, were generally warmer, even in newer buildings (e.g., STEM), there were extreme temperature variances depending on which side of the building you were on.

In some Classrooms (e.g. Chemistry labs) the ventilation appeared insufficient. Air purifiers and portable fans were observed in many Classrooms and offices to support these inconsistencies.



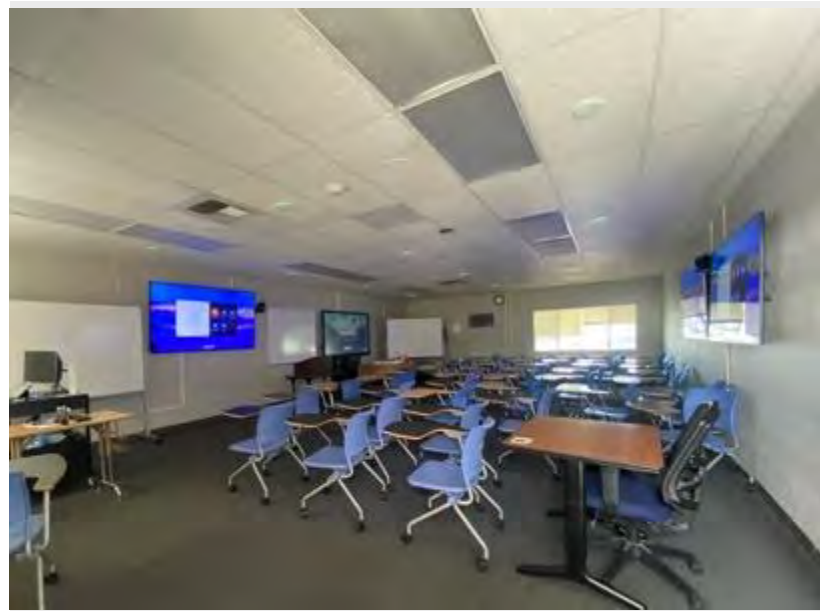
Student Access to Power + Storage

Many Classrooms and study areas observed lacked access to power for Student laptops, phones and other devices. Additionally, Students were often seen resting their bags, supplies and personal belongings on the floor due to a lack of convenient, accessible storage.

In the Chemistry building, where signage states food and beverage are not allowed in the Classrooms, lunch boxes and beverages were observed sitting on stools and the floor outside of the Classroom.

Observation Study Findings

Classroom + Learning Experiences



Room Setup + Accessibility

The furniture in the majority of Classrooms is setup to support lecture style learning which limits the interactions between Students and the Instructor. In newer Classrooms, where the furniture is more flexible and can support active learning, it is noted that these were not typically reconfigured and were not popular with Students (e.g. the triangular shaped desks in the STEM building).

While the majority of the Classrooms observed provided at least one ADA accessible desk, these units often did not match the rest of the furniture in the space. This apparent aesthetic contrast, along with being placed apart from the rest of the desks, can create feelings of isolation.



Learning Resource Center

The Learning Resource Center (LRC) was observed in high use during the study. It offers several Student support services such as ESL and tutoring as well as amenities like computer labs and study rooms.

The building receives a lot of natural light from double story windows and skylights which make the study areas well lit and bright. Overall, the building appeared to well serve its target audiences.



Access to Information + Sightlines

During observation, some Student seating in Classrooms was discovered to have obstructed sightlines to either the Instructor, information being presented, or both. For example, one Professor shared she experienced difficulties with the Classroom desktop monitors which were mounted on the podium as they inhibited her ability to make eye contact with some of the Students.

Additionally, the nature of the shape of some Classroom made viewing the wall mounted whiteboards difficult. Student views in some seats were partially blocked by the drop-down monitor screen.



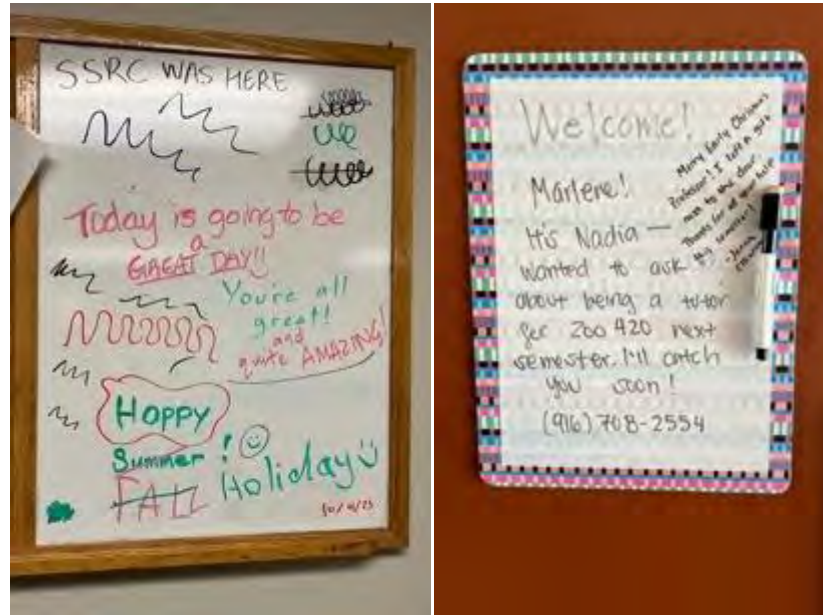
Supporting a Range of Postures

The majority of furniture observed on campus in Classrooms, study, social and dining spaces overwhelmingly consists of desk height tables and chairs. Occasionally standing height tables and stools were observed.

The few lounge settings noted, were in high use. Students were observed napping, resting and lounging. Power was not readily accessible near these lounge settings but if made available would likely encourage further use for studying and collaborating.

Observation Study Findings

Faculty Spaces



Moments of Gratitude + Celebration

Whiteboards in Faculty offices were used as tools for sharing information, celebrating milestones and passing along moments of gratitude. Sometimes the messages were outgoing for Students or colleagues, while other times, it served as a way for Students or colleagues to communicate back to Faculty.

With the transition to a more hybrid work style and the redistribution of Faculty around campus due to the Davies Hall closure, these whiteboards represent one way in which people have adapted to some of the challenges and are making the best of the situation.



Office Occupancy

During the observation period, most Faculty offices were empty and locked. Having so many closed doors with lights off contributed to a sense of emptiness and feelings of low energy in the space.

Analog schedules are posted on office doors to communicate availability. During observation there were instances when schedules appeared out of date or inaccurate.



Classrooms as Extension of the Office

Faculty were observed holding office hours in the Classrooms – either before or after class. For some, this is due to the hands-on nature of the class (e.g. fashion and science labs) while for Adjunct Faculty it is because they don't have offices on campus. In either case, it makes the Professor more accessible to Students.



Ad hoc Welcome Areas for Students

Some Faculty offices have small tables, additional storage, and/or bookcases just outside of their offices. The tables were used to host books, materials or snacks for Students.

These examples of expanding one's assigned space into common areas (e.g. hallways, sidewalks, etc.) appear to be a workaround for lack of in-person connection and to create a welcome area for Students.

Observation Study Findings

Faculty Spaces



Personalization: Building empathy + connecting with Students

Many offices were observed displaying credentials and relevant personal artifacts, books and materials in an effort to connect with and relate to Students. Some offices achieved this in a more effective manner than others.



Bringing the Home to the Office

Several Faculty offices were observed utilizing non-standard furniture, storage, lighting and décor (e.g., window treatments). While these are attempts to personalize the space and bring comfort to the office owner, it can have the adverse affect for visitors.



Individual Storage

Many Faculty offices were observed with an abundance of materials, artifacts and paperwork. Often all available surfaces were being used to house storage making it difficult for the individual to have a clear space to work effectively.

The volume of materials and storage within the office potentially makes it difficult to host visitors and conduct office hours with Students.

Observation Study Findings

Classified Professional Spaces



Ability to Connect with Colleagues

The design of many of the Classified Professional spaces are small and compartmentalized with limited social spaces to connect with colleagues. There are no centrally located coffee/nourishment bars within buildings. Departments and groups have refrigerators, microwaves, toaster ovens, etc. in their team areas to address this need.

Meeting this need within their own spaces, creates missed opportunities for connection across departments and teams for both colleague and Student interactions.



Harder Working Spaces

Several space types served multiple purposes (e.g., a meeting room/break room or a work/storage/break room). This doubling and tripling up of activities, results in each story activity not being well supported. Some adjacent outdoor spaces which may be appropriate to access during lunch or breaks were not observed being used by Staff.

Most meeting rooms were unused and empty during the Observation Study.



Storage Optimization

While most teams and groups have access to storage, the degree to which it is utilized greatly varies. Many storage units were observed half empty and/or appeared to store materials that had been accumulating over time. This results in storage areas feeling cluttered, disorganized and inefficient.

Due to increased needs, some groups are using non-traditional spaces for additional storage (e.g. private offices).



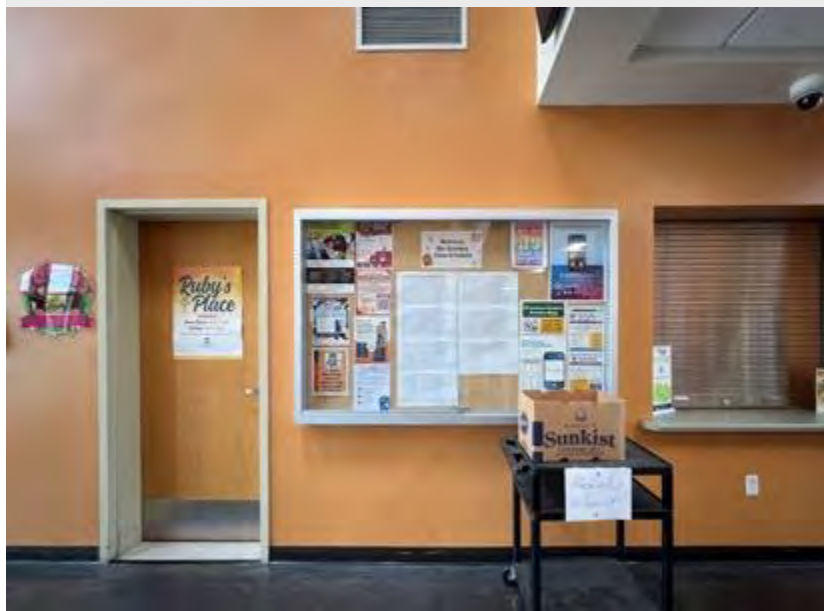
Evolving Work Processes

While some roles are becoming more centralized through the District and others are becoming more de-centralized (e.g., functional roles sitting in HomeBases) the spaces where these teams were previously located do not reflect these shifts.

In the Administrative building, for example, the Student walkup windows still exist even though they are no longer needed/used. This creates a feeling of low energy and isolation for building occupants.

Observation Study Findings

Natomas



HomeBase+

The Natomas building currently accommodates Classrooms, Faculty, Classified Professionals and Student Services. With its access to the Public Library, the High School and local shops and restaurants, it feels self-sufficient and exudes a strong sense of community.

Amenities were in close proximity and way-finding throughout this building was clear and convenient. This satellite campus feels successful in its implementation.



Shared Faculty + Staff Spaces

It was noted that only one office at Natomas is assigned. All other Faculty and Classified Professionals were observed sharing a communal workspace. This space serves as a workspace, breakroom, and supply/mail room. It was well maintained and observed in use by several individuals.

Directly adjacent to this space are two shared, reservable conference rooms – for use by Faculty and Classified Professionals for meetings or other private/focus work. It was noted that this model operates effectively for Natomas.



Community Pride

All spaces observed on the Natomas campus were clean, orderly and well maintained.

It was noted that this may be due in part to the smaller scale of Natomas and the fact that all spaces are shared. Faculty and Classified Professionals seem to feel a sense of pride in the spaces and therefore “do their part” in keeping it up to standard.



Classrooms

There are two styles of Classrooms at Natomas: Lecture and Computer Labs. The furnishings in both were modern, well maintained and provided a consistent aesthetic.

However, the layout of some Classrooms made viewing digital content on drop-down projection screens difficult.

06. Appendix

Workshop Key Findings

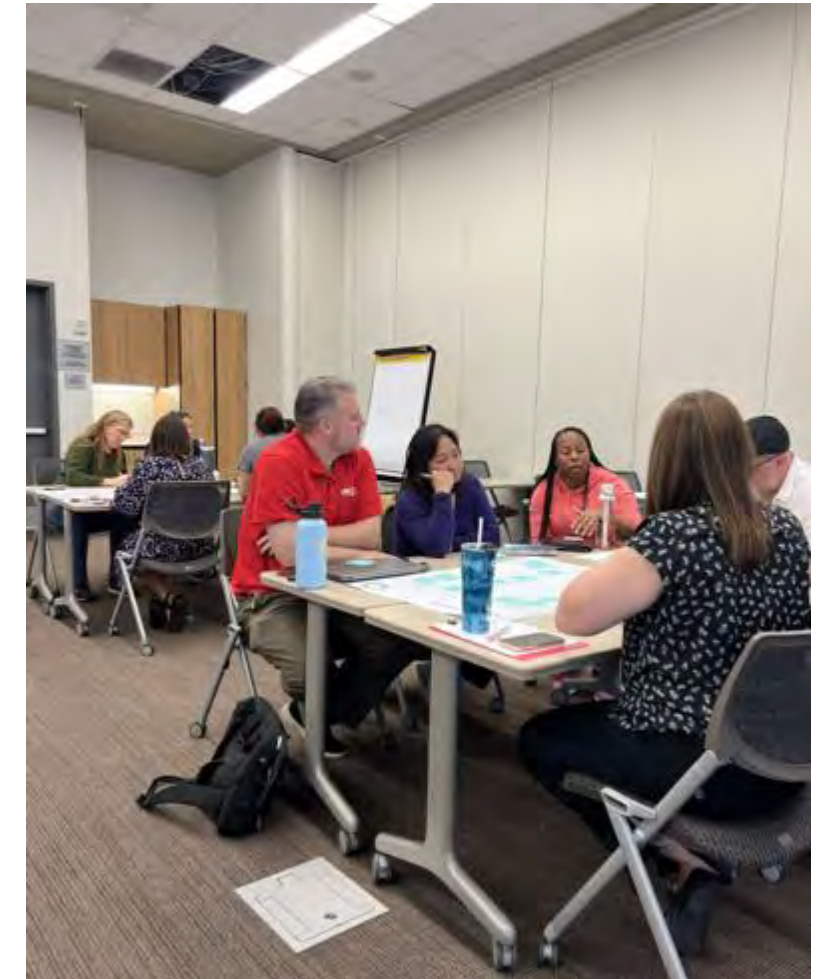
Workshops Overview

Intent + Overview

This section documents the results from workshops conducted with key stakeholder groups at American River College by the Applied Research + Consulting team during the Spring semester of 2024. A total of seven workshops were held and included two sessions with Students, two sessions with Classified Professionals and three sessions with Faculty, including one session with Faculty who previously were located in Davies Hall.

These workshops were intended to further engage Students, Faculty and Classified Professionals in the discovery process, to better understand their perspective on the current experience at ARC, and to explore what would be valued in the future learning and work experience.

The following pages reflect a summary of the workshops including key findings, direct quotes from participants and photos from the sessions.



Student Workshops

Overview

Two workshops were conducted in the Center for Leadership and Development on April 17, 2024 with a total of 23 students participating. These workshops were intended to further engage Students in the discovery process and to better understand their perspective of the campus experience at American River College (ARC).

A collaging exercise was conducted to capture feedback from the Students on what the ideal future campus experience for Students at ARC would be.

The image on the right highlights the words shared by Student participants in the workshops to describe the **ideal future learning experience**. The larger words were mentioned in both workshops.



Above is the list of words shared by participants to describe the **ideal future learning experience**. The larger words were mentioned in both workshops.

Student Workshops

Key Findings

Common themes emerged from Students regarding the current and ideal future learning experience at American River College.

Learning Experience

Both Student groups shared a preference for hands on, in person learning. Some Students mentioned a desire for more active learning classrooms in place of traditional rows of desks to better facilitate group work, create equitable experiences and encourage more interaction with Faculty. Students expressed feelings of presence disparity for online/asynchronous classes.

Infrastructure

Students shared concerns over parking, access to public transit and amenities. Parking garages and lot closures cause disruption and disorientation. Students also shared frustration with food services on campus including limited hours, high food costs, instances of cross contamination (resulting in allergic reactions), as well as a lack of dietary and religious food options (e.g. Halal, vegan, Kosher, etc.).

Diversity, Equity + Inclusion

Students spoke about a need for gender neutral bathrooms on campus. Additionally, more meditation/prayer rooms would also be appreciated and utilized. Students also shared difficulties experienced by disabled Students and visitors particularly regarding parking and building access.

Communication

Most workshop participants shared they obtain information about events and opportunities through the Student newsletter, by word of mouth or in HomeBases. However, participants commented that Students lack awareness of how to effectively access information. Barriers such as which side of campus you park on and walk from, who you know, and social media presence affect how they learn about opportunities.

HomeBases

While some Students reported utilizing HomeBases frequently, at least one participant did not know they existed. Those who use these spaces shared they enjoy the complimentary snacks and printing services. One Student suggested centralizing all HomeBases to help build community, while others liked having them near their department classrooms and Faculty. All agreed HomeBases should advertise more information about who they are, and the services offered.

Student Achievement

Workshop participants are proud to attend college (several are first generation college attendees for their families) but shared the difficulties they experience along the way. Many Students reported instances of near missed opportunities and frustrations in learning about and locating services and benefits that might be available to them (e.g. Financial Aid, scholarships, counseling, etc.).

Community + Support

Students are seeking a strong community environment where they will be authentically accepted and upheld. Study groups, HomeBases and the Unite Center were a few examples of how Students feel they can connect and support one another. Students commented there is confusion around navigating available services and finding out how to access them, comparing it to a labyrinth and a treasure hunt.

Wellbeing

Students shared a strong preference for more comfortable lounge furniture on campus, in both study and social spaces. A desire for a fitness center, denoted walking paths/hiking trail access, and outdoor spaces that encourage and support physical fitness were some of the many ideas shared by Students to help address wellness on campus.

Faculty Interactions

The majority of workshop participants shared a preference to be in person for learning and interacting with Faculty. Students expressed frustrations with asynchronous classes and feelings of being “left behind” due to the challenges it can create in communicating with Instructors. One Student shared feeling awkward about scheduling a Zoom for office hours, particularly if she only has one question, and admitted to often foregoing reaching out due to this, resulting in missed opportunities for connection.

Student Workshops

Collaging Exercise

Students workshop participants were divided into groups and asked to collectively build a collage using a selection of images. The collages served as a process by which Students could ideate, explore and share perspectives regarding the ideal future campus experience.

The following questions were considered:

- *What will help you be successful?*
- *What will inspire you?*
- *Where is the heart of the campus?*
- *What will make it feel like a community?*
- *How will you connect to Faculty?*
- *How will you connect with other students?*
- *What services/amenities are important to you?*

Students were highly engaged and provided robust and thoughtful feedback. A summary of the feedback and key themes from the Student workshops are provided in this section of the report.



Above are images of Student groups creating collages during the workshops.

Student Workshops



“Most students **stay** in their **designated areas**, so I learn by going to different areas of campus to see/hear what's going on. We give tours here and it's amazing how many students will say 'I didn't know we had this.' We should be **encouraging students to explore** all of campus.”

Quotes from Students during the Workshop



“The longer you are here [at ARC] the harder it is to **graduate**. There are a lot of **barriers**.”

“When an Instructor knows how to **captivate and engage** with students, it really makes a difference. It **can be difficult** to remain on topic in **bad learning environments**.”

“The **cafeteria closes early**. Even if people want to stay [on campus] longer, you have to **leave because you’re hungry.**”



“Typically, in classrooms, we have **rows of chairs** and people just hide out in the back, but I **love** the idea of a more **active/engaged learning environment.**”

Quotes from Students during the Workshop



“I chose the **lounge chairs** because you kind of need that here [on campus] to find a **space to chill out** for a while. If you're going to hang out after class, having **comfortable places to sit** would be better than some of the stuff they've got sitting around.”

Classified Professionals Workshops

Overview

Two in-person workshops were conducted with representatives from Classified Professionals: one session was held on April 3rd with 21 participants and the other on April 4th with 18 participants.

These workshops were intended to further engage Classified Professionals in the discovery process, to better understand their perspective on the current experience at American River College, and to explore what would be valued in the future work experience.

Two exercises were conducted to capture feedback from workshop participants: the Value Framework (Trash, Treasure, Hopes and Fears) and the ranking of the Foundational Pillars.

The image on the right highlights the words shared by Classified Professionals workshop participants to describe the **ideal future work experience**. The larger words were mentioned in both workshops.

A summary of the feedback and key themes from the Classified Professionals workshops are provided in this section of the report.



Above is the list of words shared by workshop participants to describe the **ideal future work experience**. The larger words were mentioned in both workshops.

Classified Professionals

Key Findings

Common themes emerged from Classified Professionals regarding their current and ideal future work experience at American River College.

Meaningful Connections and Interactions

Workshop participants value connections with their colleagues and interactions with Students. They hope for more opportunities to work with other departments and to connect informally with colleagues. They recognize the importance of maintaining strong relationships both in person and online to support Student demand.

Impact of Hybrid Work on Student Services

Hybrid Work has been embraced and participants believe it has positively impacted how they support Students. Shifts in demand for in-person and/or online support can be responded to more flexibly. They believe demand for in-person support will increase as more Students return on-ground but expect online support will still be required.

Infrastructure Maintenance

There is a sense of frustration and belief that the current infrastructure is not keeping up with the changes in work process e.g., delays in infrastructure improvements and addressing safety concerns across the Campus.

Effective Communication

Workshop participants expressed the need for more transparent communication in the future. They highlighted several areas of potential improvement to increase transparency and awareness among employees and across departments e.g., the high volume of emails leads to missed communications; the current website is difficult to navigate for both Employees and Students.

Process Improvement

Workshop participants commented that many processes have been updated to support the shift to online working and learning. However, they hope for more a proactive response to changes required for the future rather than a reactive response, especially in the areas of onboarding, training and professional development.

Promote Work-Life Balance + Wellbeing

Classified Professionals value work-life balance and flexible schedules. They hope for an equitable hybrid program and continued autonomy over time and presence in the office.

Student-Centric Approach

There is a desire for an environment where every Student thrives but there is a concern that the pre-pandemic approach will not adequately support the demands of a new generation of Students. They hope that class schedules will prioritize Student demand for mixed modalities and ensure equitable considerations for disadvantaged students when deciding between online or in-person education.

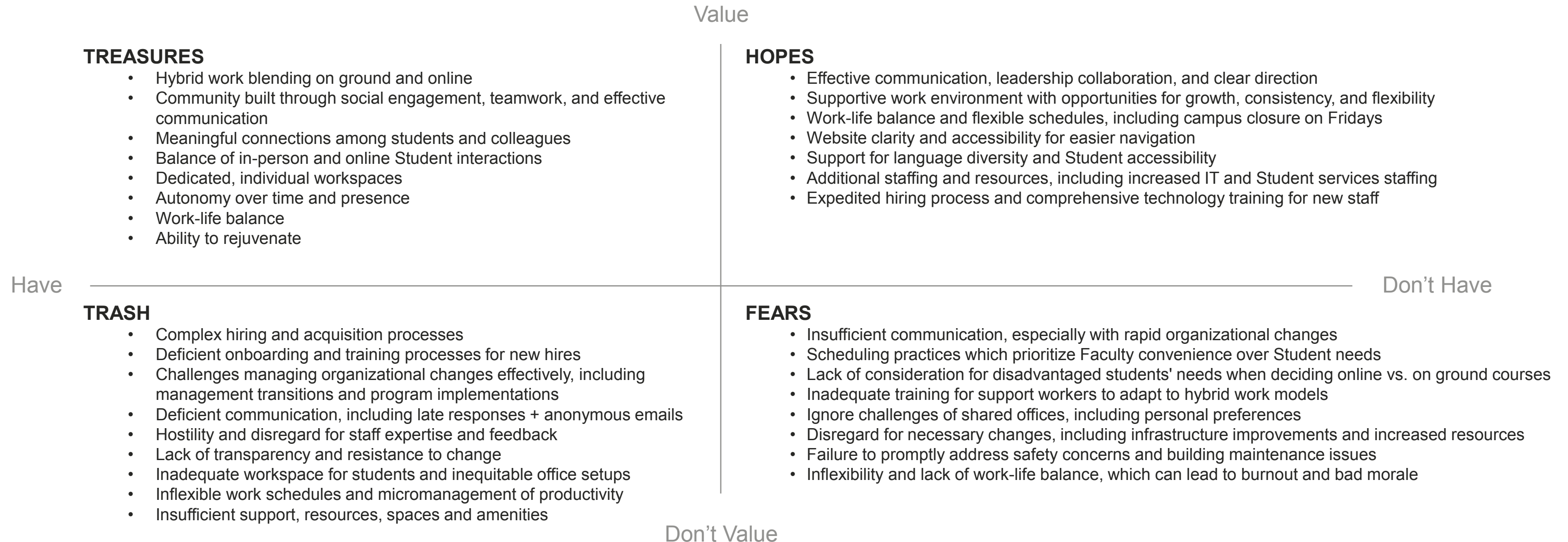
Support and Resource Enhancement

Classified Professionals feel that recent employee turnover has negatively impacted some services and departments. They emphasized the need for additional staffing and resources, particularly in IT positions and Student Services e.g., increased demand for Interpreters / Translators and Counsellors.

Classified Professionals Workshops

Exercise 1 Values Framework

The exercise is intended to capture elements of the work experience at American River College that Classified Professionals treasure, want to trash, hope for, and fear in the future.



Classified Professionals Workshops

Exercise 2 Foundational Pillars

Foundational Pillars were developed before the workshop based on interviews with ARC Leaders. The intent of this exercise was for Classified Professionals to force-rank the Pillars (from 1 to 8) in order of priority to achieve the ideal future work experience.

The results indicate general alignment between Classified Professionals Workshop Groups and ARC Executive Team on the ranking of the Foundational Pillars Success Rates, College Community and Communication.

The Foundational Pillar Flexibility + Balance is ranked higher in priority by Classified Professionals (no 3) than ARC Executive leadership (no 7). This likely reflects the focus at this moment on the desire to work from home more often and the perceived inequities around the current hybrid policy.

The gaps represent opportunities for creating awareness of what is most important for the future ARC experience.

FOUNDATIONAL PILLARS	ARC Executive Team	Classified Group 1 In-person	Classified Group 2 In-person	Faculty Group 1 In-person	Faculty Group 2 Online	Davies Hall Project Team Online
Success Rates	1	1	4	2	3	3
College Community	2	2	1	1	1	1
Communication	3	5	2	7	5	2
Learning + Development Flexibility	4	6	8	5	7	7
Campus Experience	5	7	6	3	6	5
Innovation	6	4	7	6	2	6
Flexibility + Balance	7	3	3	4	4	4
Work Experience	8	8	5	8	8	8

Classified Professionals



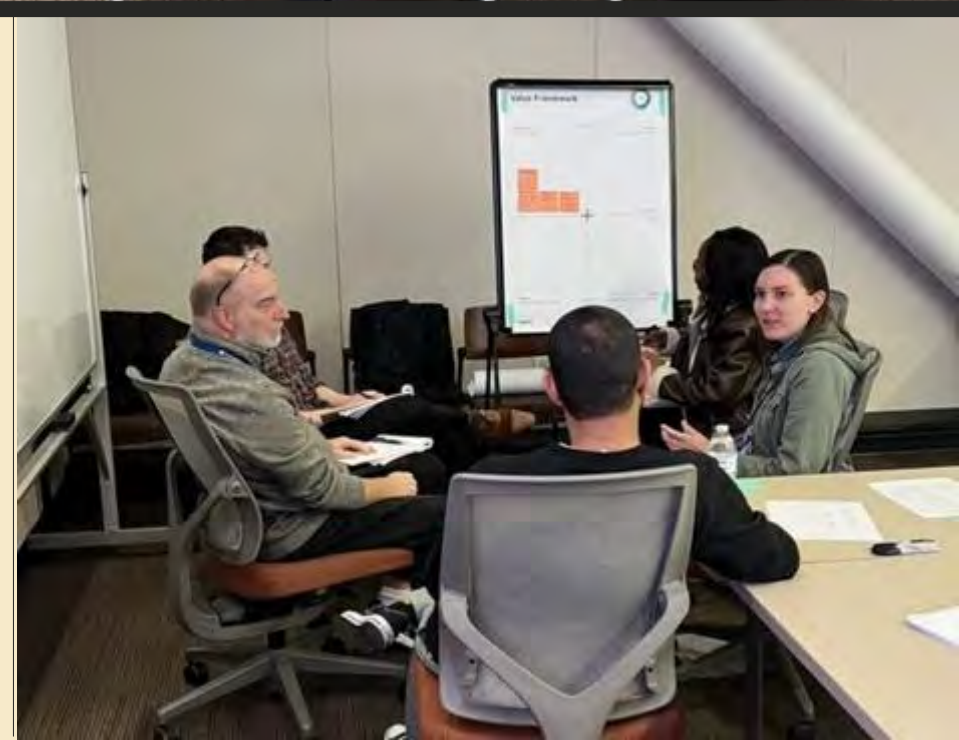
“There is **miscommunication** and **missed communications**. With the volume of emails, sometimes you miss important information or updates.”



“We need better **infrastructure** for hybrid...currently we find ways to **make it work**.”



“People schedule without thought. You have people grabbing classrooms **without thinking about the Student [experience]**”



Faculty Workshops

Overview

Two workshops were conducted with representatives from Faculty: one in person workshop on April 16th with 8 participants, and one virtual workshop held on April 19th with 8 participants.

The intent of these workshops was to further engage Faculty in the discovery process, to better understand their perspective on the current experience at American River College and to explore what would be valued in the future.

Three exercises were conducted to capture feedback from Faculty: Ranking of the Foundational Pillars, identifying Barriers/Enablers to achieve Ideal Instructional Modalities, and the Values Framework (Trash, Treasure, Hopes and Fears).

The image on the right highlights the words shared by Faculty workshop participants to describe the **ideal future learning and work experience**. The larger words were mentioned in both workshops.

A summary of the feedback and key themes from the Faculty workshops are provided in this section of the report.



Above is the list of words shared by participants to describe the **ideal future learning and work experience**. The larger words were mentioned in both workshops.

Faculty Workshops

Key Findings

Common themes emerged from Faculty regarding their current and ideal future experience at ARC.

Focus on Student Success

Faculty highly value their relationships with Students with a preference for in-person interactions. They expressed gratitude for the many services offered to Students as well as the Classified Professionals that support them (e.g. HomeBase Staff).

Improving Equity + Inclusion

Faculty are looking to offer greater access to programs and events by providing additional interpretive services (e.g. ASL) so more Students have the opportunity to participate. Faculty believe departments and groups are siloed and acknowledge there is a benefit to all for more sharing of best practices across disciplines.

Infrastructure

Faculty expressed concerns about facilities and infrastructures. They desire more modern, flexible spaces for learning environments and events, and the tools, technology and equipment to support both on ground and online modalities. Faculty also expressed a desire for better mass transit access.

Importance of Connection

With the closing of Davies Hall, the importance of connection and community has been emphasized. Faculty value collaborating with colleagues and Students and appreciate having spaces in which to meet and mentor. Proximity and access are important to Faculty.

Creating Successful Online Experiences

With the increase in online instruction, additional time is often required to prepare and Faculty fear work creep. They shared examples of having to “chase enrollment” to ensure an in-person class and expressed frustration over online cheating. Faculty would value working with an Online Curriculum Coordinator or similar expert resource to provide training in digital course design and teaching .

Processes + Enhancing Efficiencies

Faculty expressed concerns over Students struggling to find appropriate resources and discussed ways to simplify processes for Students. Faculty feel the campus is hard to navigate and believe new Students might benefit from an enhanced on-boarding process.

Lack of Trust

Faculty described decision making at ARC as “top-down” and believe there is a lack of transparency. They shared instances of territoriality and feel they are often pitted against one another for resources. The Davies Hall experience appears to have negatively impacted trust among a number of Faculty members.

Fear of Temporary becoming Permanent

There is a palpable fear from Faculty that the temporary Davies replacement strategy will become permanent. Faculty is concerned the look and feel of the portables does not convey an appropriate collegiate experience for existing and prospective Students and Staff.

Resources + Amenities

Faculty voiced concerns over a lack of faith/prayer spaces as well as food options for the diverse religious populations. Faculty wish to ensure there remains space for Student clubs and groups to meet on campus. Faculty would like to see food service and resources available on campus in the evenings.

Faculty Workshops

Exercise 1 Foundational Pillars

Foundational Pillars were developed before the workshop based on interviews with ARC Leaders. The intent of this exercise was for Faculty to force-rank the Pillars (from 1 to 8) in order of priority to achieve the ideal future work experience.

The ranking of the Foundational Pillars for each workshop session is shown to the right.

Participants from each Faculty workshop discussed how the loss of Davies Hall has furthered the desire to strengthen College Community. Group 1 participants also mentioned how proximity to colleagues allows for faster decision making.

During discussion about why Work Experience ranked lowest, participants expressed concern about the statement “entice and increase in-person presence” in the definition. Flexibility + Balance was ranked higher indicating preference for “choice and control over where work is done and how to connect with Students.”

Flexibility and Balance was ranked higher in priority by Faculty (no 4) than ARC Executive Team (no 7). This likely reflects the continued interest in hybrid and work from home.

FOUNDATIONAL PILLARS	ARC Executive Team	Classified Group 1 In-person	Classified Group 2 In-person	Faculty Group 1 In-person	Faculty Group 2 Online	Davies Hall Project Team Online
Success Rates	1	1	4	2	3	3
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Flexibility + Balance	7	3	3	4	4	4
Work Experience	8	8	5	8	8	8

Faculty Workshops

Exercise 2 Barriers/Enablers to achieve Ideal Instructional Modalities

The intent of this exercise was to discuss and align on the optimal blend of time spent on ground versus online, in the future, for Student success. Participants were also asked to discuss the enablers and barriers to achieve this percentage of time. This activity was done in two small groups.

The graph below reflects the percentage of time spent in each modality pre-pandemic, the current state, and future state according to Faculty reflections. The text to the right reflects the enablers and barriers identified by the Faculty to achieving the desired future state.

<i>Modalities</i>	Pre-pandemic	Current State (from ARC)	Exercise Results: Future State Group 1A	Exercise Results Future State Group 1B
Online	10%	45%	40%	30-25%
On Ground	90%	55%	60%	70-75%

Group 1B participants represented departments with higher on ground presence due to program requirements.

Discussions in both groups indicated a preference to shift future modalities to higher percentages of on ground instruction.

Some of the perceived **Barriers** to these shifts included:

- Student life circumstances
- General resistance from Students and Faculty
- Time and cost of commute
- Lack of services and amenities for evening classes

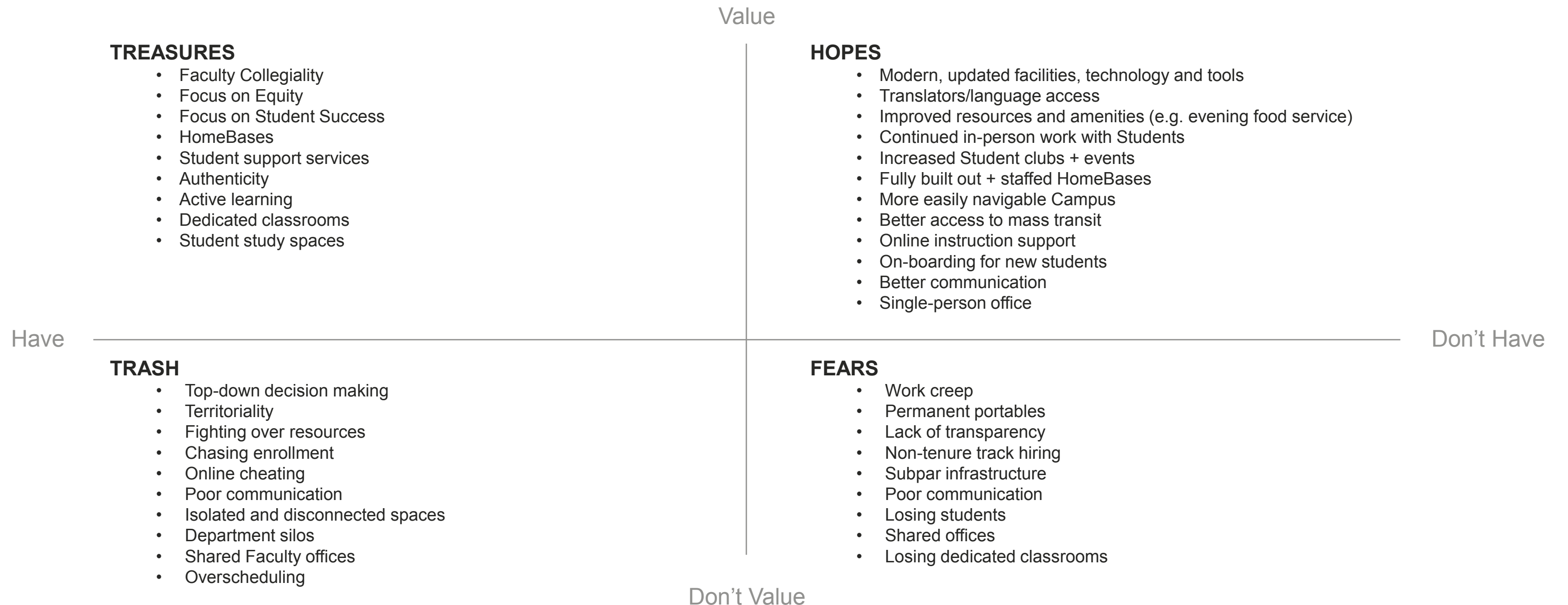
Some of the perceived **Enablers** to these shifts included:

- Online instruction fatigue
- Offering Students safe, supportive spaces (e.g. HomeBases)
- Providing resources + amenities
- Hands-on experiential learning opportunities

Faculty Workshops

Values Framework Exercise

The exercise is intended to capture elements of the learning and work experience at American River College that Faculty treasure, want to trash, hope for, and fear in the future.



Faculty



“Students and Faculty shouldn’t have to worry about whether the ceiling will fall apart when it rains...**some buildings shouldn't exist anymore.**”

Quotes from Faculty during the Workshops



“I was in Davies Hall, now our department is scattered...that **locality and proximity** used to help so much in **speeding up decision making.**”



“If we are talking about the Facilities Master Plan we need to build [classrooms] around the **HomeBases**...that would make a big scary campus feel more **welcoming.**”

Davies Hall Project Team

Overview

A workshop was conducted with members from the Davies Hall Project Team on April 26th 2024. Included were seven Faculty members who had previously been based in Davies Hall, along with Derrick Booth, Margaret Lednicky and Lori Shull.

The intent of this session was to engage the Davies Hall Project Team in the discovery process, better understand their perspective on the past Davies Hall experience, their current experience and to explore priorities, concerns and what would be valued in the future.

Two exercises were conducted to capture feedback from this Team: ranking of Foundational Pillars and the Values Framework. The results and feedback are shared in this document.

The image on the right highlights the words shared by Davies Hall Project Team workshop participants to describe the **ideal future learning and work experience**.

A summary of the feedback and key themes from the workshop with Davies Hall Project Team are provided in this section of the report.



Above is the list of words shared by participants to describe the ideal future learning and work experience.

Davies Hall Workshop

Key Findings

Common themes emerged from Davies Hall Faculty regarding their past, current and ideal future experience at ARC.

Loss of Community

Faculty stressed the importance of maintaining connections with colleagues and building community with Students. Top of mind for Faculty is the loss of community and the challenges of maintaining connections to Students while currently spread across campus.

Proximity + Access

Faculty value in-person and quick access to colleagues, classrooms, and resources to best assist Students.

Standard Infrastructure

There is a concern that the current infrastructure in the Portable Village provide less than optimal learning experiences e.g., ventilation, acoustics, facilities, furnishings and equipment.

Lack of Trust

Faculty expressed fear that their feedback is not being heard by decision-makers. Participants also voiced concerns that their needs will not be addressed.

Space to Focus

Faculty commented that a lot of their work requires individual focus. They expressed a strong desire for spaces to support these quiet and heads-down activities.

Inspiring Destination

There is a desire to ensure American River College is a destination campus with inspiring and innovative experiences and spaces for Students and Faculty.

“The strength of **Davies Hall** was that all the **Faculty offices** were on the third floor, and everyone left their doors **open**... you could go up and down the hall. Without the **community**, it all falls apart..”

“Whatever we say, or are told, cannot just be **lip service**.”

“My son will be attending next year as a freshman. I **fear** that he/or any Student will feel like the **portables** aren’t up to the **standards of other colleges**.”

Above are quotes from Faculty during the Davies Hall Workshop. They reflect the themes from the discussions.

Davies Hall Workshop

Exercise 1 Foundational Pillars

Foundational Pillars were developed before the workshop based on interviews with ARC Leaders. The intent of this exercise was for Faculty to force-rank the Pillars (from 1 to 8) in order of priority to achieve the ideal future work experience.

The ranking of the Foundational Pillars for each workshop session is shown to the right. The results for the Davies Hall Project Team are consistent with the results from the other two Faculty Workshop Groups (which are detailed earlier in this section).

During the discussion, participants commented on the importance of having a strong community and how it positively impacts both Student and Faculty experience. The closure of Davies Hall and feelings of isolation, while being spread across the campus, have highlighted the value of a strong, connected community.

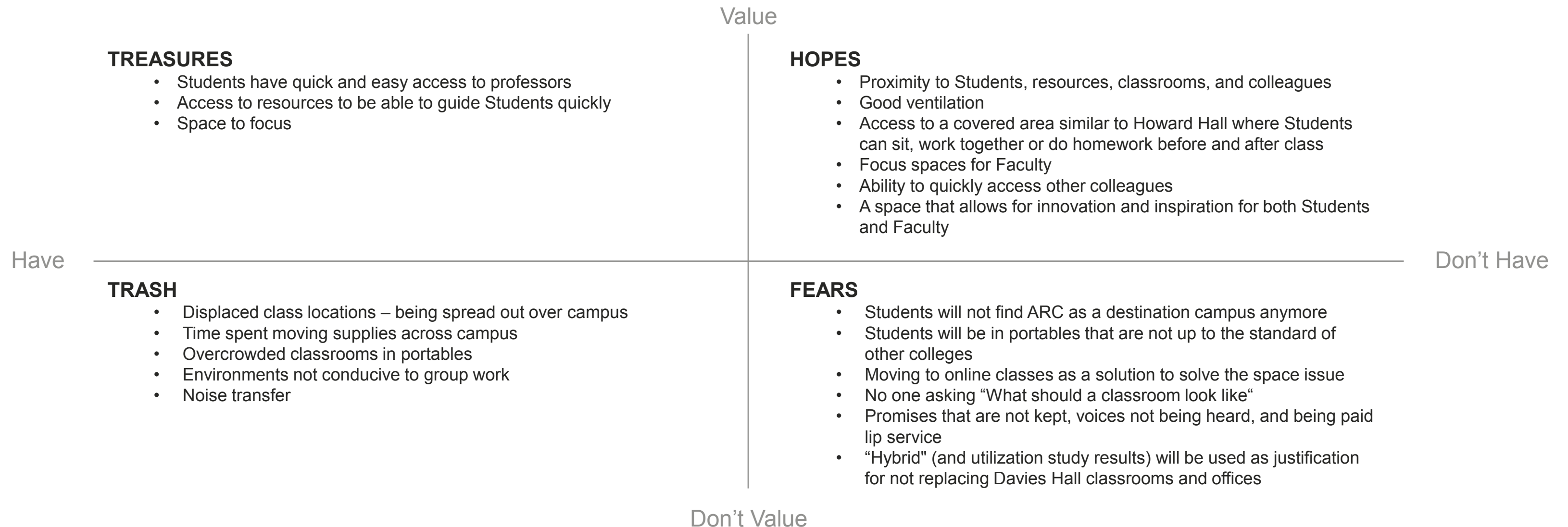
Flexibility and Balance was ranked higher in priority by Faculty (no 4) than ARC Executive Team (no 7). This reflects the continued interest in hybrid and work from home by Faculty.

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Davies Hall Workshop

Exercise 2 | Values Framework

The exercise is intended to capture elements of the ARC learning and work experience that Faculty treasure, want to trash, hope for, and fear in the future.



06. Appendix

Space Utilization Survey Key Findings

Overview

Introduction

This section contains an overview of **Key Findings** from the Survey conducted for Students, Faculty, and Classified Professionals from March 28th to April 22nd 2024. The survey measures perspectives about the **current experiences** and **patterns** on campus, online, and in classrooms.

Sampling was not employed, and the response levels were:

62.1% for Faculty
(215 of 346 Faculty responded)

86.5% for Classified Professionals
(211 of 244 Classified Professionals responded)

The invitation was sent to all Students, and there were **117 responses**, representing a low response rate; however, sufficient responses were received for the data to be usable.

A detailed report documenting the Experience Survey results is in a separate PDF titled **“Space Utilization Study: Experience Survey Report.”**



Students, Faculty, and Classified Professionals

Time in Locations

Workplace

Classified Professionals spent 70% of their time in an assigned workstation or office, and Faculty spent 23% in an assigned workstation or office.

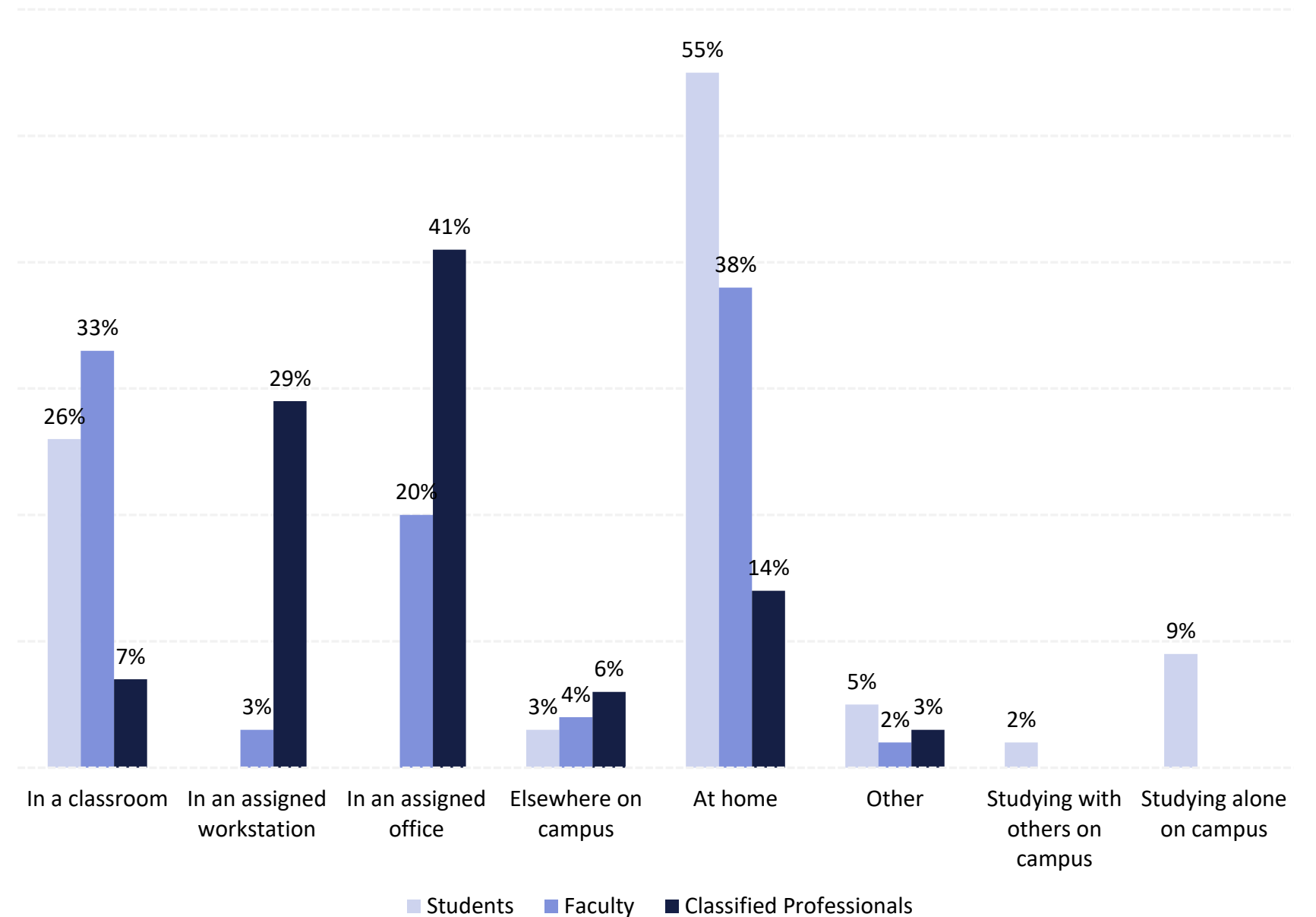
Home

Students spent the most time at home, 55%, while Faculty spent 38%, and Classified Professionals spent the least, 14%.

Classroom

Time spent in classrooms was the second highest for both Students (26%) and Faculty (33%).

Time Spent in Different Locations



Faculty and Classified Professionals

Work Modes

Faculty

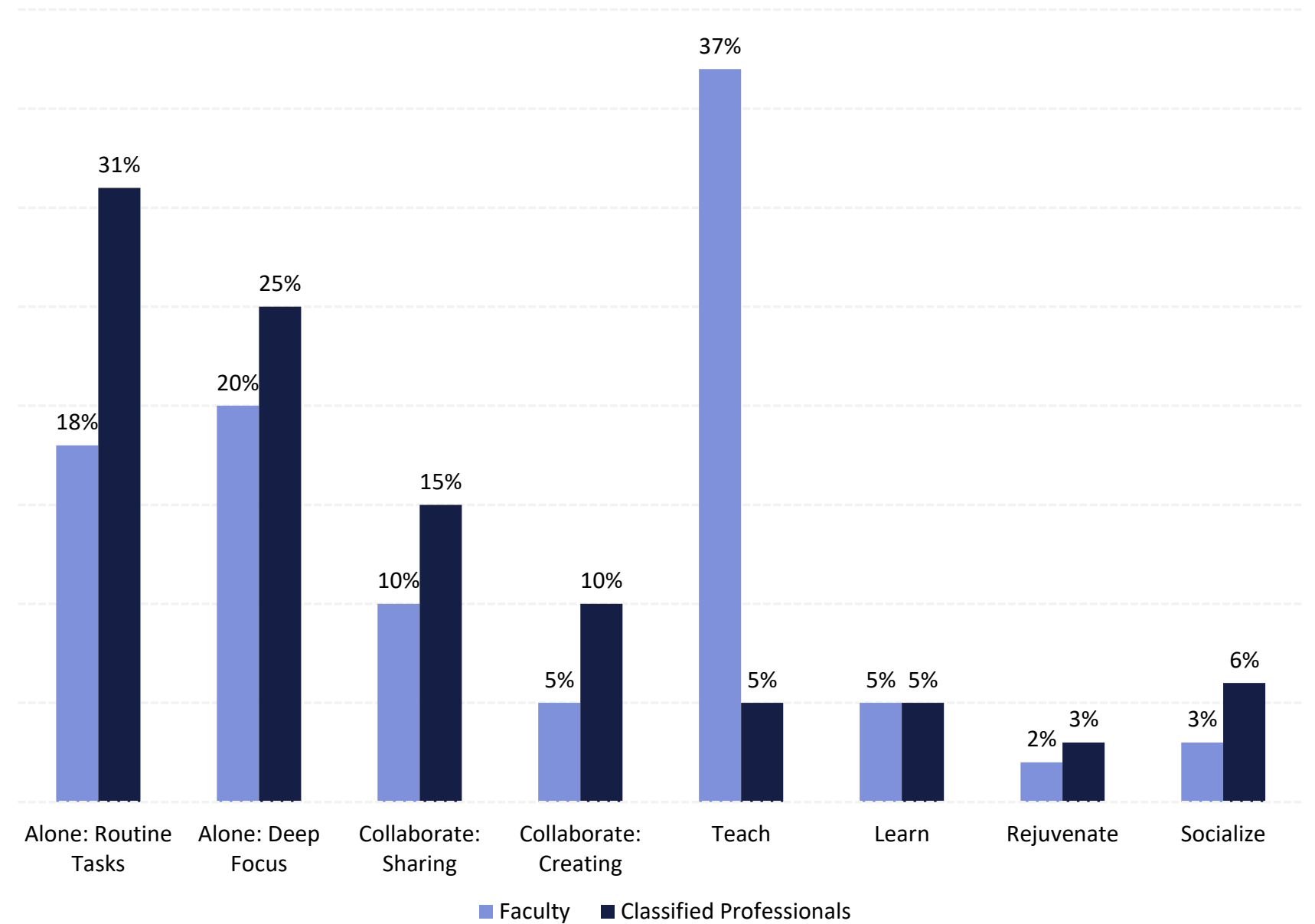
Faculty spent 37% of their time teaching and 38% working alone on routine tasks or doing deep-focused work. Also, 18% of Faculty time is spent in some form of collaboration or socializing.

Classified Professionals

Classified Professionals spent 56% of their time working alone, and 31% collaborating or socializing.

The Work Mode Analysis section provides additional details on Work Modes for Classified Professionals. The data in both studies are aligned.

Time Spent in Work Modes



Students

Key Findings

This section contains an overview of **Key Findings** from the Space Experience Survey conducted for Students.

Satisfaction levels for on-campus, in-classroom, and at-home experiences are **slightly higher** for Student respondents than for Faculty and Classified Professionals respondents.

- **177** Students responded to the survey
- **35%** of respondents were over 40 years old
- **27%** of respondents were between 21 and 39 years old
- **32%** of respondents were between 18 and 20 years old

4

of the top 5 reasons to come to the campus are to be part of the **learning community** to help them **feel inspired** and **achieve success**

40%

of Student time is spent on campus and of this time **65%** is spent “**in a classroom,**” and **35%** is spent **elsewhere on campus**

78%

of respondents **do not** “**completely agree**” that **classrooms support** a blend of **in person and online learning**

59%

of respondents were not “highly satisfied” with the “**on-campus experience,**” and **55%** of respondents were not “highly satisfied” with the “**in-classroom experience**”

Students

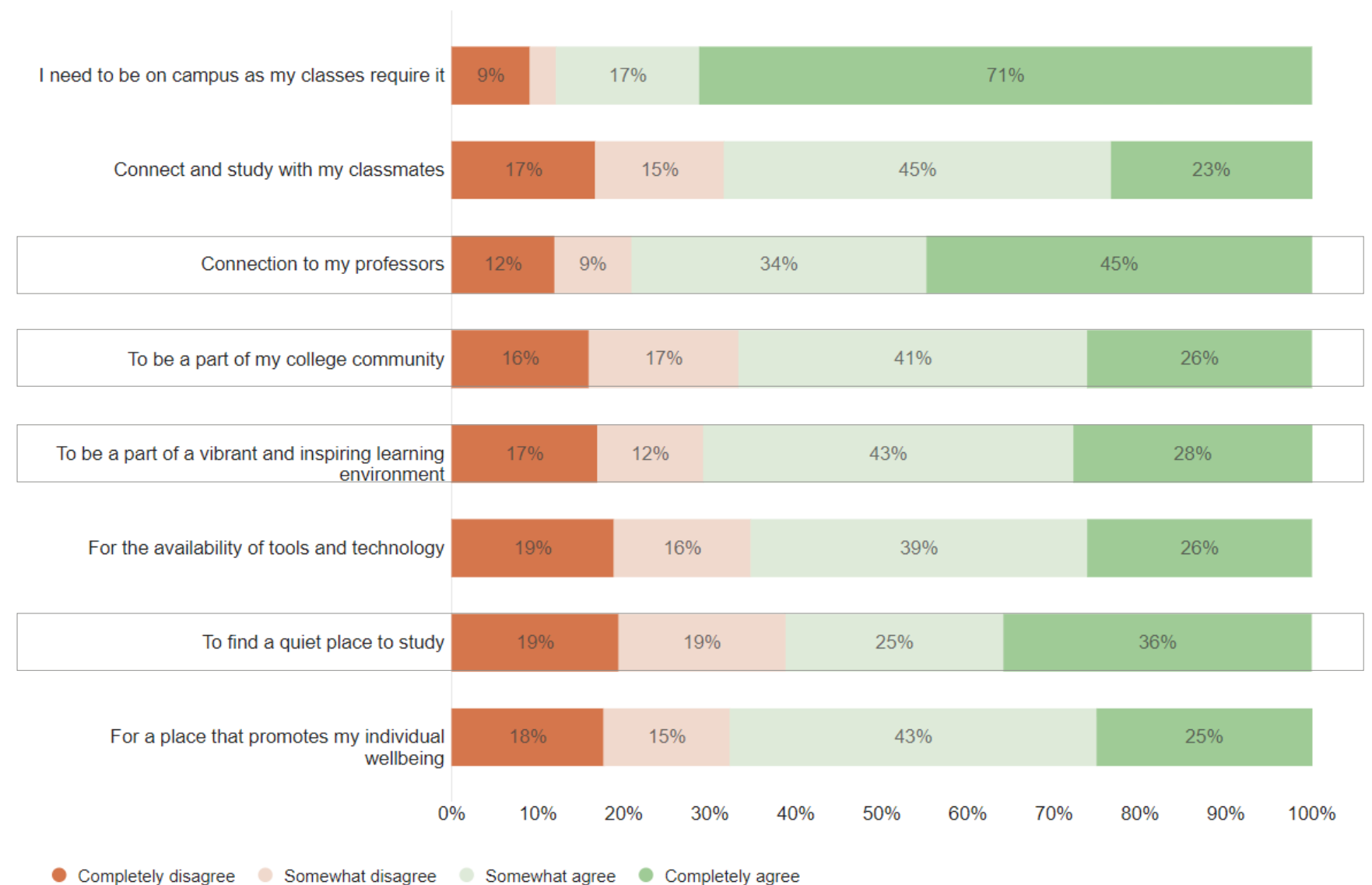
Campus Attractors

4 of the top 5 reasons to come to the campus are to be part of the **learning community** to help them **feel inspired** and **achieve success**

Primary reasons to come to campus:

1. I need to be on campus as my classes require it
2. **Connection** to my professors
3. To find a **quiet place to study**
4. To be a part of the **vibrant and inspiring learning environment**
5. To be a part of my **College community**

Q5 - Your Campus Experience | Primary reasons for coming to campus



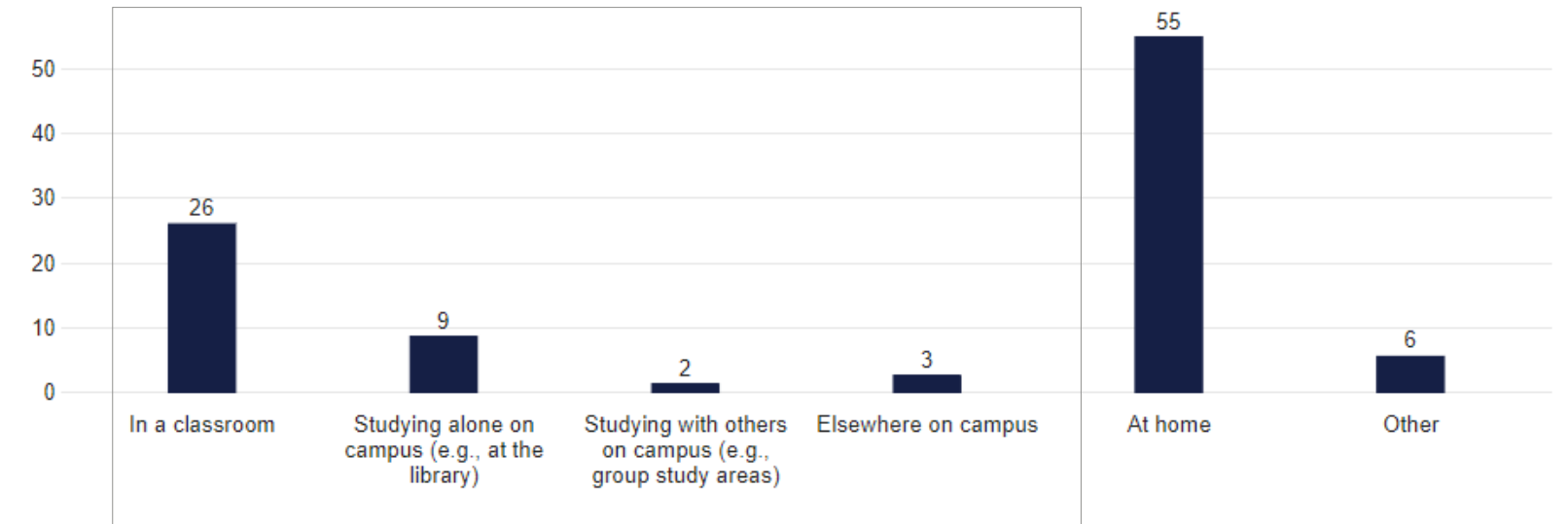
Students

Time in Locations

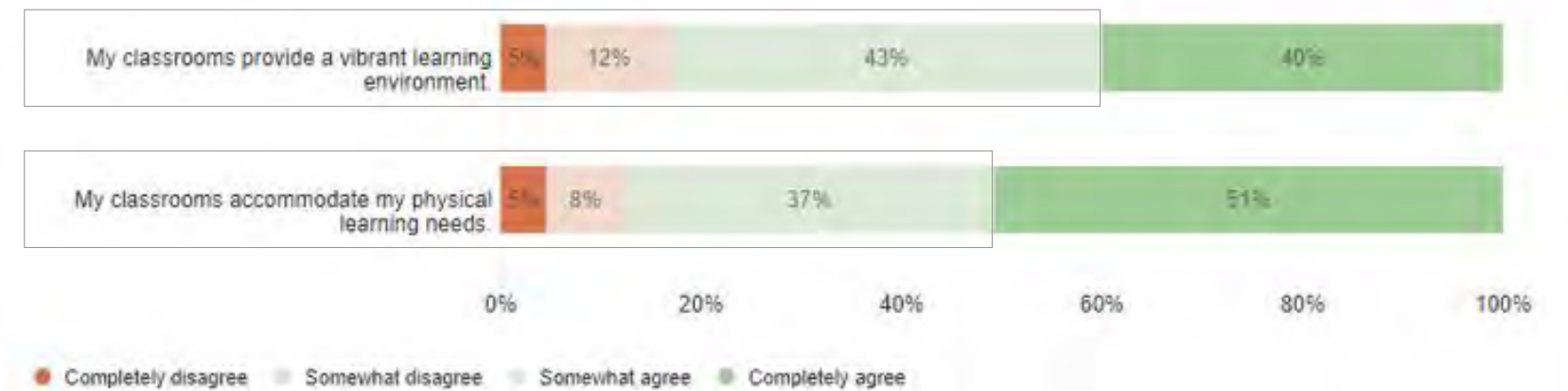
40% of Student time is spent on campus and of this time **65%** is spent “**in a classroom,**” and **35%** is spent **elsewhere on campus**

Respondents indicate the classroom experience adequately “**accommodates physical learning needs**”; however, **60%** of respondents indicate that the classroom could be more of “**a vibrant learning environment.**”

Q4 - What percentage of time do you spend in the following locations in a typical week?



Q9 - Your Classroom Experience | To what extent do you agree or disagree with the following regarding your physical classroom experience?



Students

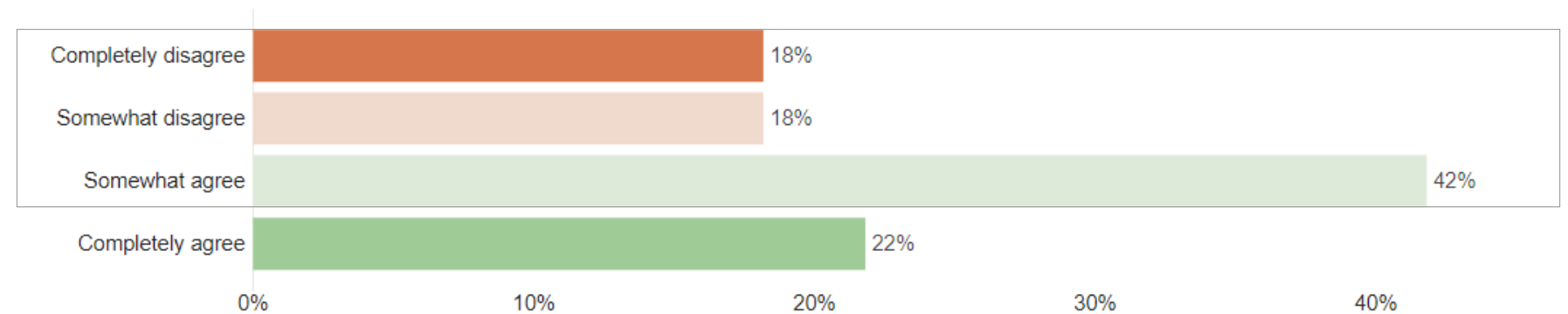
Learning Experience

78% of respondents do not “completely agree” that classrooms support a blend of in person and online learning

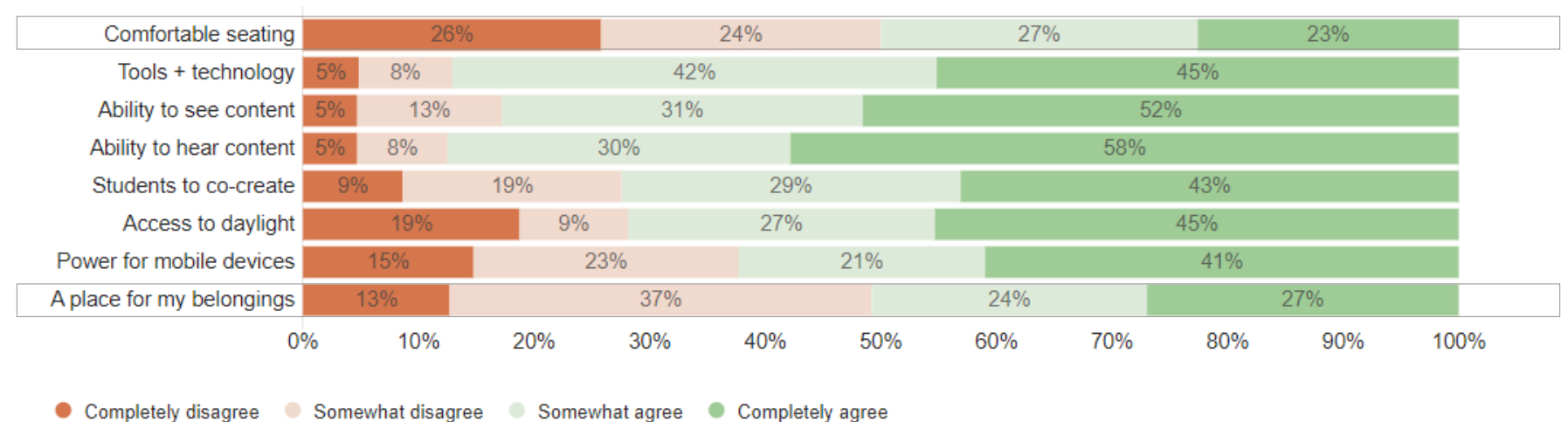
Respondents indicate the physical classroom supports **most of the environmental elements** shown on the table in response to Question 9 in the lower right-hand corner of this slide.

However, **almost two-thirds** of respondents do not “completely agree” classrooms provide “**comfortable seating**” or “**a place for their belongings.**”

Q10 - Your Classroom Experience | The physical classrooms support a blend of in-person and online participants at the same time.



Q11 - Your Classroom Experience | To what extent do the physical classroom environments support the following?



Students

General Satisfaction

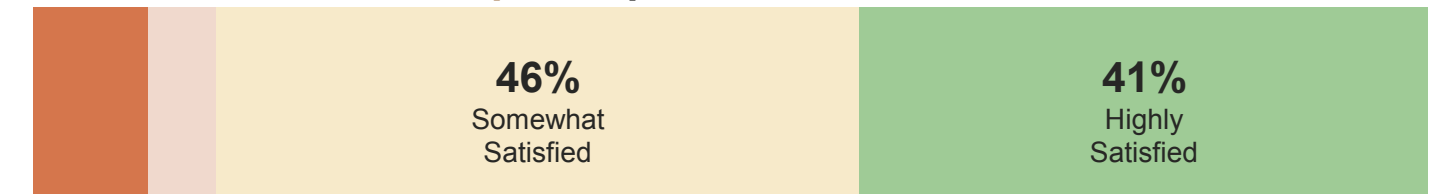
59%

of respondents were not “highly satisfied” with the “**on-campus experience**,” and 55% of respondents were not “highly satisfied with the “**in-classroom experience**”

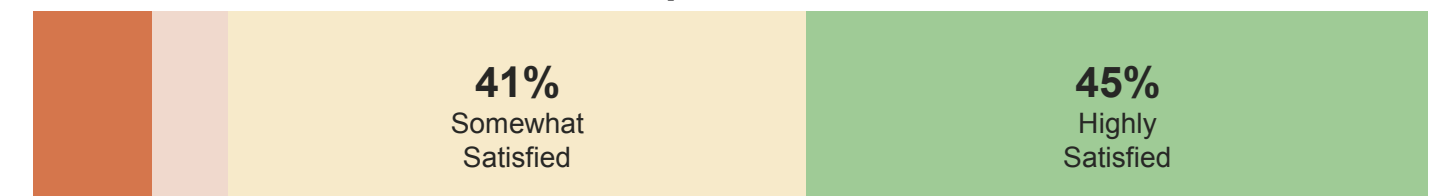
The bar charts to the right indicate satisfaction with **on-campus**, **in-classroom**, and **online experiences**. The results reveal there is room for improvement in each of these areas.

Q16-18 - To what extent are you **satisfied** or **dissatisfied** with your experiences?

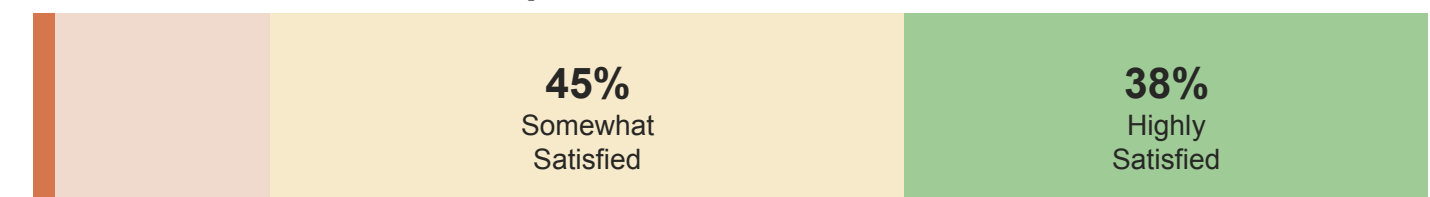
Satisfaction of **on-campus** experience:



Satisfaction of **in-classroom** experience:



Satisfaction of **online** experience:



Students

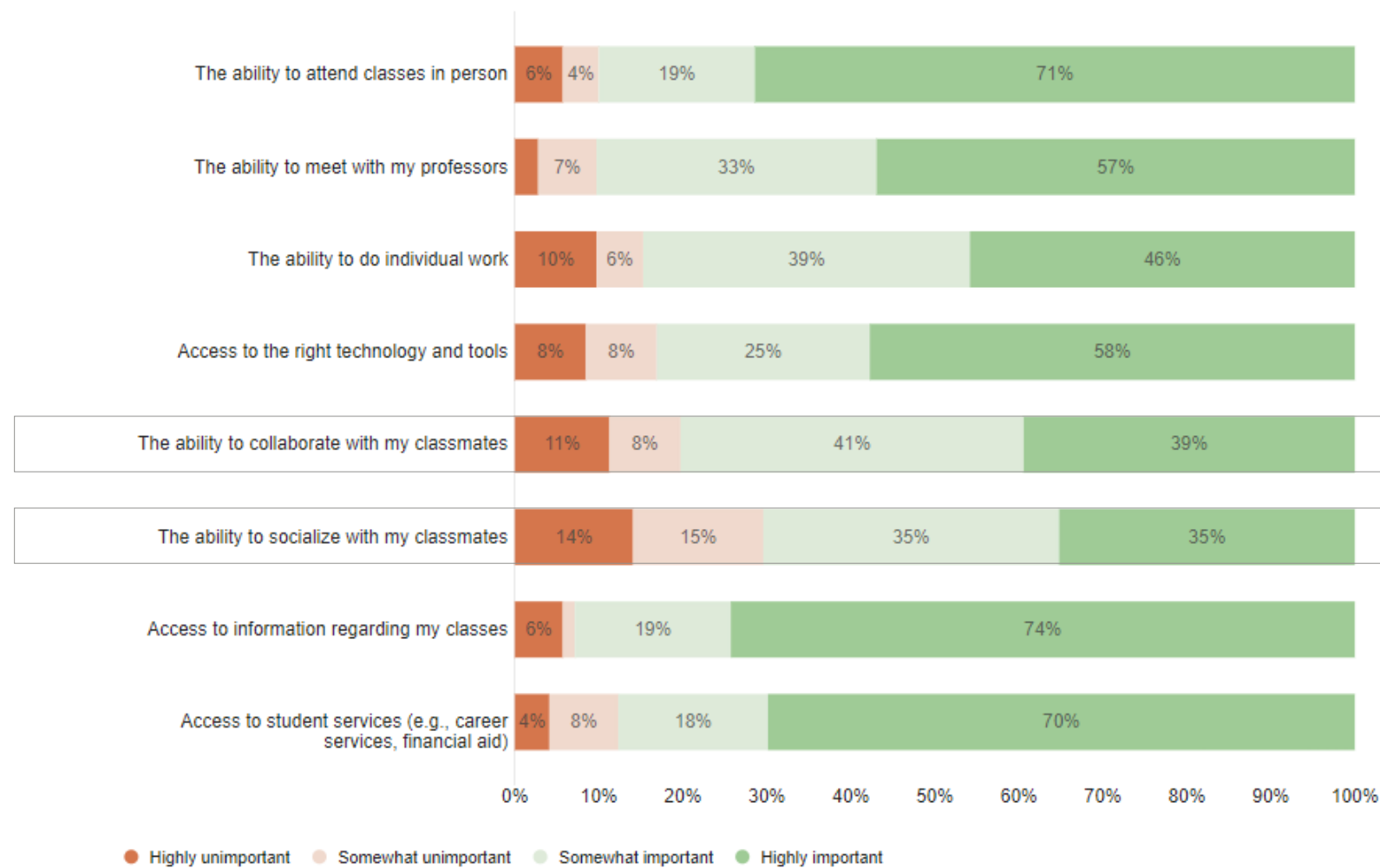
Campus Experience

Below is a side-by-side comparison of areas important to the overall campus experience and associated levels of satisfaction

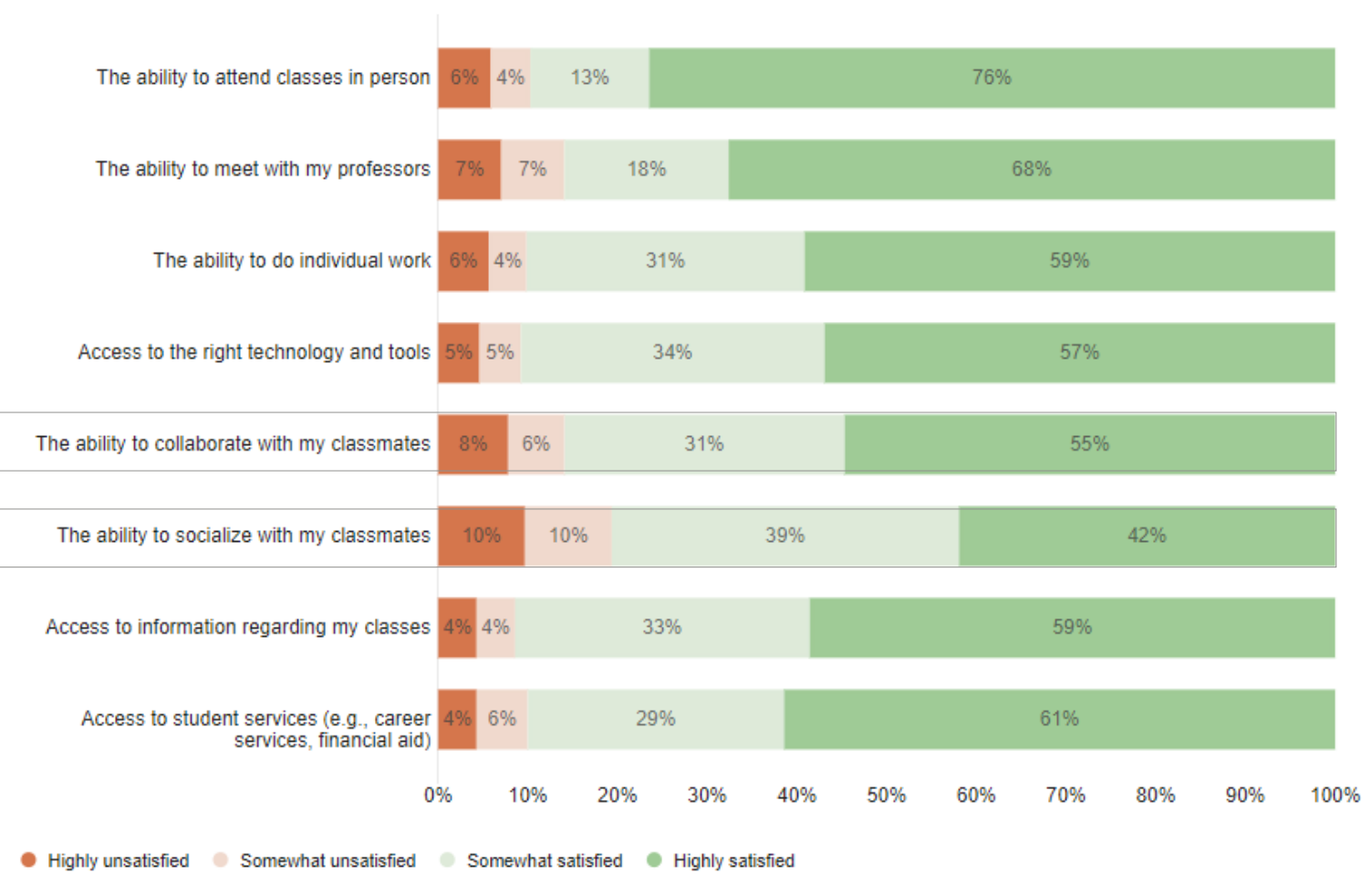
Respondents were **generally satisfied** with the majority of Campus Experience categories shown in the graphics below

Two categories, the ability to **“collaborate”** and **“socialize”** with my classmates, have relatively lower satisfaction ratings than the others

Q6 - When you are on campus, what activities are most important to you?



Q7 - When you are on campus, how satisfied are you with the ability to accomplish the following activities?



Students

Tools + Technology

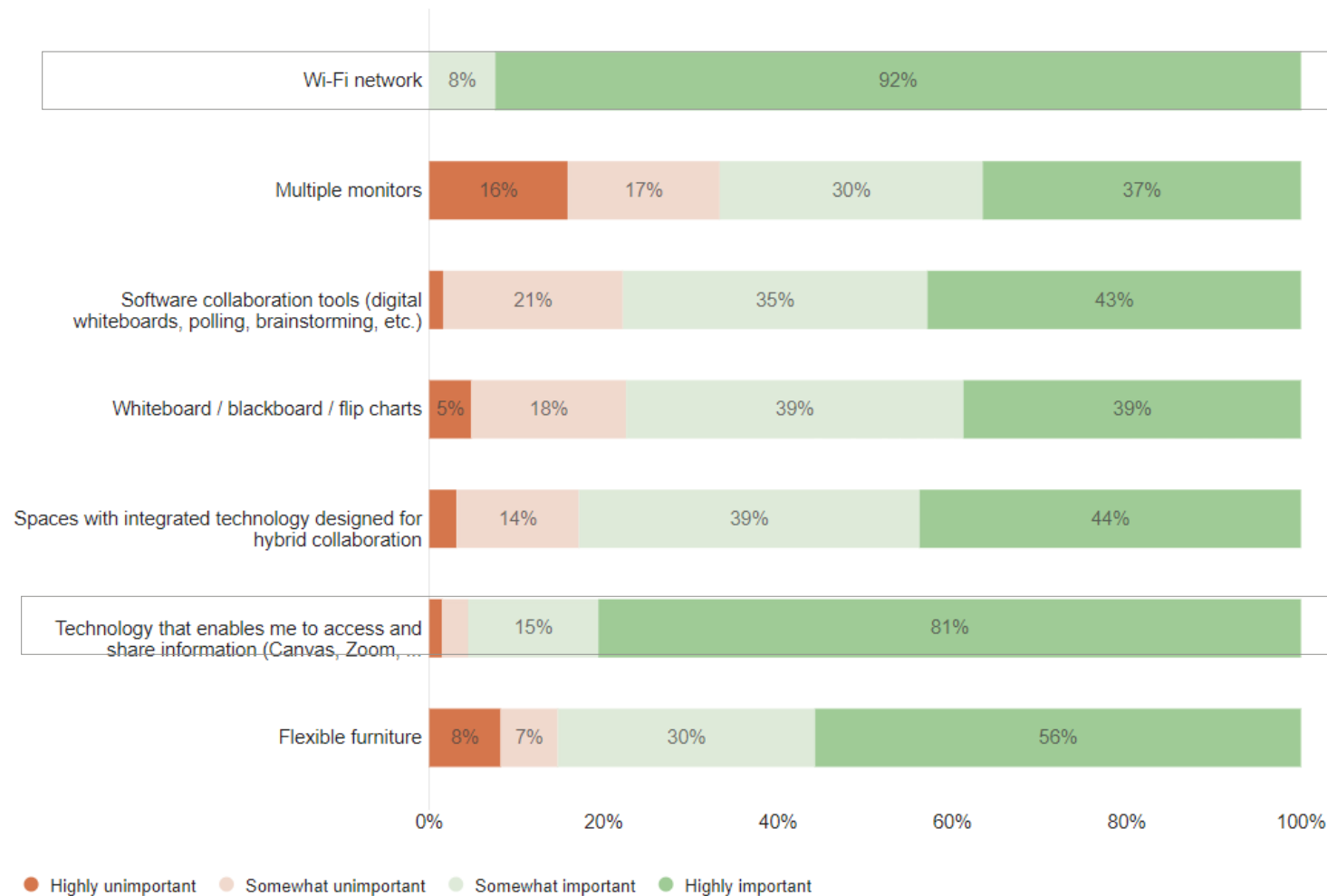
Below is a side-by-side comparison of tools and technology important to the overall campus experience and associated levels of satisfaction

92% of respondents indicate a **“Wi-Fi network”** is “highly important”; however, only 59% report being “highly satisfied”

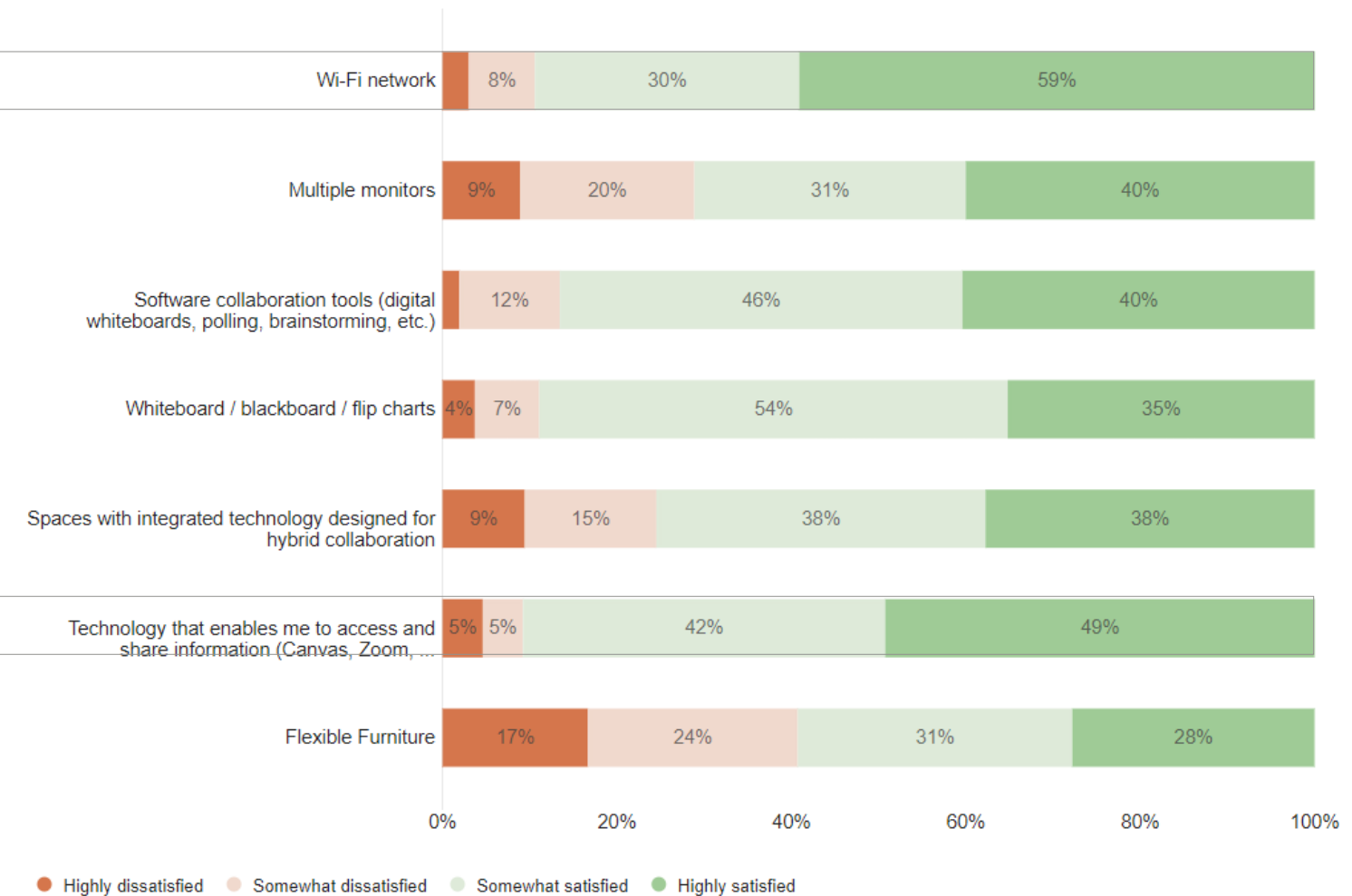
81% of respondents indicate that **“technology to access + share information (Canvas, Zoom, SharePoint, Teams, etc.)”** is “highly important”; however, only 49% report being “highly satisfied”

Both categories directly impact the quality and effectiveness of the **Learning Experience**

Q13 - Tools + Technology | What technology elements are most important?



Q14 - Tools + Technology | How satisfied are you with the following tools and technology?



Faculty

Key Findings

This section contains an overview of **Key Findings** from the Space Experience Survey conducted for Faculty.

Faculty time was divided approximately into thirds between classrooms, assigned workspaces, and home.

- 215 Faculty responded to the survey (62% response rate)
- 87% of respondents work on the Main Campus
- 10% of respondents work at the Natomas Center
- Responses were received from Faculty representing **14 departments**. Below are the departments with the highest response rates:
 - 18% Science, Math & Engineering
 - 17% Instructional
 - 15% English & Language Studies

4

of the top 5 primary reasons to come to campus are to **build connections** and **join the college community**

23%

of Faculty time is spent on campus in an **assigned workspace**, and an additional **33%** of their time is spent **in a classroom**

38%

of Faculty time is spent working **Alone**, either on **Routine Tasks** or **Deep Focus**

37%

of Faculty time is spent **Teaching**

89%

of respondents **do not “completely agree”** that **classrooms support** a blend of **in person and online learning**

77+%

of respondents were not “highly satisfied” with the **“on-campus”** and **“in-classroom”** experiences

Faculty

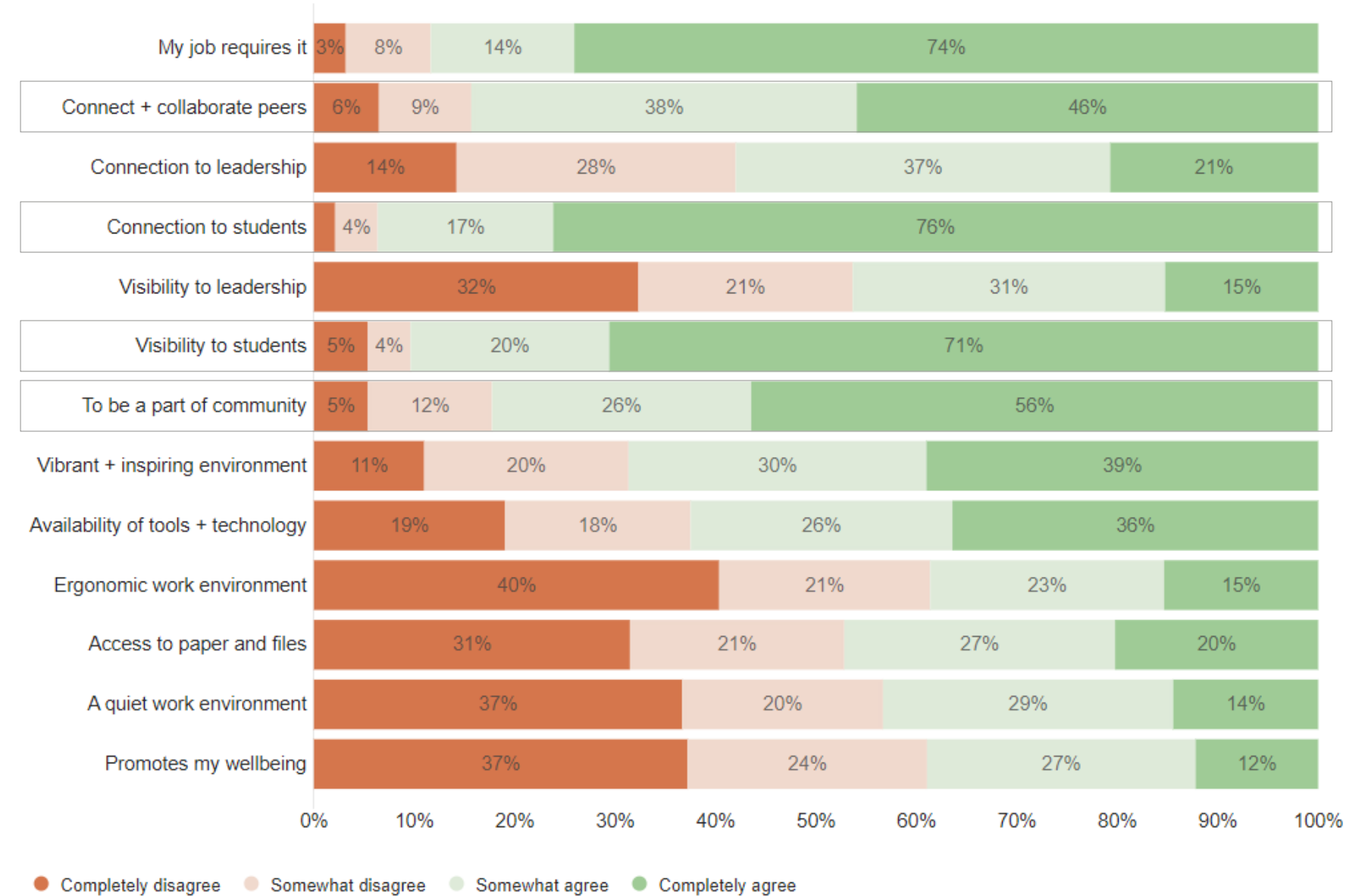
Campus Attractors

4 of the top 5 primary reasons to come to campus are to **build connections** and **join the college community**

Primary reasons to come to campus:

1. **Connection** to students
2. I need to be on campus as my job requires it
3. **Visibility** to students
4. To be a part of my **College community**
5. To **connect + collaborate** with my peers

Q5 - Your Campus Experience | Primary reasons for coming to campus



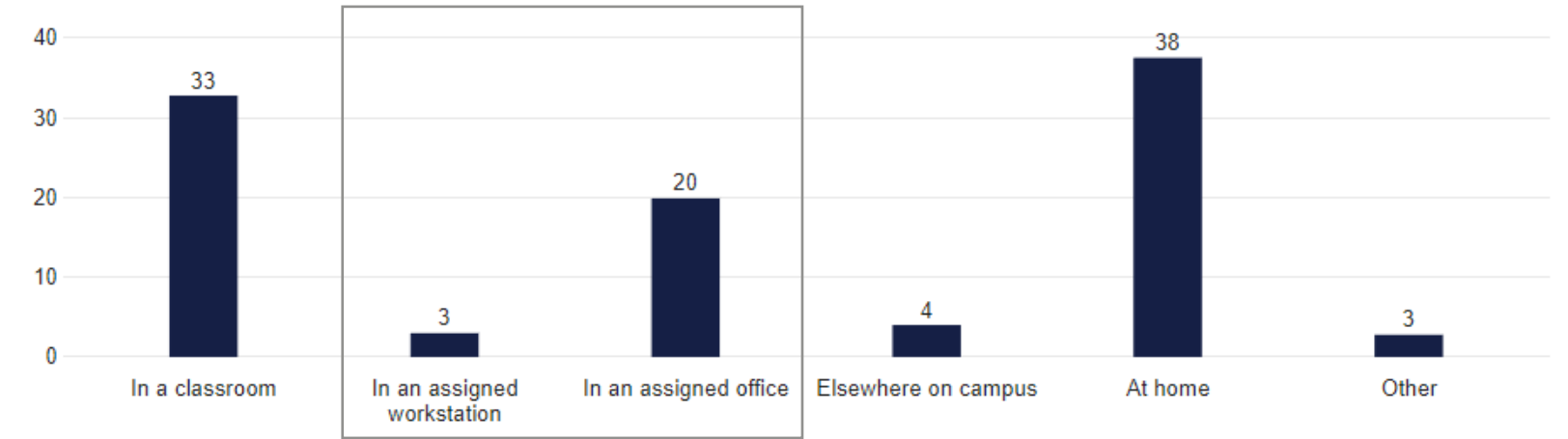
Faculty

Time in Locations

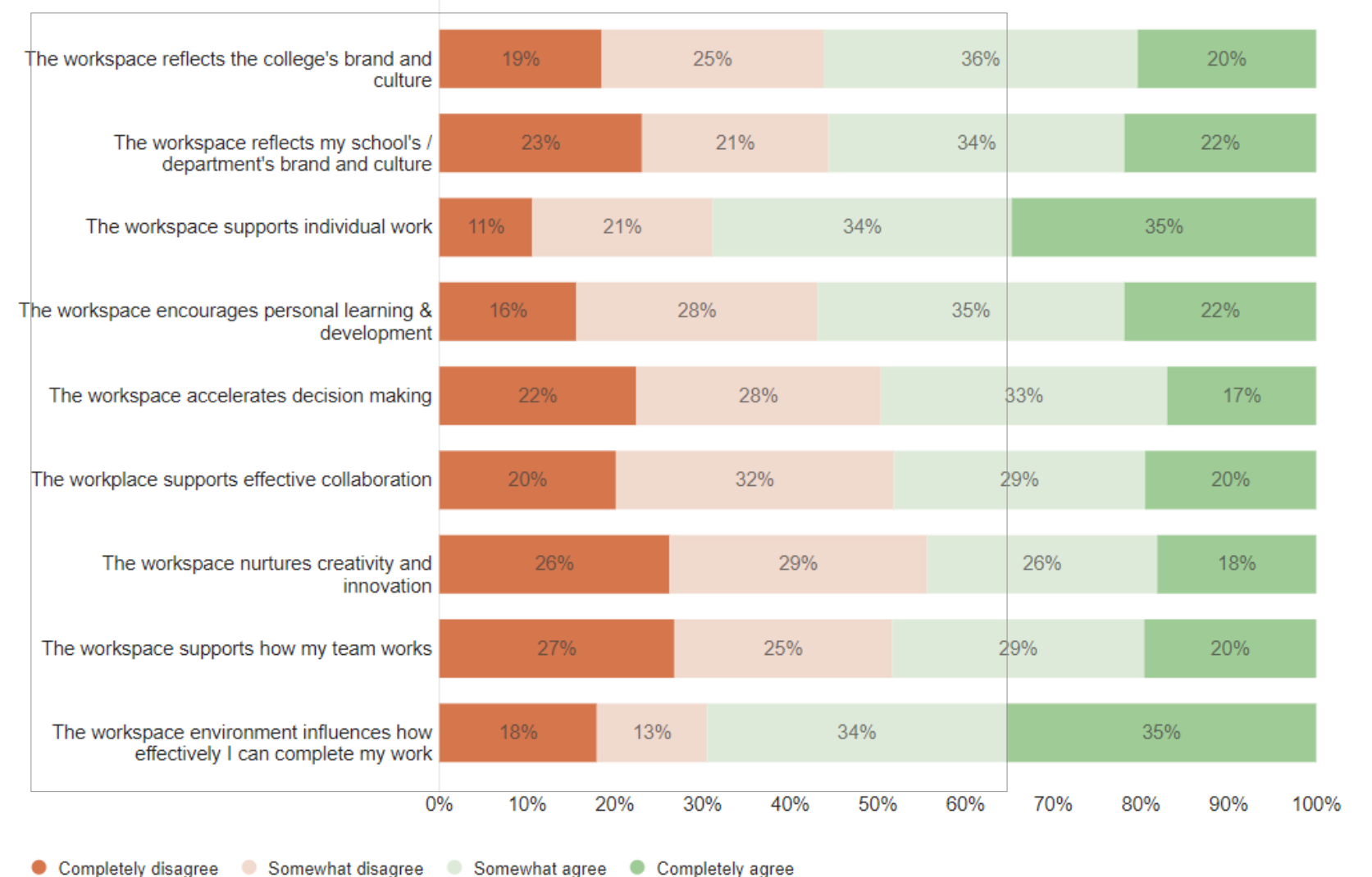
23% of Faculty time is spent on campus in an **assigned workspace**, and an additional **33%** of their time is spent **in a classroom**

More than 65% of respondents indicate that most elements related to their primary workplace, as identified in the graphic to the right, are **acceptable** but have significant opportunities for improvement.

Q4 - Where You Are | What percentage of time do you spend in the following locations in a typical week?



Q10 - Your Primary Workspace | The degree to which the workspace supports the following:



Faculty

Individual Work Experience

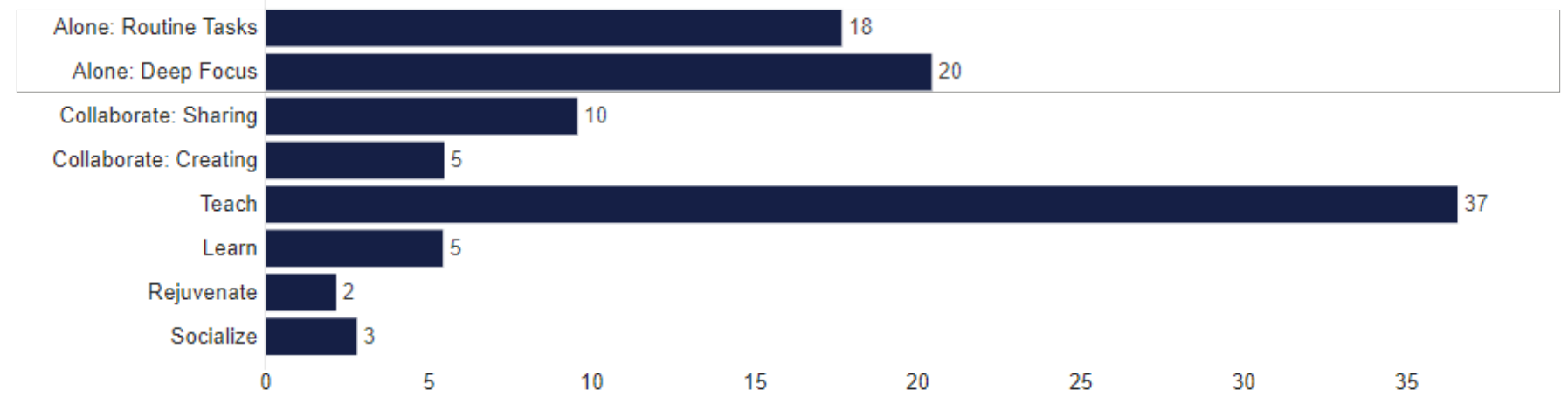
38% of Faculty time is spent working **Alone**, either on **Routine Tasks** or **Deep Focus**

63% of respondents indicate that the workplace does not “completely” support **Alone: Deep Focus** work.

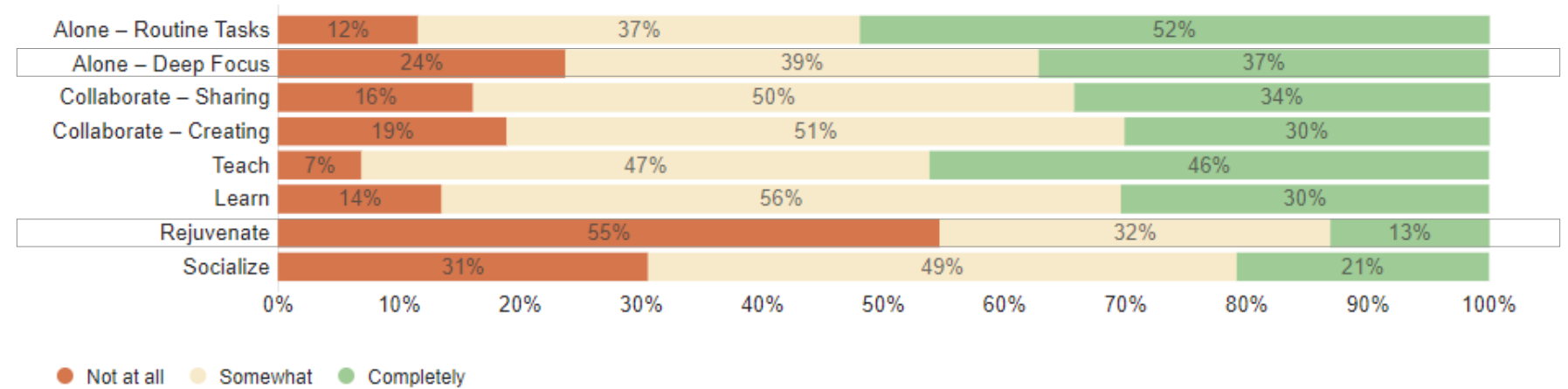
87% of respondents believe the workplace does not completely support **Rejuvenation**.

83% of respondents indicate they are not “completely satisfied” with the “**choice of different places**” when working alone.

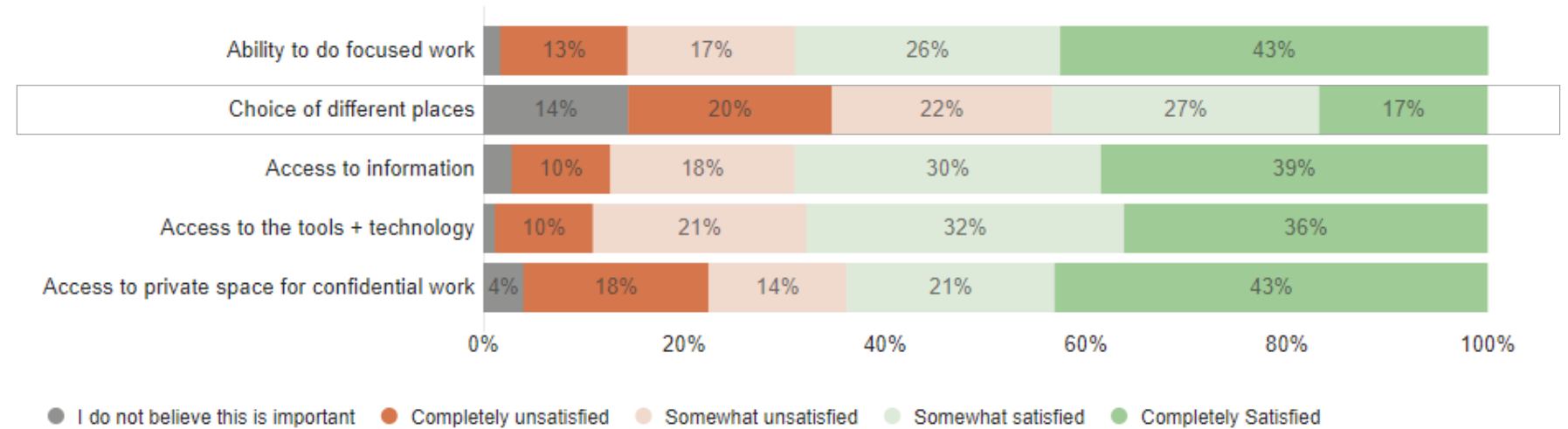
Q14 - Work Modes | Percentage of time spent in each work mode throughout the day



Q15 - Work Modes | To what extent does your workplace support each of the following work modes?



Q11 - Your Workplace Experience | Satisfaction when working ALONE



Faculty

Teaching Experience

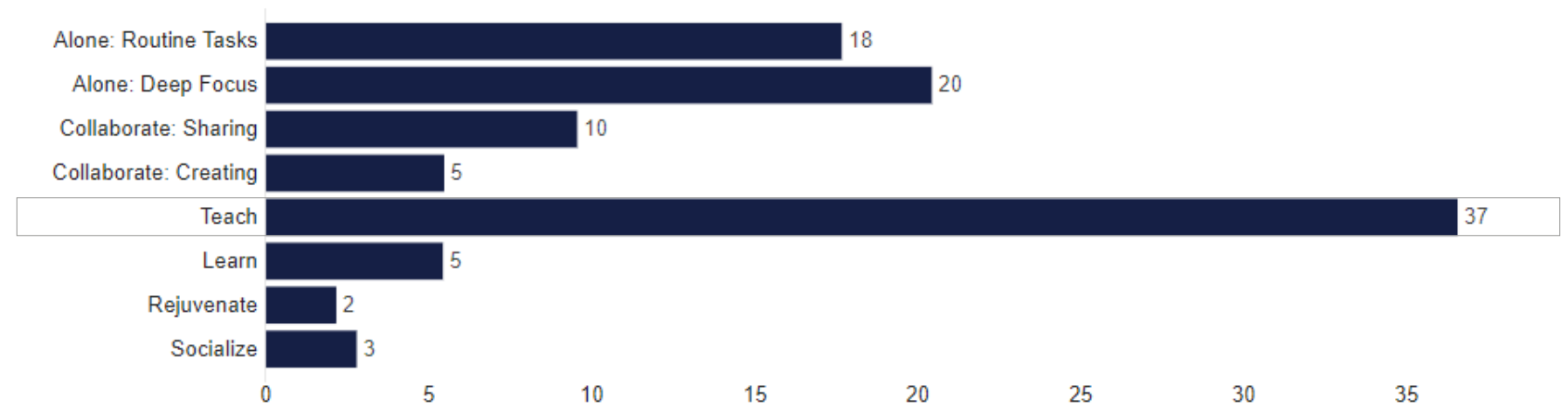
37% of Faculty time is spent **Teaching**

54% of respondents indicate the workplace does not “completely support” **Teaching**.

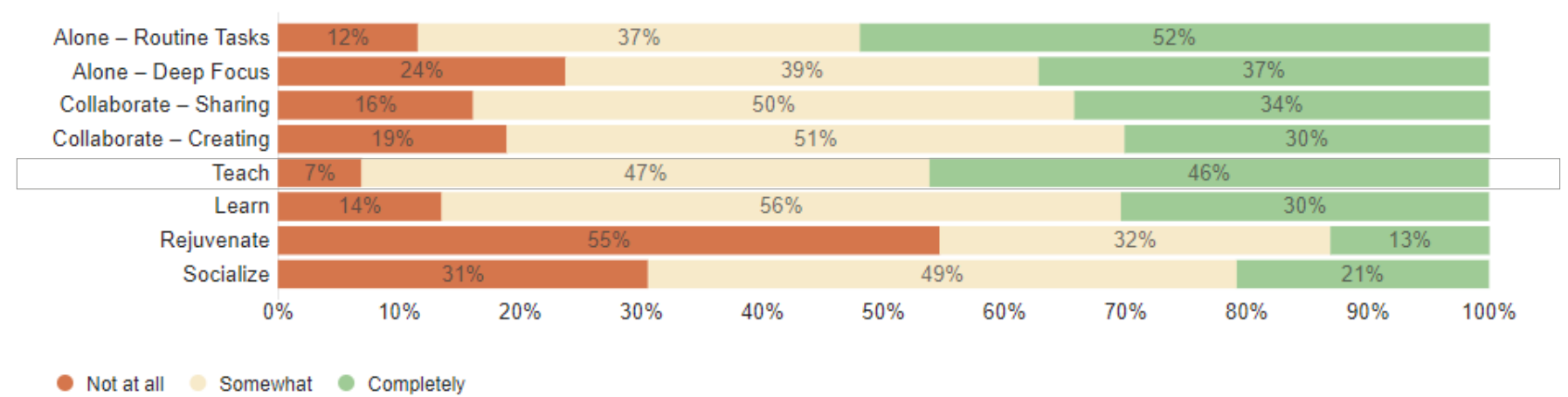
61% of respondents indicate they do not “completely agree” that “**classrooms help to facilitate group learning between students**”.

65% of respondents indicate they do not “completely agree” that “**classrooms support their preferred pedagogy.**” It is the lowest rating of the four categories.

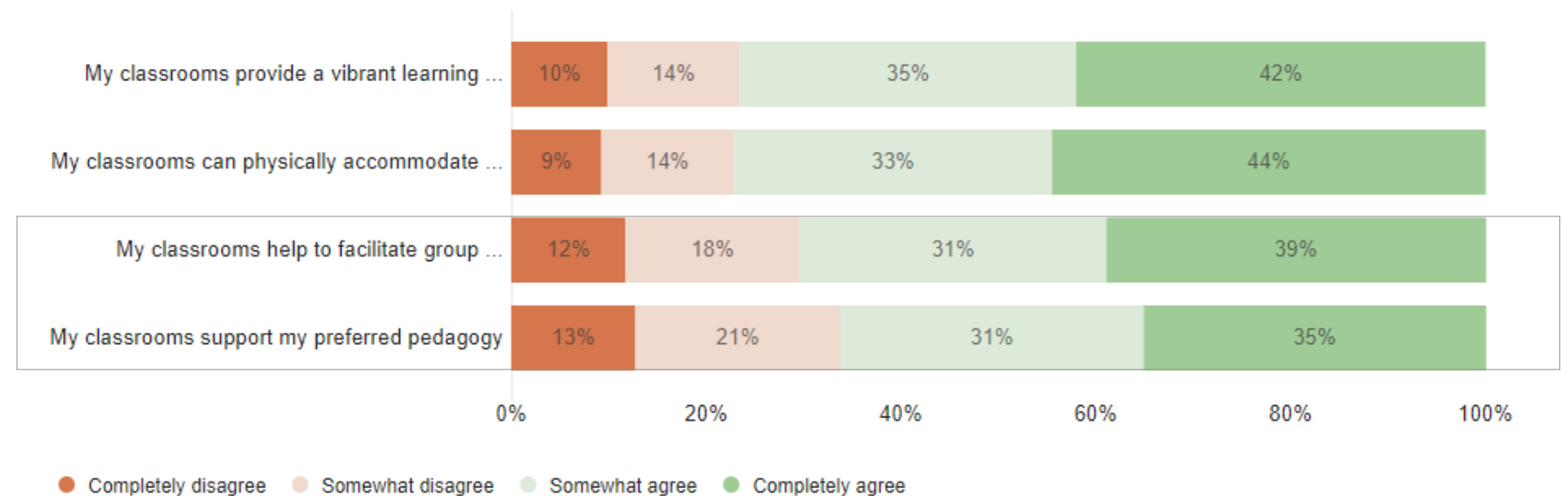
Q14 - Work Modes | Percentage of time spent in each work mode throughout the day



Q15 - Work Modes | To what extent does your workplace support each of the following work modes?



Q7 - Your Classroom Experience | To what extent do you agree or disagree with the following regarding your physical classroom experience?



Faculty

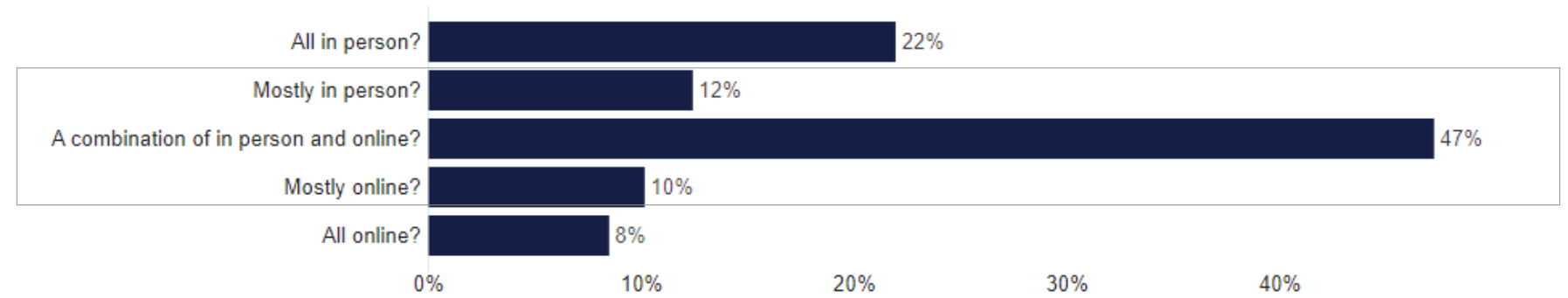
Teaching Experience

89% of respondents do not “completely agree” that classrooms support a blend of in person and online learning

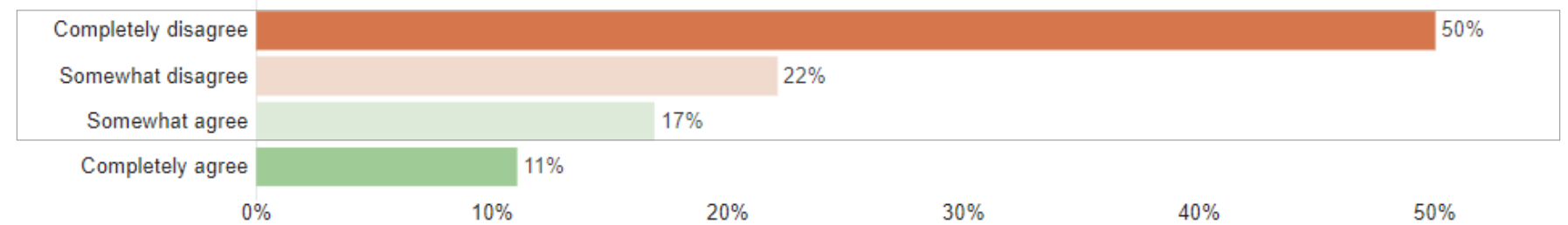
A significant percentage of Faculty conduct a blend of online and on ground courses.

Almost two-thirds of respondents indicate classrooms do not support the ability to “see” or “hear” content.

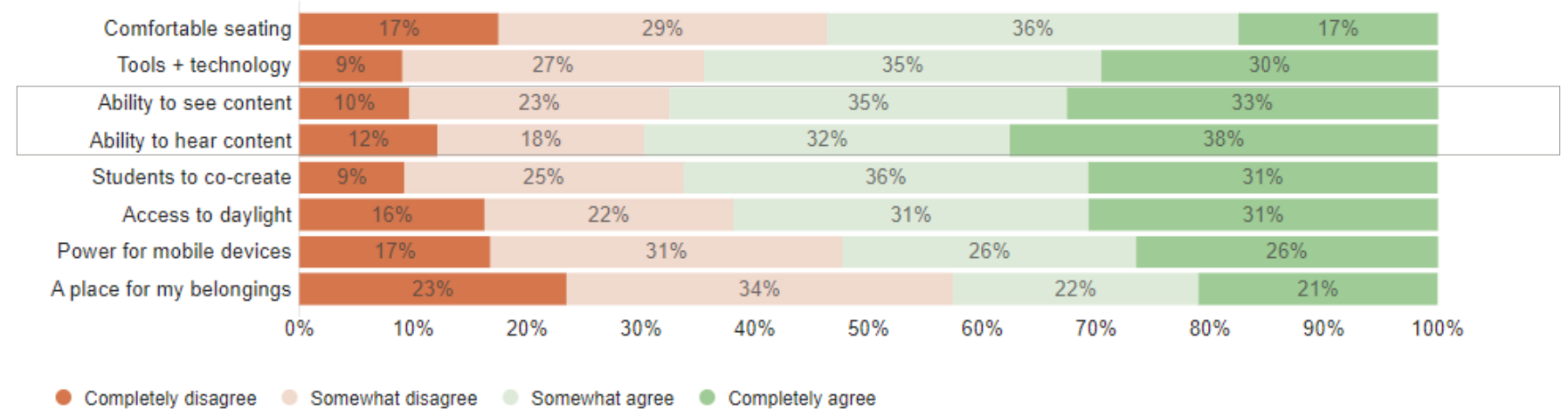
Q6 - Your Classroom Experience | Are your classes:



Q8 - Your Classroom Experience | The physical classrooms support a blend of in-person and online participants at the same time.



Q9 -Your Classroom Experience | To what extent do the physical classroom environments support the following?



Faculty

Collaborative Experience

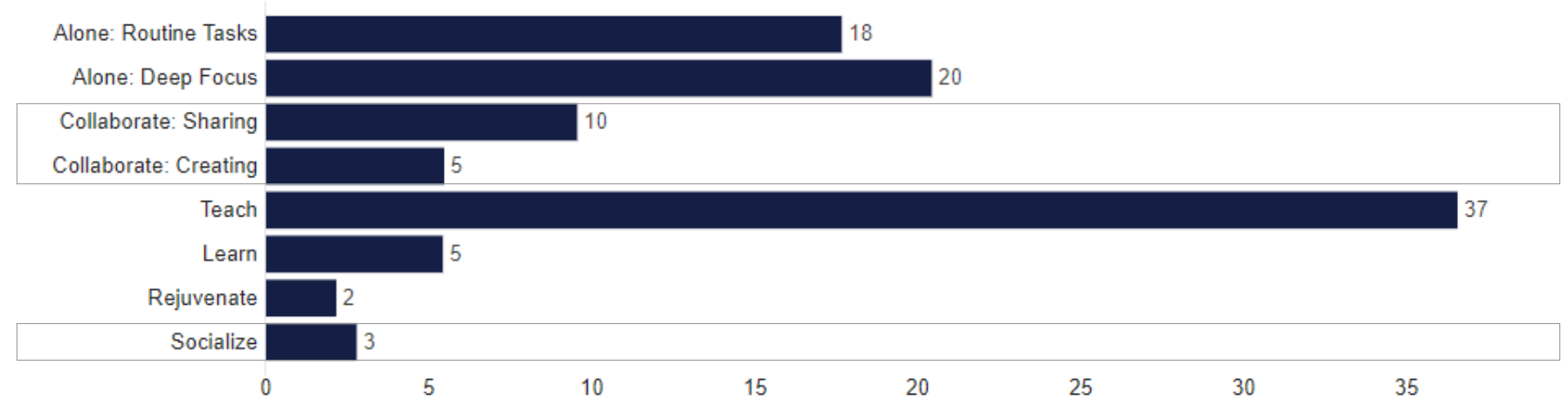
15% of Faculty time is spent **Collaborating**, either **Sharing** or **Creating**

Approximately two-thirds of respondents indicate the workplace does not “completely support” **Collaboration**, either **Sharing** or **Creating**.

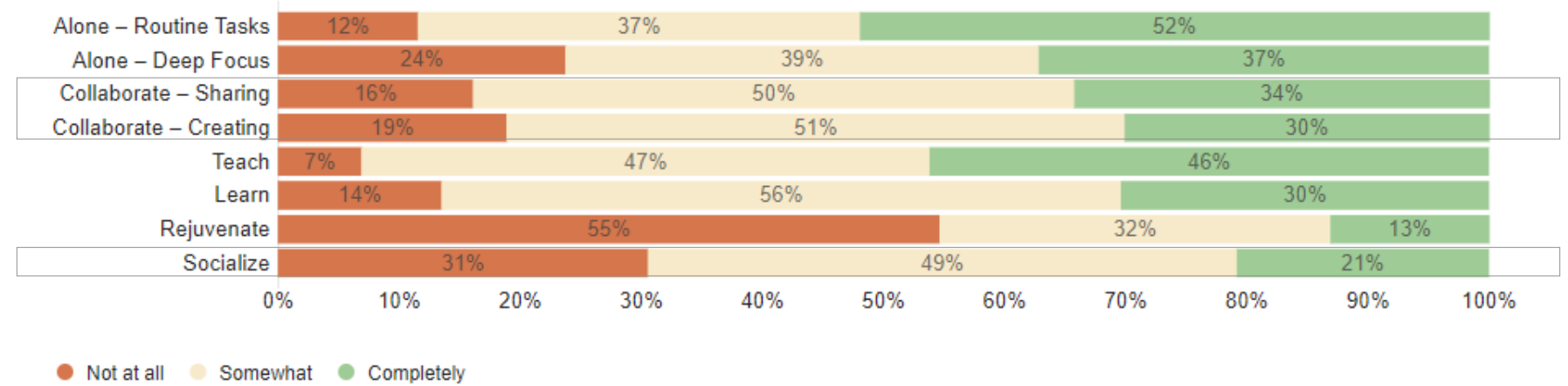
Faculty spend **3%** of their time in **Socialization**, however **80%** of respondents believe the workplace does not support it.

84+% of respondents indicate they are not “completely satisfied” with access to “**visually private**” and “**acoustically private**” group spaces or “**collaborative spaces for unscheduled meetings**.”

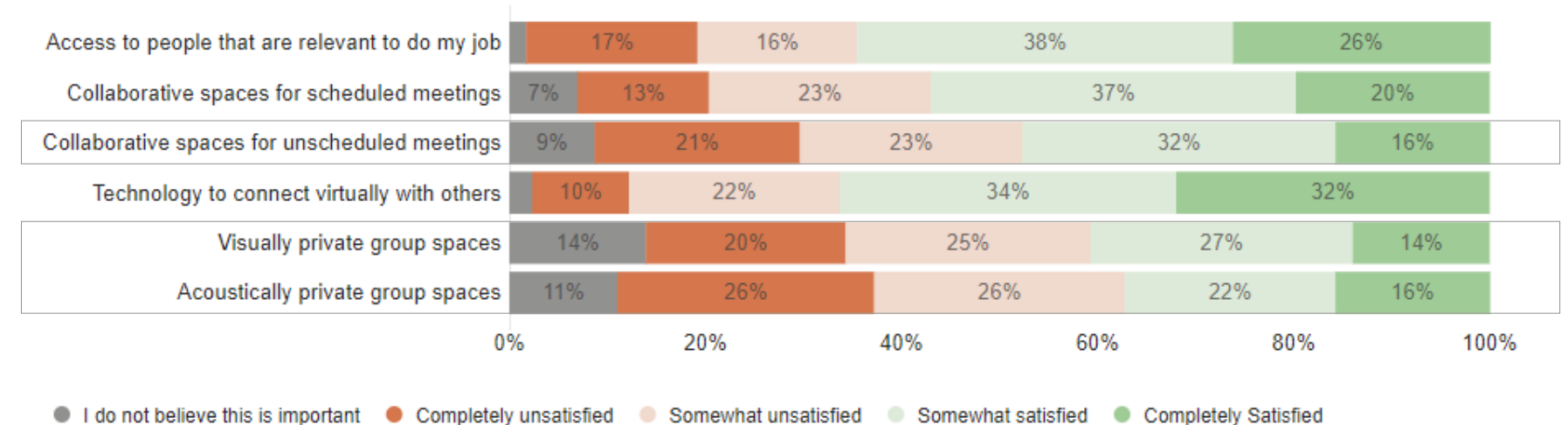
Q14 - Work Modes | Percentage of time spent in each work mode throughout the day



Q15 - Work Modes | To what extent does your workplace support each of the following work modes?



Q12 - Your Workplace Experience | Satisfaction when working WITH OTHERS



Faculty

General Satisfaction

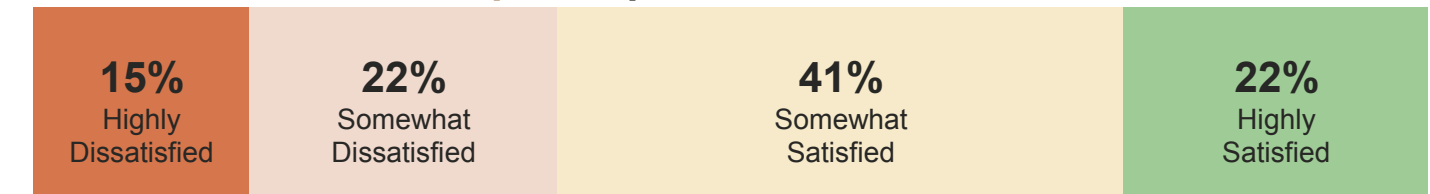
77+% of respondents were not “highly satisfied” with the “on-campus” and “in-classroom” experiences

The bar charts to the right indicate satisfaction with on-campus, in-class, and online experiences.

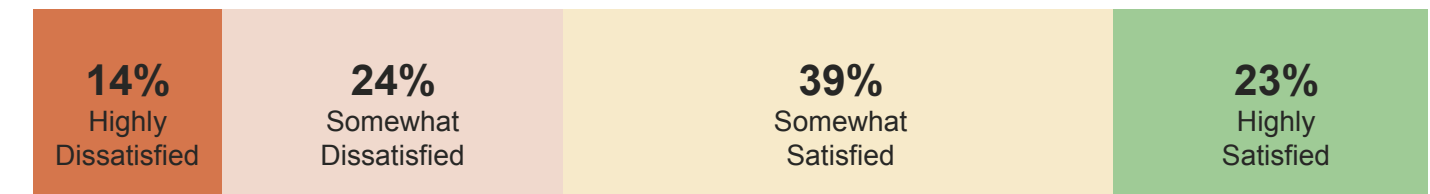
The results reveal there is room for significant improvement in the on-campus and in-class experiences and some improvement in the online experiences.

Q19-21 - To what extent are you **satisfied** or **dissatisfied** with your experiences?

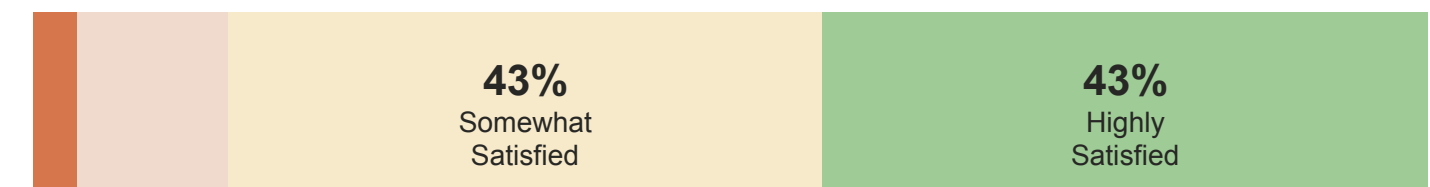
Satisfaction of **on-campus** experience:



Satisfaction of **in-classroom** experience:



Satisfaction of **online** experience:



Faculty

Tools and Technology

Below is a side-by-side comparison of tools and technology important to the overall campus experience and associated levels of satisfaction

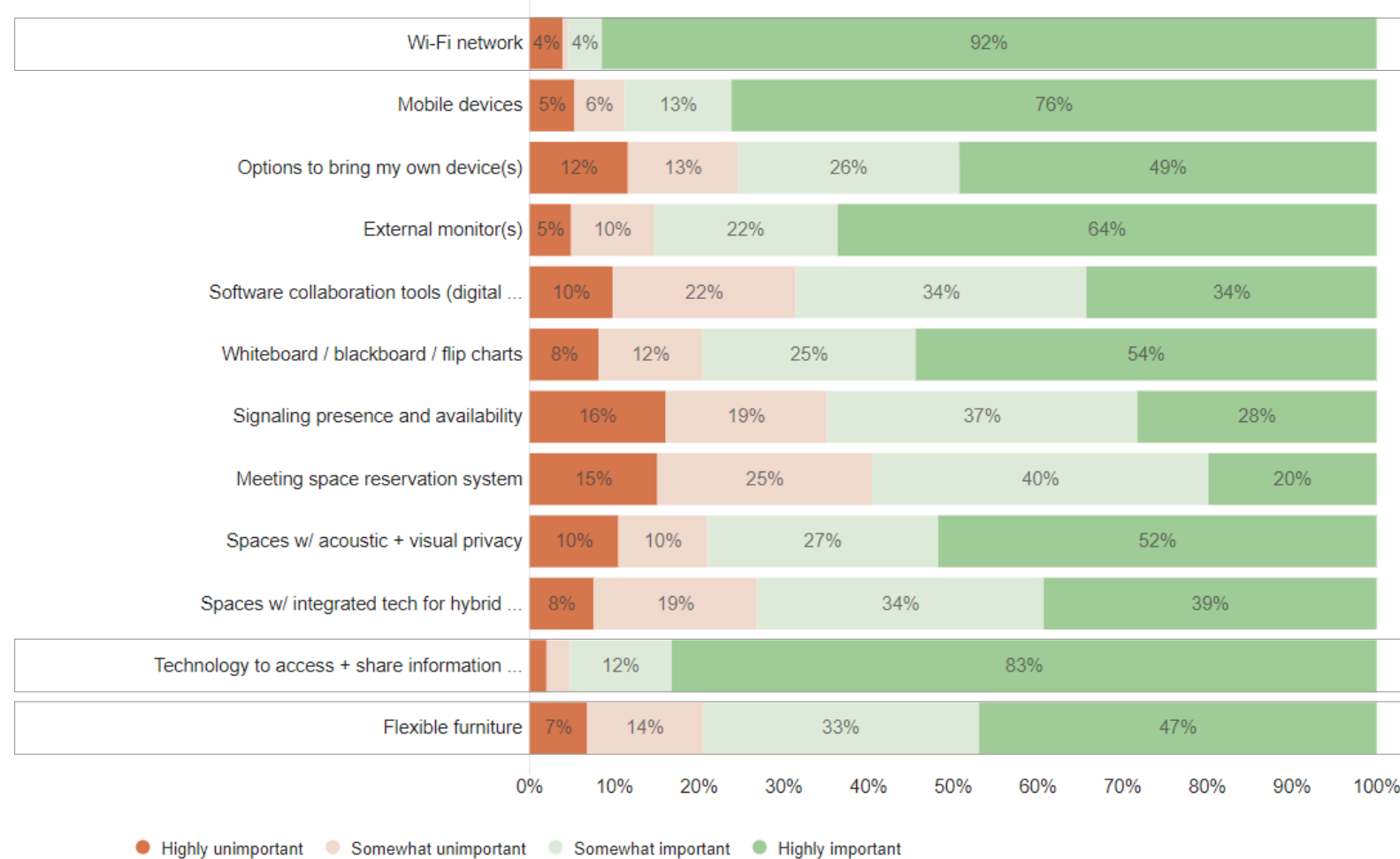
92% of respondents indicate that “**Wi-Fi network**” is “highly important”; however, only **50%** report being “highly satisfied”

83% of respondents indicate that “**technology to access + share information** (Canvas, Zoom, SharePoint, Teams, etc.)” is “highly important”; however, only **35%** report being “highly satisfied”

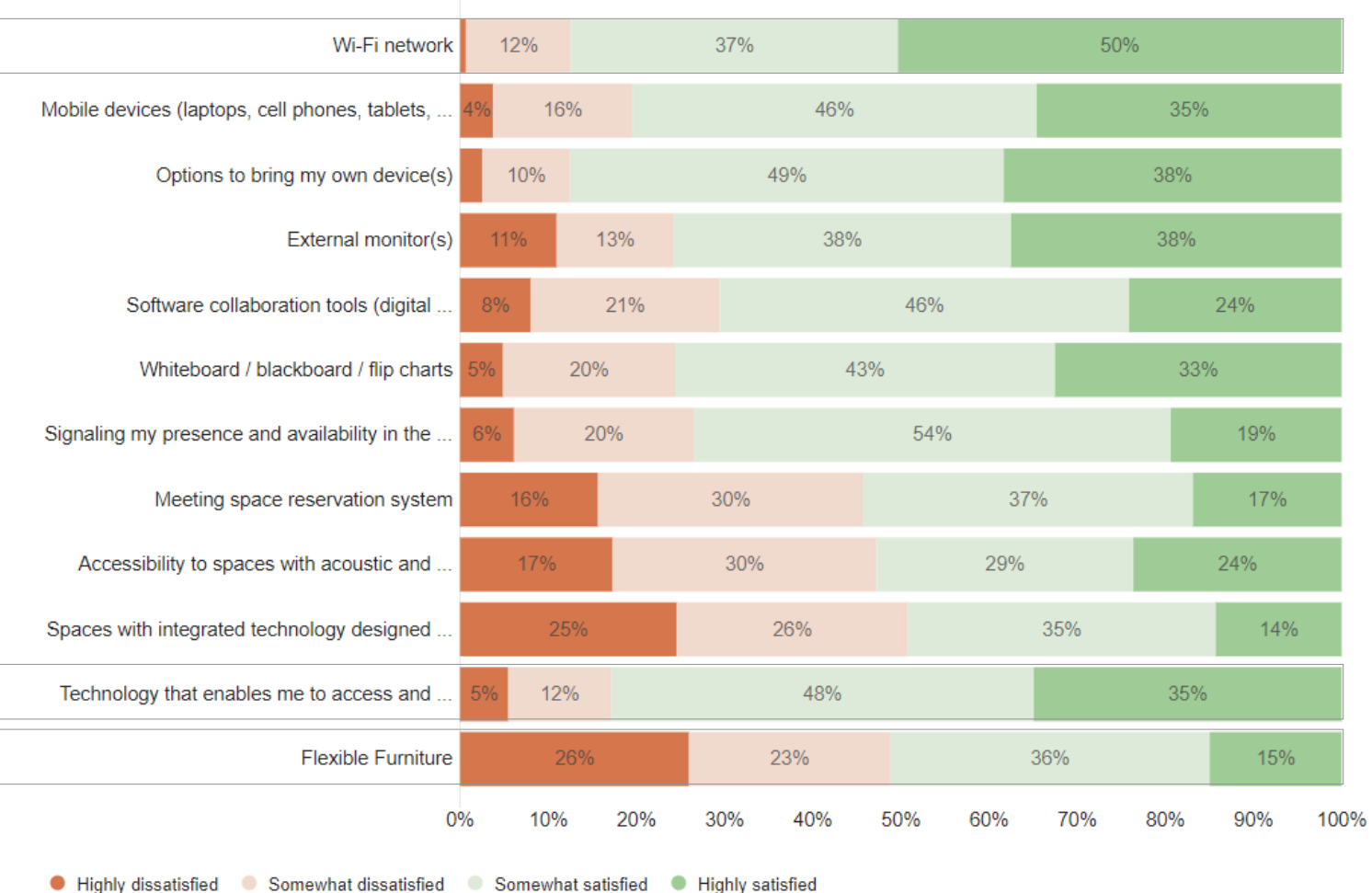
47% of respondents indicate that “**flexible furniture**” is “highly important”; however, only **15%** report being “highly satisfied”

These three categories directly impact the quality and effectiveness of **Teaching**

Q16 - Tools + Technology | What technology elements are most important?



Q17 - How satisfied are you with the following tools and technology elements?



Classified Professionals

Key Findings

This section contains an overview of **Key Findings** from the Space Experience Survey conducted for Classified Professionals.

Classified Professionals work primarily **alone** in focused activities in an **assigned office** or **workstation**.

- 211 Classified Professionals responded to the Survey (86.5% response rate)
- 18% of respondents were Manager/ Supervisor
- Responses were received from Classified Professionals representing **3 groups**:
 - 46% of respondents were from Student Services & Support Programs
 - 26% of respondents were from Instructional Services
 - 17% of respondents were from Administrative Services

4

of the top 5 primary reasons to come to campus are to **build connections** and **join the college community**

70%

of time is spent in an **assigned office** or **workstation**

56%

of Classified Professional's time during the day is spent working **Alone**, either on **Routine Tasks** or **Deep Focus**

74%

of respondents were **not "highly satisfied"** with the **"on-campus"** experience

Classified Professionals

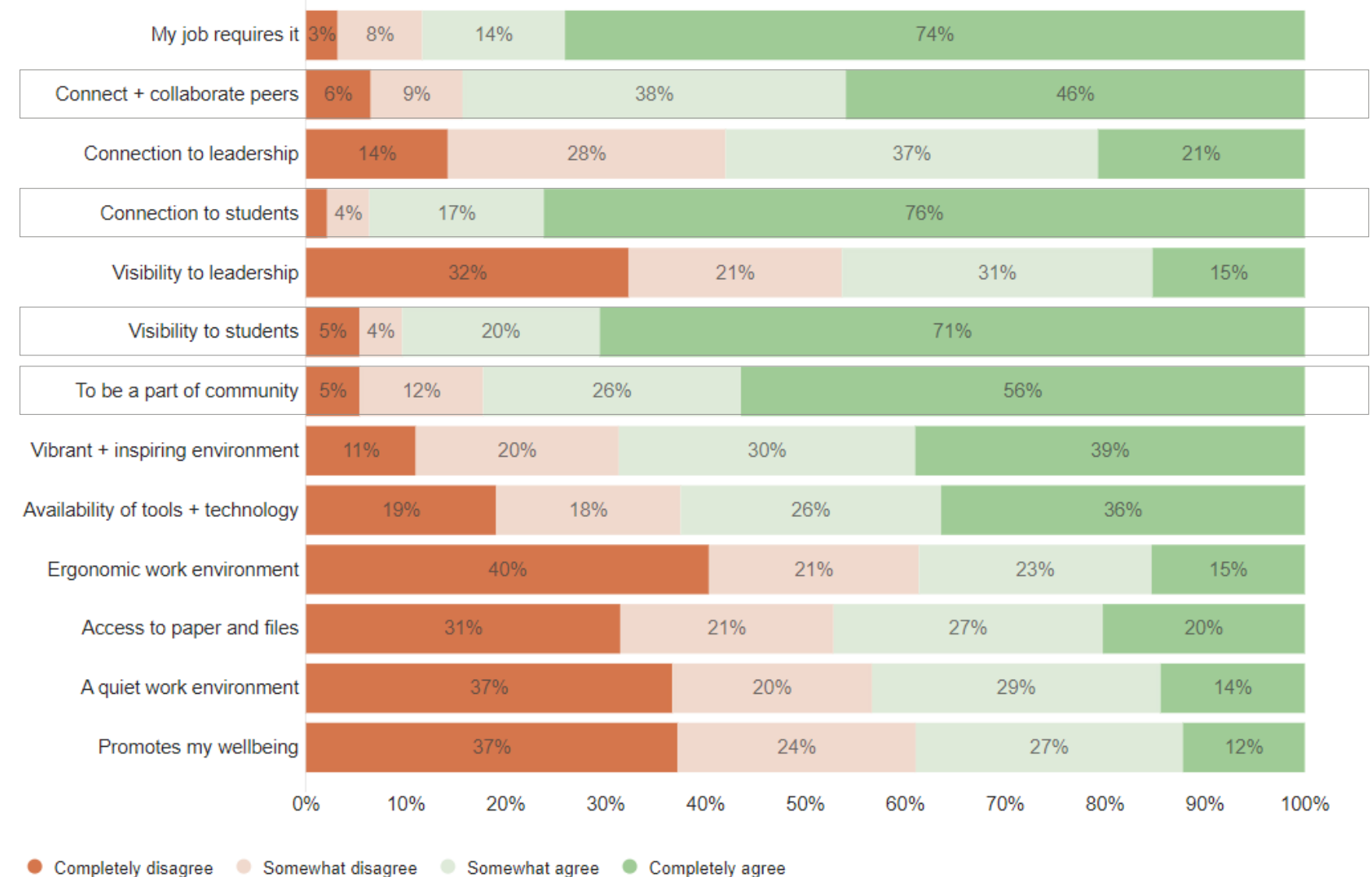
Campus Attractors

4 of the top 5 primary reasons to come to campus are to **build connections** and **join the college community**

Primary reasons to come to campus:

1. **Connection** to students
2. **Visibility** to students
3. I need to be on campus as my job requires it
4. To **connect + collaborate** with my peers
5. To be a part of my **College community**

Q5 - Your Campus Experience | Primary reasons for coming to campus



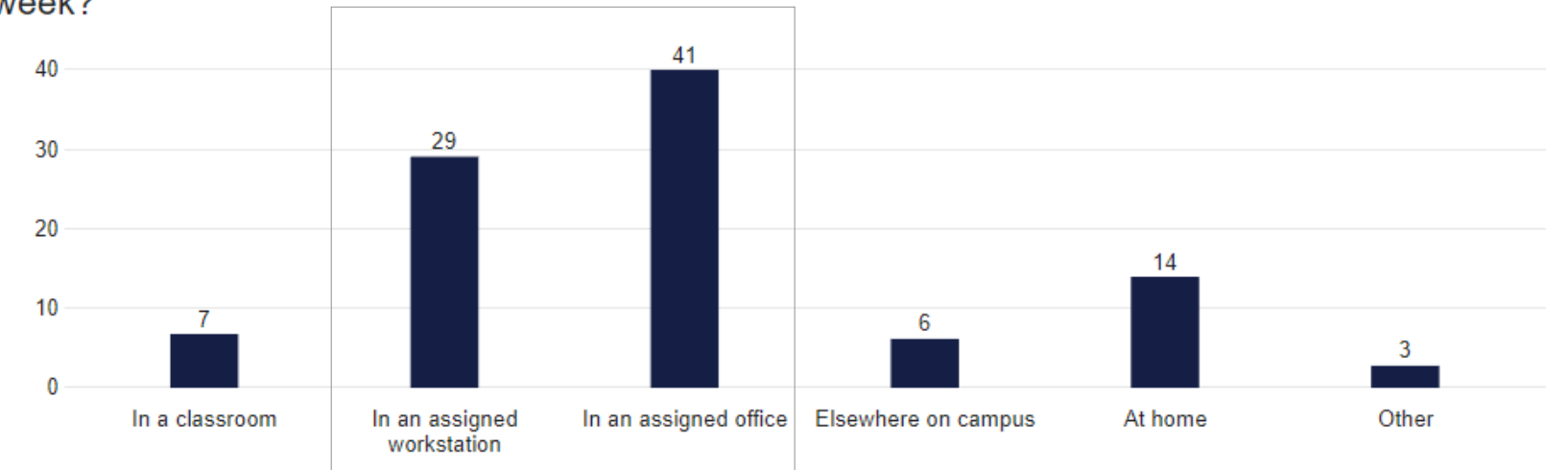
Classified Professionals

Time in Locations

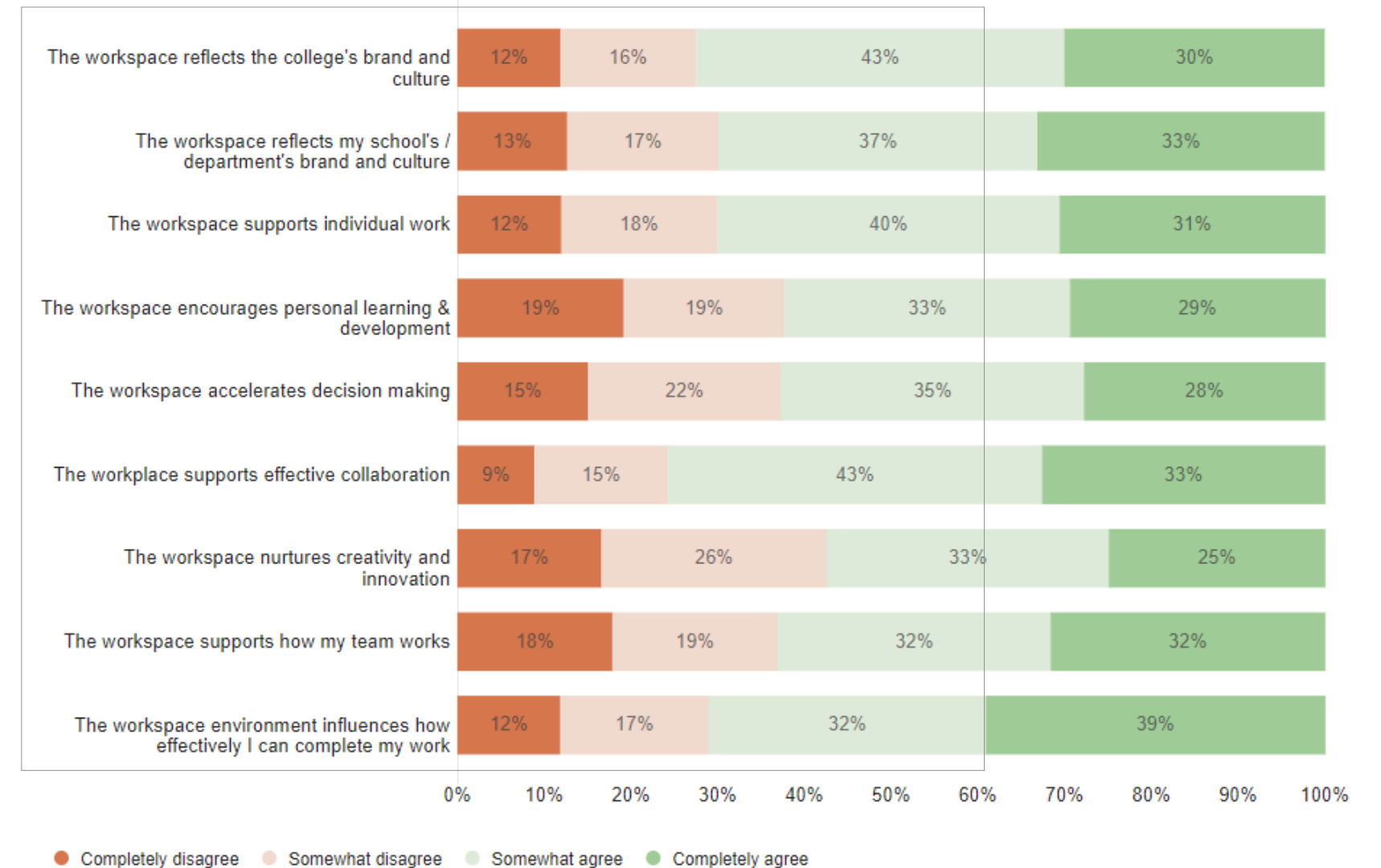
70% of time is spent in an **assigned office or workstation**

More than 60% of respondents indicate that most elements related to their primary workplace, as identified in the graphic to the right, are **acceptable** but have significant opportunities for improvement.

Q4 - Where You Are | What percentage of time do you spend in the following locations in a typical week?



Q10 - Your Primary Workspace | The degree to which the workspace supports the following:



Classified Professionals

Individual Work Experience

56%

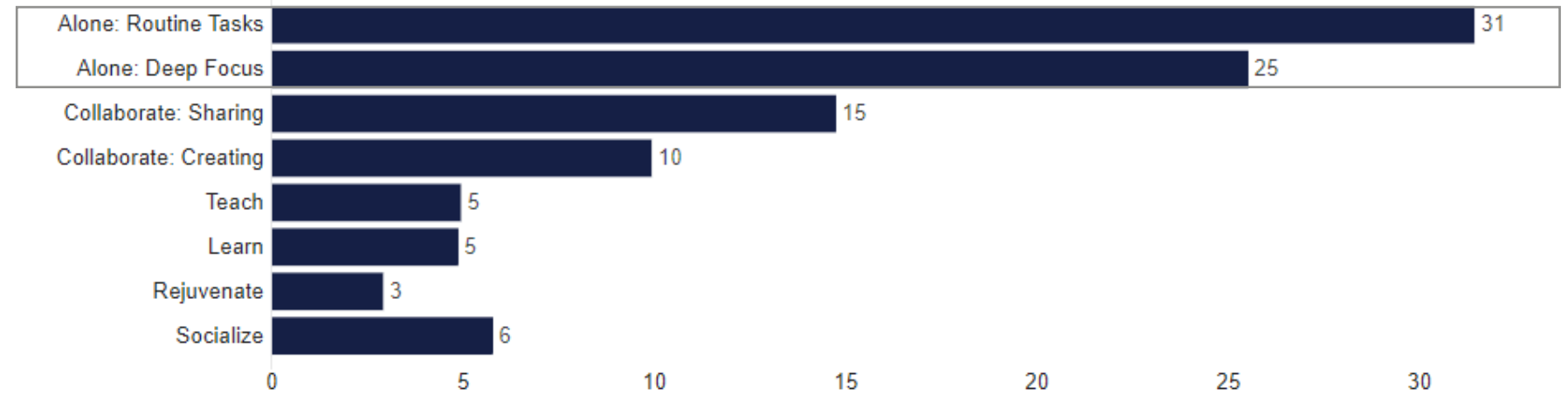
of Classified Professional's time during the day is spent working **Alone**, either on **Routine Tasks** or **Deep Focus**

68% of respondents indicate that the workplace does not "completely support" **Alone: Deep Focus** work.

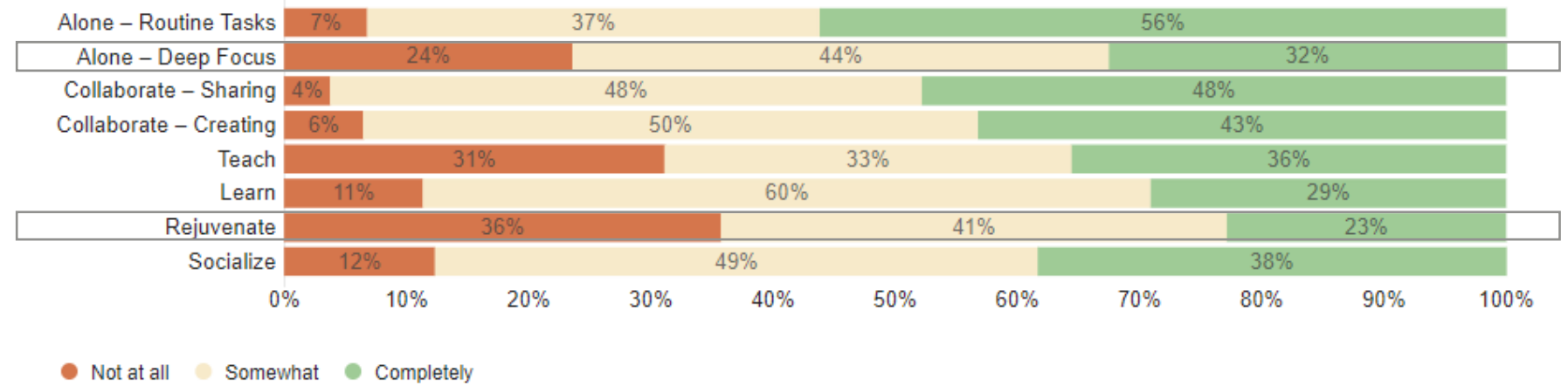
77% of respondents believe the workplace does not completely support **Rejuvenation**.

77% of respondents indicate they are not "completely satisfied" with the "choice of different places" when working alone. It is the lowest rating of the five categories.

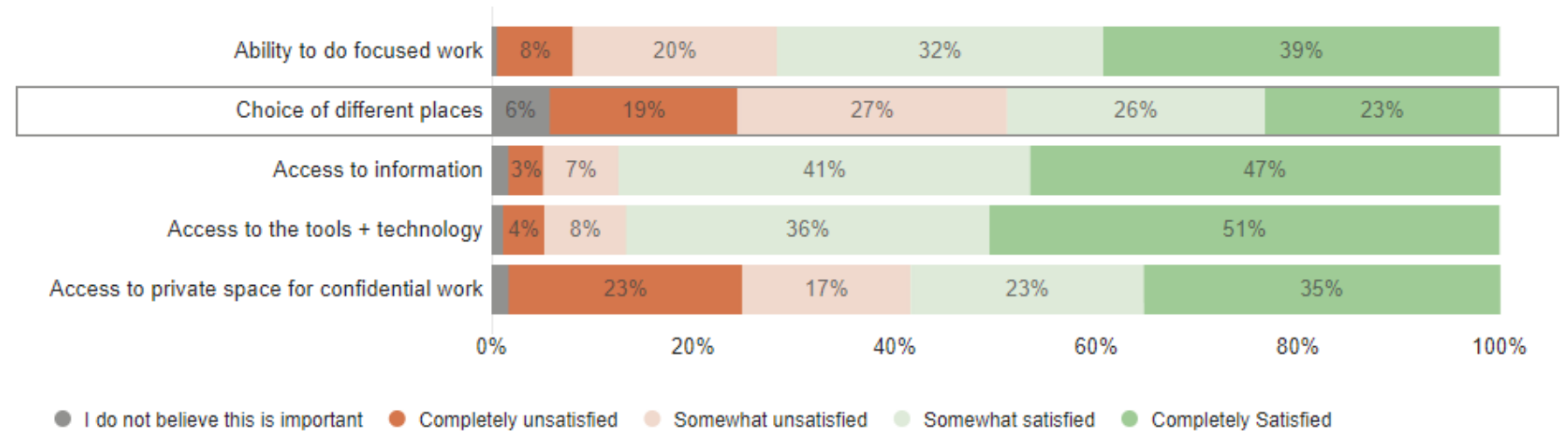
Q14 - Work Modes | Percentage of time spent in each work mode throughout the day



Q15 - Work Modes | To what extent does your workplace support each of the following work modes?



Q11 - Your Workplace Experience | Satisfaction when working ALONE



Classified Professionals

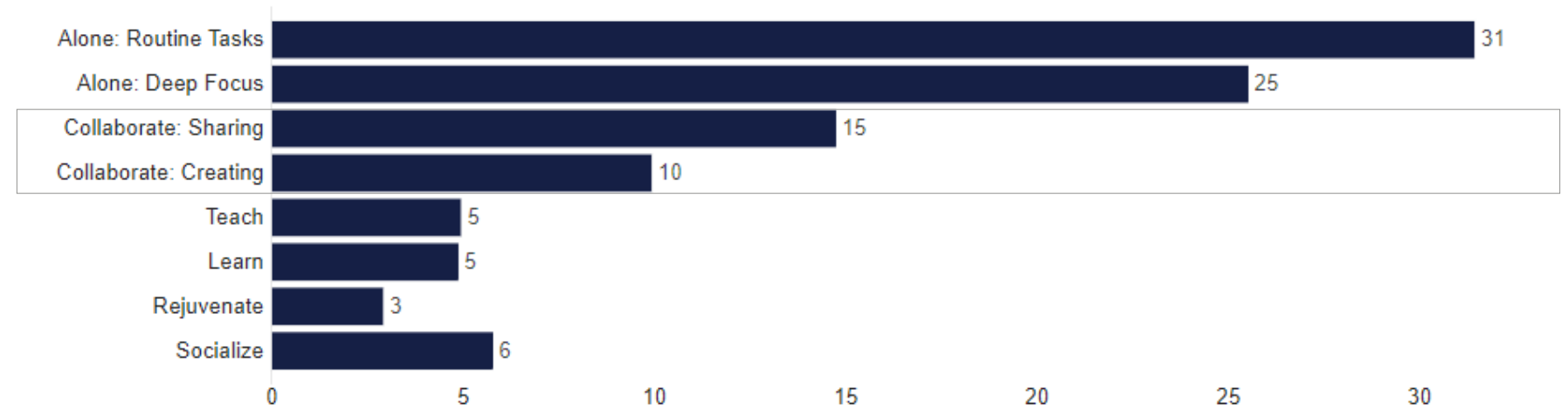
Collaborative Work Experience

25% of Classified Professional's time is spent **Collaborating**, either **Sharing** or **Creating**

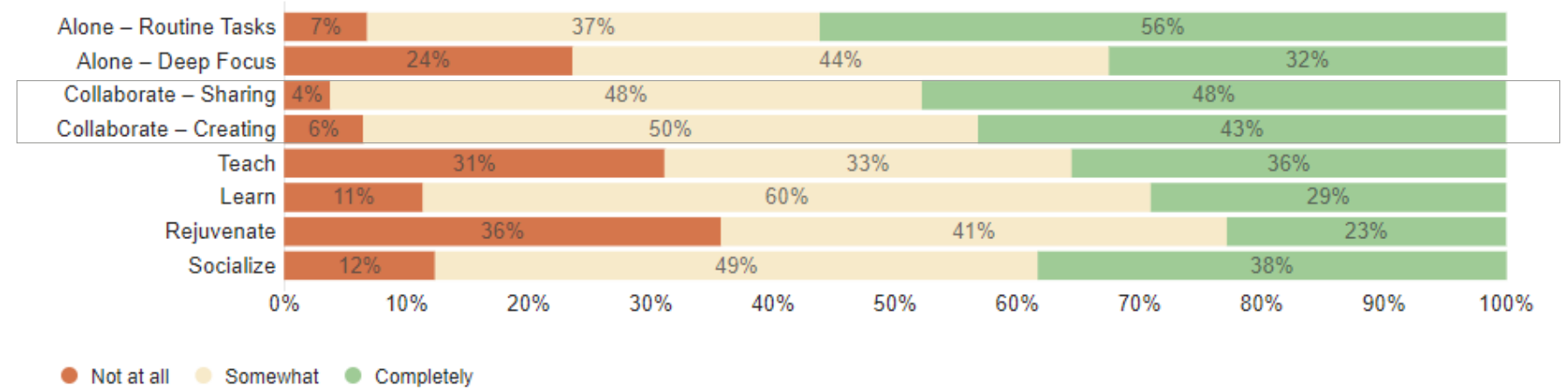
More than half of respondents indicate the workplace does not "completely support" **Collaboration**, either **Sharing** or **Creating**.

More than 75% of respondents indicated they are not "completely satisfied" with access to "**visually private**" and "**acoustically private**" group spaces and "**collaborative spaces for unscheduled meetings**."

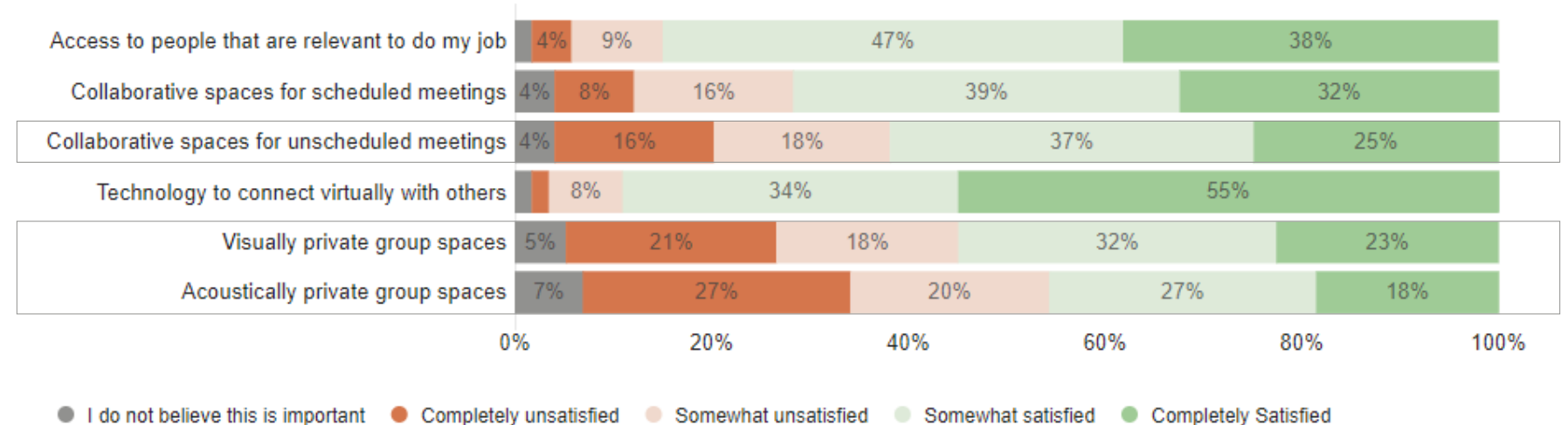
Q14 - Work Modes | Percentage of time spent in each work mode throughout the day



Q15 - Work Modes | To what extent does your workplace support each of the following work modes?



Q12 - Your Workplace Experience | Satisfaction when working WITH OTHERS



Classified Professionals

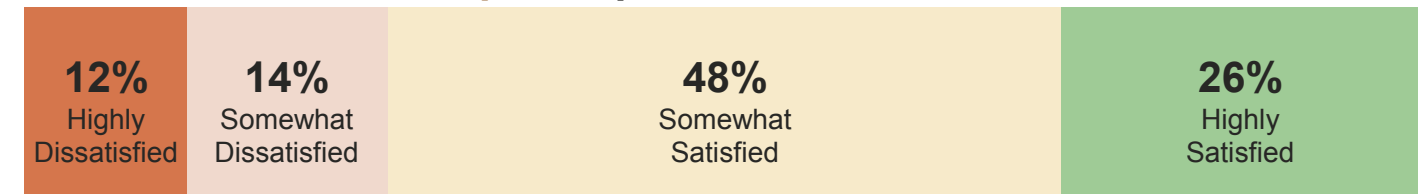
General Satisfaction

74% of respondents were **not “highly satisfied”** with the **on-campus experience**

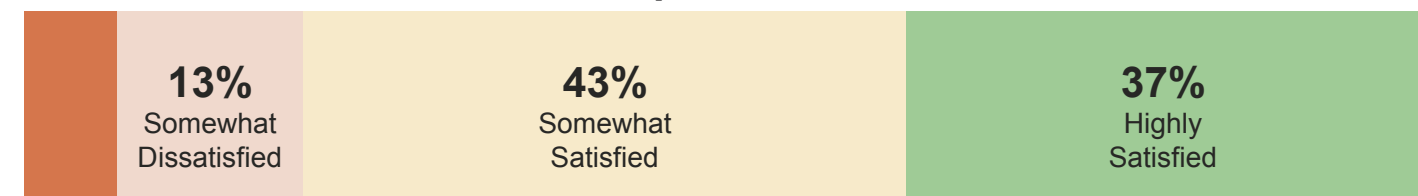
The bar charts to the right indicate satisfaction with **on-campus**, **in-classroom**, and **online** experiences. The results reveal that there is room for significant improvement in the on-campus experience and improvement in the in-classroom and online experiences.

Q19-21 - To what extent are you **satisfied** or **dissatisfied** with your experiences?

Satisfaction of **on-campus** experience:



Satisfaction of **in-classroom** experience:



Satisfaction of **online** experience:



Classified Professionals

Tools and Technology

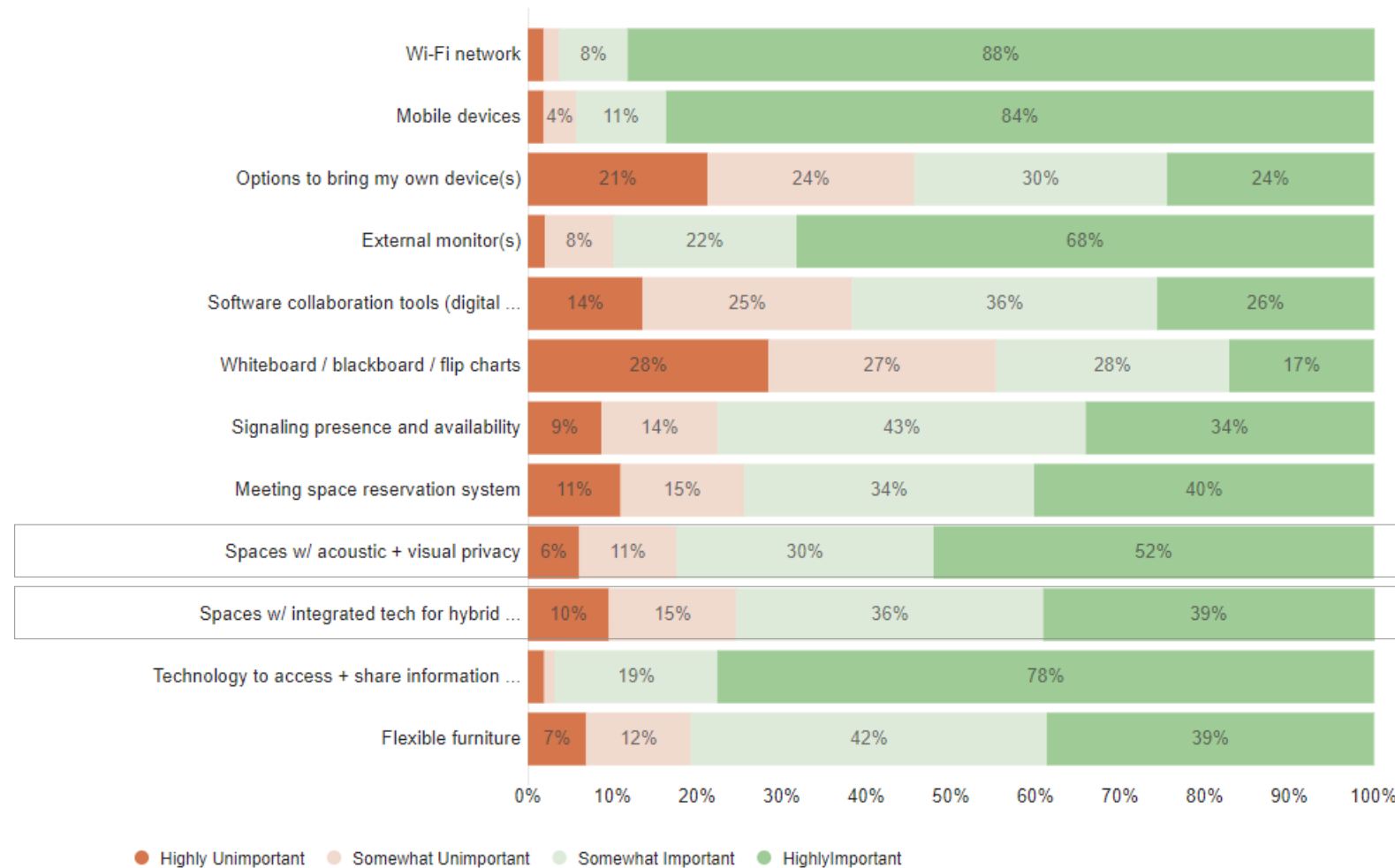
Below is a side-by-side comparison of tools and technology important to the overall campus experience and associated levels of satisfaction

52% of respondents indicate that “**access to space with acoustic and visual privacy**” is “highly important”; however, only **20%** report feeling “highly satisfied”

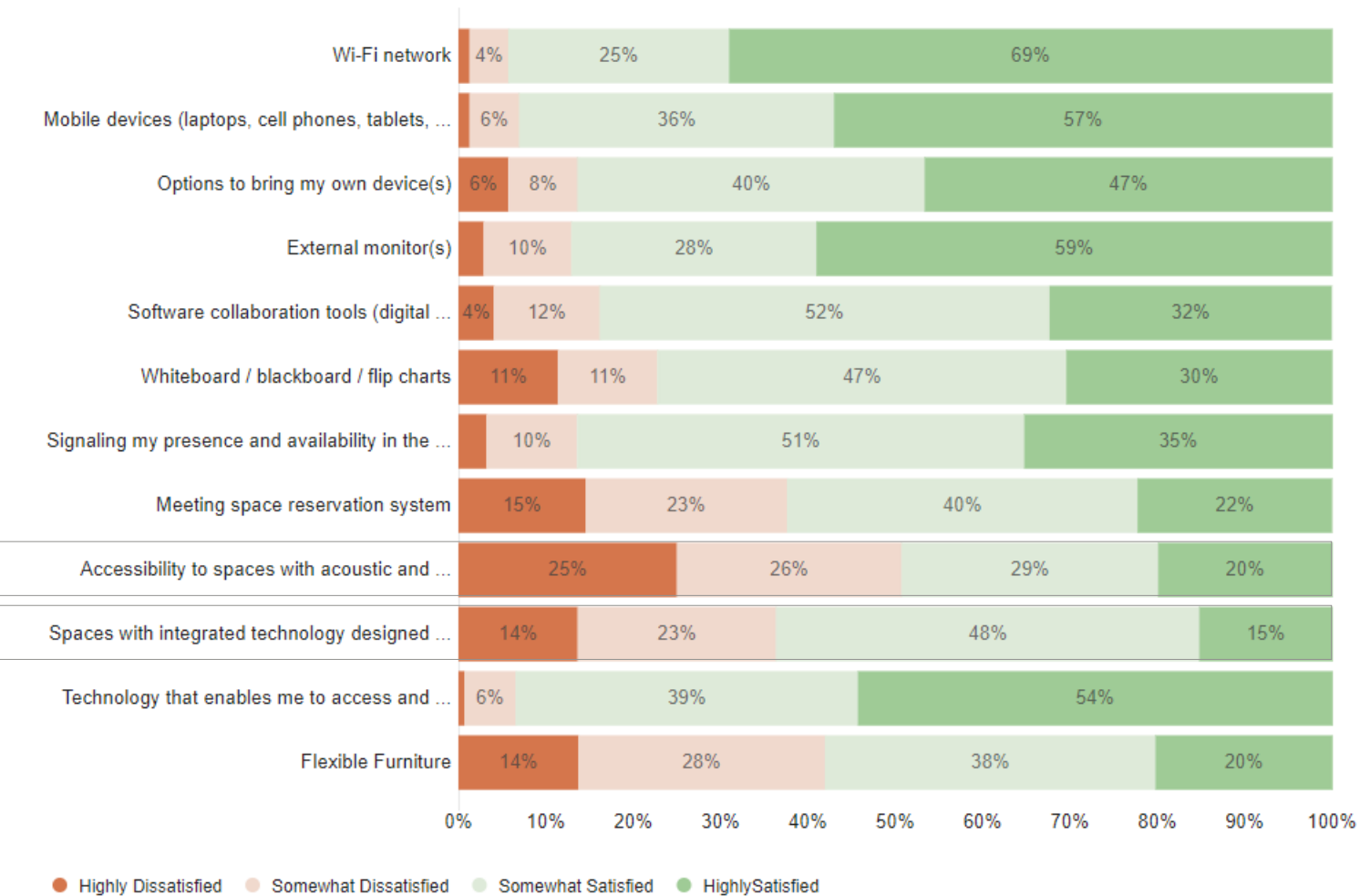
This category directly impacts the quality of **Alone: Routine Tasks**, especially **Alone: Deep Focus** work modes

39% of respondents indicate that “**spaces with integrated technology for hybrid collaboration**” are “highly important”; however, only **15%** report feeling “highly satisfied”

Q16 - Tools + Technology | What technology elements are most important?



Q17 - How satisfied are you with the following tools and technology elements?



Steelcase

Applied Research + Consulting

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