# 3x3 – A 3 Year Study of 3 Buildings

## Measuring Spaces for Student Engagement

*Facilities Officers Conference, 2018*

# The Team



**Ramesh Vakamudi**

*Vice President for Facilities Management*

Georgia State University

**Molly Schaller**

*Interim Dean, School of Education*

Saint Louis University /University of Dayton

**Doug Dahlkemper**

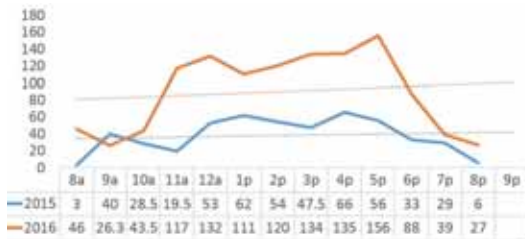*Principal Higher Education Studio*

SmithGroup

**Jamie Lee**

*Principal Higher Education Studio*

SmithGroup

# Learning Outcomes



1. Discover specific relationships between spaces, student connections, and positive learning outcomes.

**Student Engagement in Classrooms**

| | Old | New |
|---|---|---|
| Listening to the instructor | 4.90 | 4.76 |
| Discussion with instructor | 2.48 | 2.94 |
| Discussion with students | 2.76 | 3.00 |

5 = almost always   1 = almost never

3. Translate qualitative and quantitative data as indicators of behavior, engagement, learning, and institutional culture.



| | 8a | 9a | 10a | 11a | 12a | 1p | 2p | 3p | 4p | 5p | 6p | 7p | 8p | 9p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2015 | 3 | 40 | 28.5 | 19.5 | 53 | 62 | 54 | 47.5 | 66 | 56 | 33 | 29 | 6 | |
| 2016 | 46 | 26.3 | 43.5 | 117 | 132 | 111 | 120 | 134 | 135 | 156 | 88 | 39 | 27 | |

2. Implement assessment techniques to aggregate and verify outcomes.



4. Apply lessons learned about engagement and community to future decisions.

# 3 New Buildings







| Georgia State University | American University | University of Utah |
| :---: | :---: | :---: |
| College of Law | Washington College of Law | S.J. Quinney, College of Law |
| Fall 2015 | Spring 2016 | Fall 2015 |
| | | |
| *200,000 gsf* | *320,000 gsf* | *155,000 gsf* |
| *800 FTE Students* | *1,700 FTE Students* | *445 FTE Students* |
| *163 NSF/Student* | *115 NSF/FTE* | *218 NSF/FTE* |

Design for Community

Outcomes

Engagement

Space
(learning Ecosystem)

**student**
performance/ competency
jobs/career
life long learning
professional accreditation

**network**
discipline
alumni
donors
Partnerships

**faculty/staff**
recruit/retain
publishing/research
grants
evolving pedagogy

accessing resources

interaction with professionals

discussion with students

discussion with faculty or experts

simulation/experiential

self directed learning

library /research

faculty/ga/ staff offices

events space

partnership space

formal learning space

social spaces

informal learning spaces

10

# Design for Engagement–Student to Faculty

# Design for Engagement–Student to Student

# Design for Engagement– Student to Resources

# Design for Engagement– Context and Partnerships

The plural of anecdote is data.

—Douglas Hurt Yarn

# Partners: Molly Schaller and Sawyer Hunley
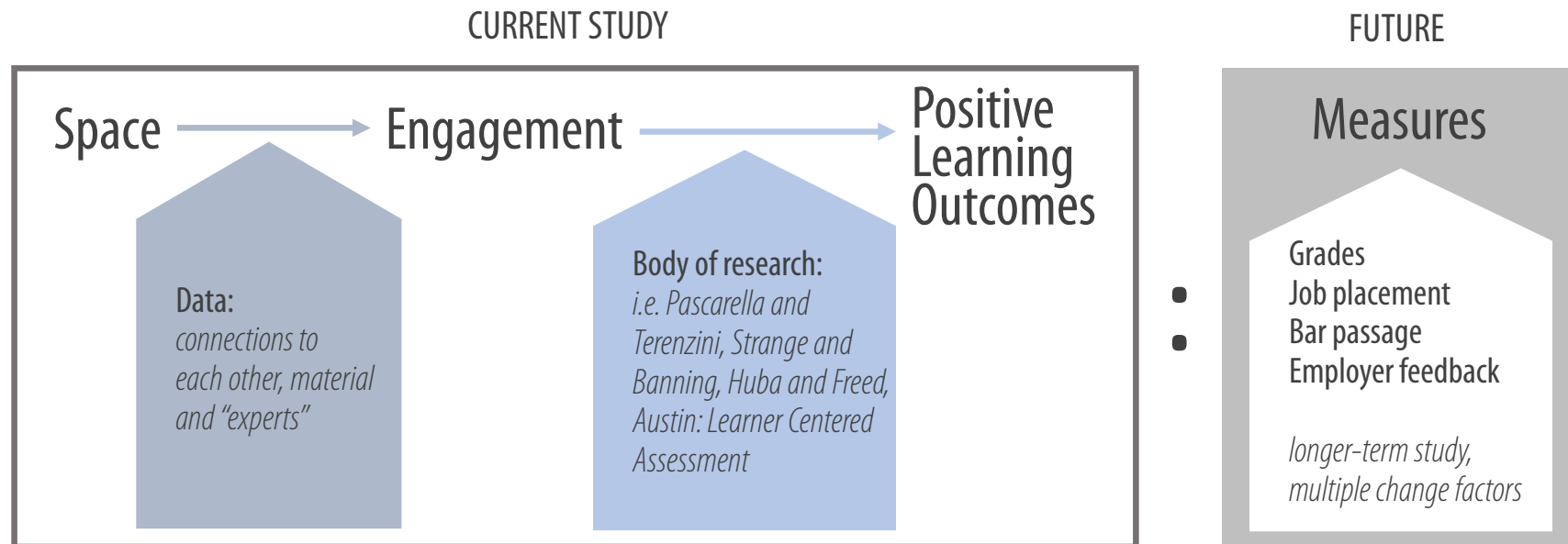
EDUCAUSE

*Learning Spaces*
Diane Oblinger, Editor, 2006

Chapter 13 **Assessing Learning Spaces**
Assessment Framework
Assessment Targets
Assessment Methods
An Example of Assessment
Practical Implications

*'A general consensus in the literature finds student engagement to be a valid indicator of educational effectiveness and a good indicator of learning'.*

*'The relationship between the learning environment and the individuals occupying that environment can be determined.*

*Engagement can be measured through direct (observation) and indirect (survey, focus group) methods.'*

# Assessing Learning Spaces

Space → Engagement → Positive Learning Outcomes

**Data:**
*connections to each other, material and "experts"*

**Body of research:**
*i.e. Pascarella and Terenzini, Strange and Banning, Huba and Freed, Austin: Learner Centered Assessment*

Measures

Grades
Job placement
Bar passage
Employer feedback

*longer-term study, multiple change factors*

## Revised ABA Standards 2014

Standard 315. Evaluation of Program of Legal Education, Learning Outcomes and Assessment Methods

# Process and Techniques

| Engagement | observation | seat counts | surveys | focus groups | Classroom observation | events data | existing data |
|---|---|---|---|---|---|---|---|
| with material | ● | ● | ● | ● | | | ● |
| with each other | ● | ● | ● | ● | ● | | ● |
| with experts | | | ● | ● | ● | ● | ● |

*Method*

*Variety, access to technology, natural light increases student engagement*



11

# Process

2014    Project conceived
        Drafted plan with researchers and client
        Detailed proposal, protocols

2015    Data collection (existing buildings)
        Data entry, analysis

**Fall 2015, Spring 2016**    New buildings open

2016    Data collection (new buildings)

2017    Data collection (new buildings)

2018    Data collection (new buildings)

**2017, 2018**  Interim and final reports, graphics

GSU   Utah   AU



14
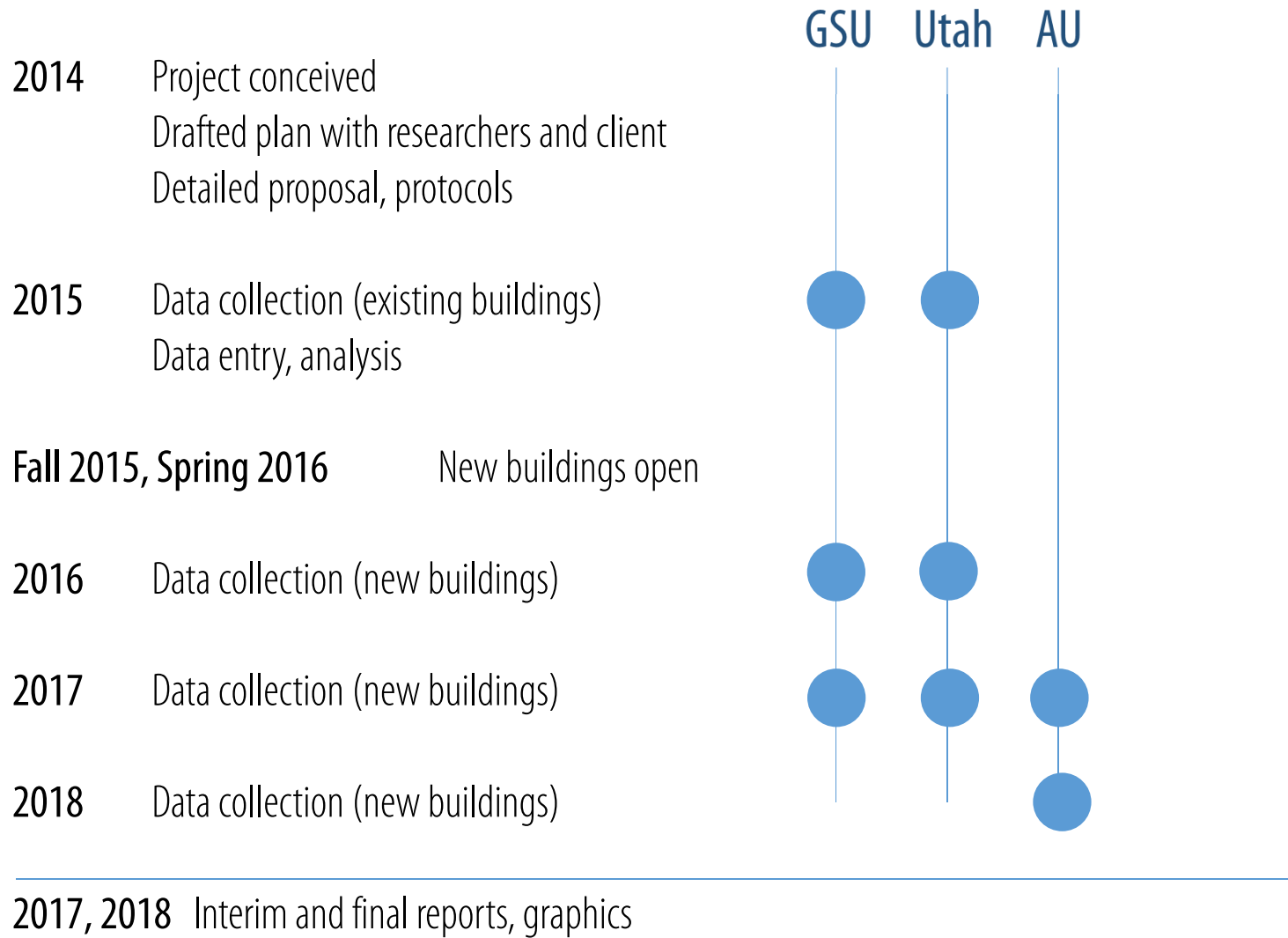
# Multi-Method Approach

Focus Groups

Seat Counts

Library Observations

Classroom Observations

Student Surveys

Visitor Surveys

Faculty Surveys

IRB

LSSSE Data
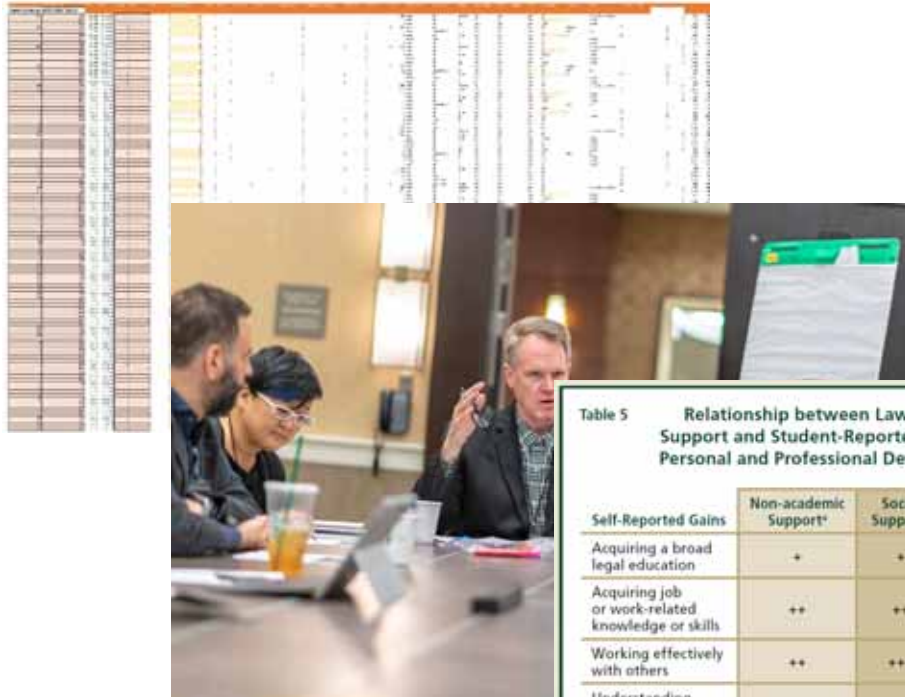


Data Validation

Confidence in Findings

Improved Significance

Multi Year- Multi Campus

# GSU College of Law-Location
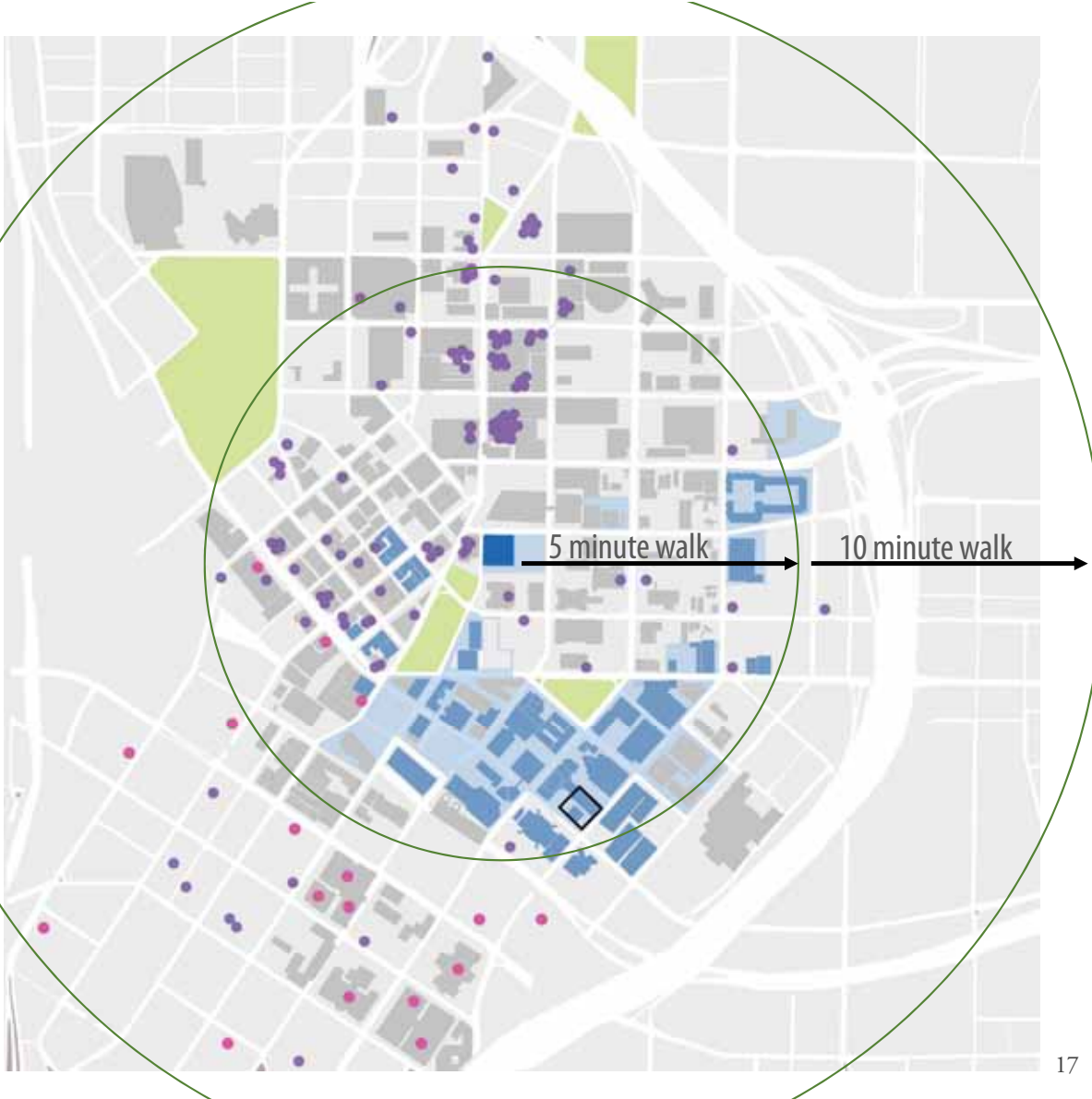


Downtown Atlanta

■ Law firms

■ Government agencies



5 minute walk

10 minute walk

# GSU College of Law–Culture of Engagement

*Engagement with the Community*

*Consistent with our mission, we strive to enhance public awareness of and access to information about the law and legal services through a variety of means.*

*The **new building provides a unique opportunity to become an intellectual and professional hub that encourages interaction and synergy.** Through the new conference center, our clinical center and the 230-seat ceremonial courtroom, we will open channels among students, alumni, the university community, members of the bench and bar, legislators and policymakers, and nonprofit organizations dedicated to service and advocacy. The college also will devote part of the fourth floor to an international dispute resolution center in support of Atlanta's goal of being a venue of choice for legal community and international business.*

*~ Steven Kaminshine, Dean, Georgia State University College of Law*

# Georgia State University

- Founded in 1913

- Public urban research university in Atlanta

- 35,000 students at downtown campus

- 18,000 students at 5 suburban campuses

- Typical student profile:
  first generation,
  Pell grant recipient

# Georgia State University Strategic Plan 2011–2021
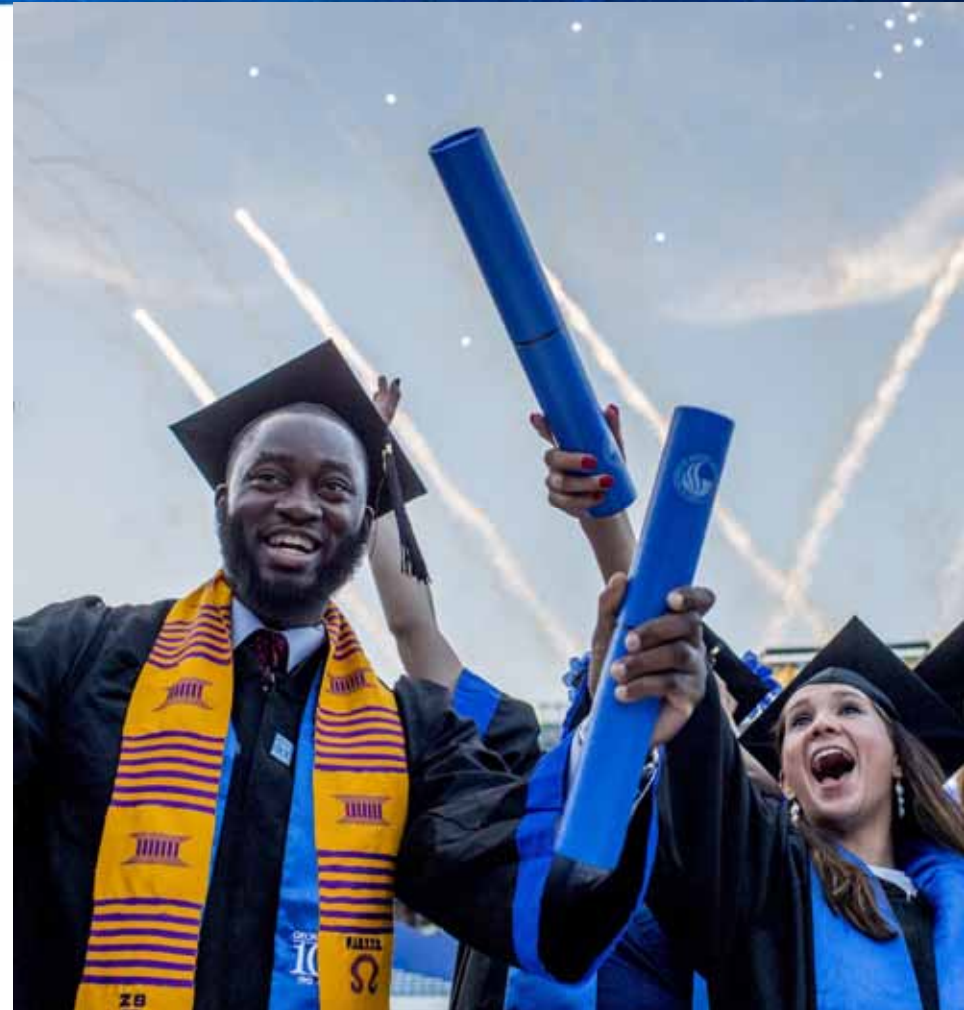
1. Become a national model for undergraduate education

2. Strengthen graduate programs to develop leaders

3. Become a leading public research university addressing 21st century challenges

4. Lead in understanding and solving complex challenges facing cities

5. Achieve distinction in globalizing the university

# Georgia State University College of Law

- Founded in 1982

- 625 J.D. and 25 LL.M. students

- 2018-2019 Full-time student in-state tuition: $7,404 per semester

- Consistently high Bar passage rates and employment placements

- Recent rankings by *National Jurist:*

  - 2017 #1 Best Value Law School in the nation

  - 2018 #15 Best Law School Facility in the nation

# College of Law Strategic Plan 2014-2020

## Goals

## Metrics

1. Prepare students for success- innovative pedagogy, experiential learning, professional development

   Acquire a broad legal education and job or work-related knowledge and skills.

2. Enhance scholarly contributions to legal education

   The quality of scholarship produced by a school's faculty is recognized

3. Serve as a hub for interaction

   Attendance at extracurricular programs and events will increase by 10 percent each year

4. Increase global awareness for students

   students will complete at least one course with a substantive international or comparative law component

5. Adapt and lead in a changing environment

   Increase scholarship funds for high achieving and diverse students

# GSU College of Law– Then and Now

# GSU College of Law Design Objectives

**Community** • Atrium- A vertical public core-encourage collaboration/visibility- a variety of collaboration space types and resources capped by the library



**Connections**

- Leverage urban Atlanta location
- Recognize global influence
- Outreach and partnership spaces including events, clinics, International Arbitration Center
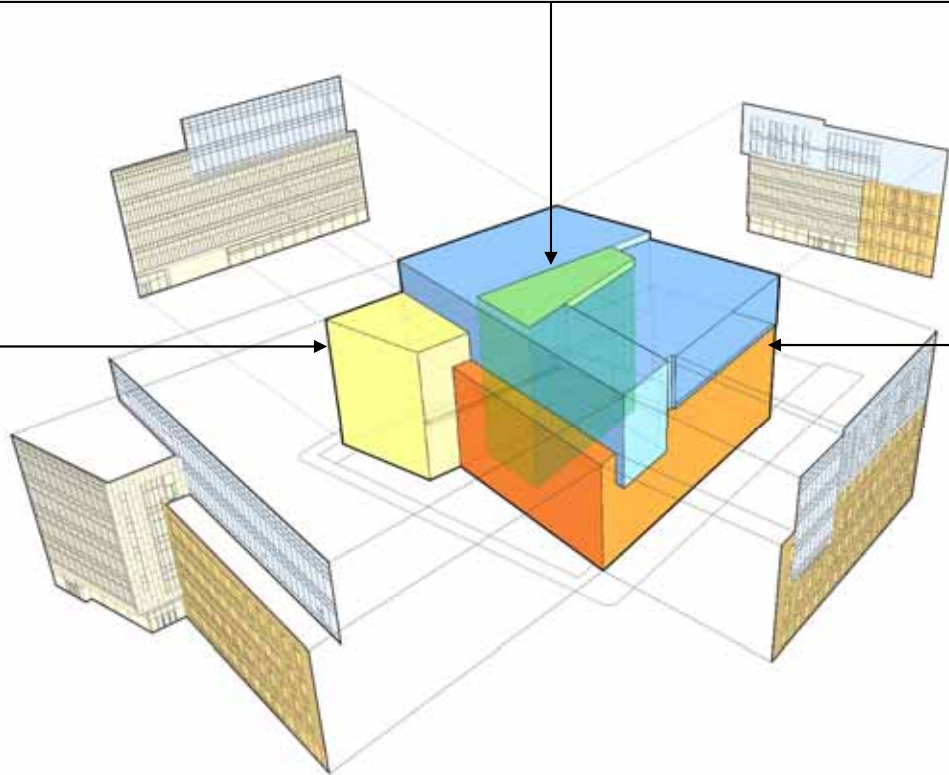
**Learning**

- Foster a learning ecosystem
- Adapt to emerging pedagogies
- Faculty to student interaction
- Technology rich, active learning, flexible skills space

# Building Organization Reinforcing Community

**Floor 5-6**   Law library: Multi-media Resource and Research

**Floor 4**   Atlanta Center for International Arbitration and Mediation,
Curricular: centers/programs, Administration

**Floor 2-3**   Formal and informal learning+ Faculty + Leadership+
Open flexible study and collaboration space

**Ground Floor and Lower Level**   Auditorium/ Courtroom –
formal, Clinics- Community Service
Multipurpose/events - flexible
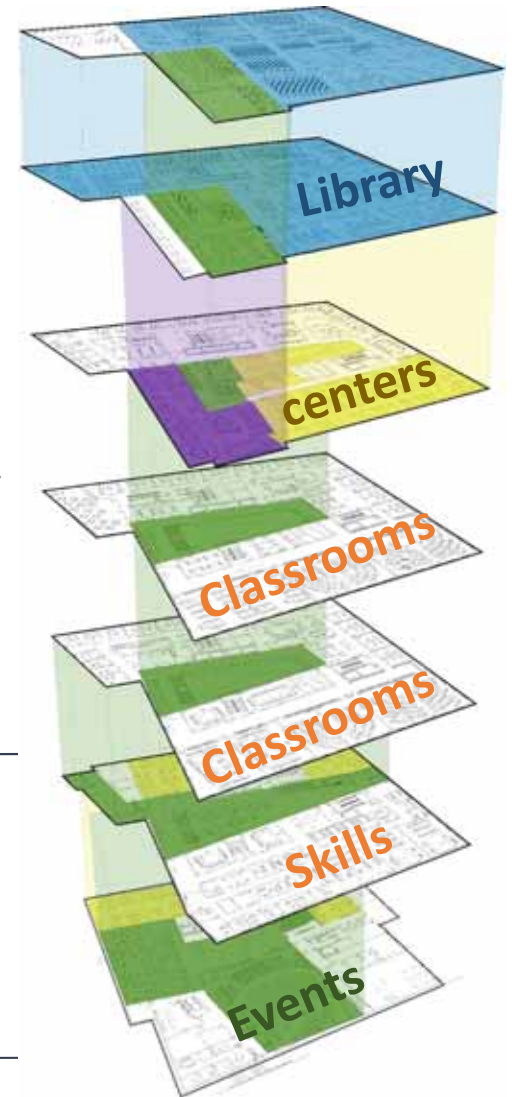
# Teaching and Learning–Strategic Plan 2014-2020



**GOAL 1**

Be a national leader in preparing students for success in rapidly changing professional environments by **infusing our law program with innovative pedagogy, experiential learning and professional development**.

**Metric**

By 2020, **at least 95 percent of third-year students** responding to the Law School Survey of Student Engagement will give the answer "very much" or "quite a bit" when asked whether they acquired (a) a broad legal education and (b)job or work-related knowledge and skills.

# Teaching and Learning



*Size and shape*



*Relationships*



*Energy*



*Flexibility*

"meeting people in your classes…that semicircle classroom shape is really conducive to that."

"I think inside the classroom, developing relationships and being more comfortable with classmates has improved…"

"I am more willing to speak up and listen actively to my other classmates."

"The new classrooms are amazing. This class is much more energized…They seem a lot more awake…"

"It's really quite wonderful to be able to have that flexibility."
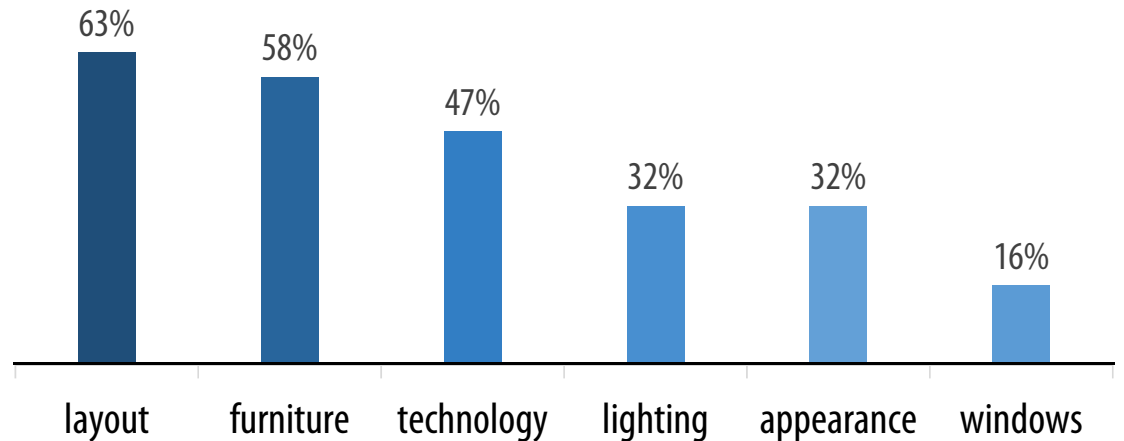
# Teaching and Learning



*old*



*new*

## Student Engagement in Classrooms

| | Old | New 2016 | New 2017 |
|---|---|---|---|
| Listening to the instructor | 4.90 | 4.76 | 4.82 |
| Discussion with instructor | 2.48 | 2.94 | 3.29 |
| Discussion with students | 2.76 | 3.00 | 3.53 |

5 = almost always    1 = almost never

## Desired Classroom Features from Student Survey

| layout | furniture | technology | lighting | appearance | windows |
|---|---|---|---|---|---|
| 63% | 58% | 47% | 32% | 32% | 16% |

# Teaching and Learning





## Interaction

One student reported having a professor who used the screens in the back of the room as an "audience response" system... **"if you don't want to raise your hand, or if you thought your question was stupid**...it pops up at the back of the board…that was awesome."

## Group Work

"We have a number of professors who are using the collaborative space, who are incorporating that into their teaching, because…they were doing a lot of group work."

**"I thought about how can I do what I've been doing in a better way? What makes sense in the use of the space?"**

# Experiential Learning Community



Faculty observed that students were more likely to work in groups in support of one another in the clinic, "**The group work has improved tremendously**."

"if someone is not there doing clinic work, they are still available to help the level one students, which is really critical at the beginning of the semester because we kind of throw them in the middle of the deep end and tell them to swim."
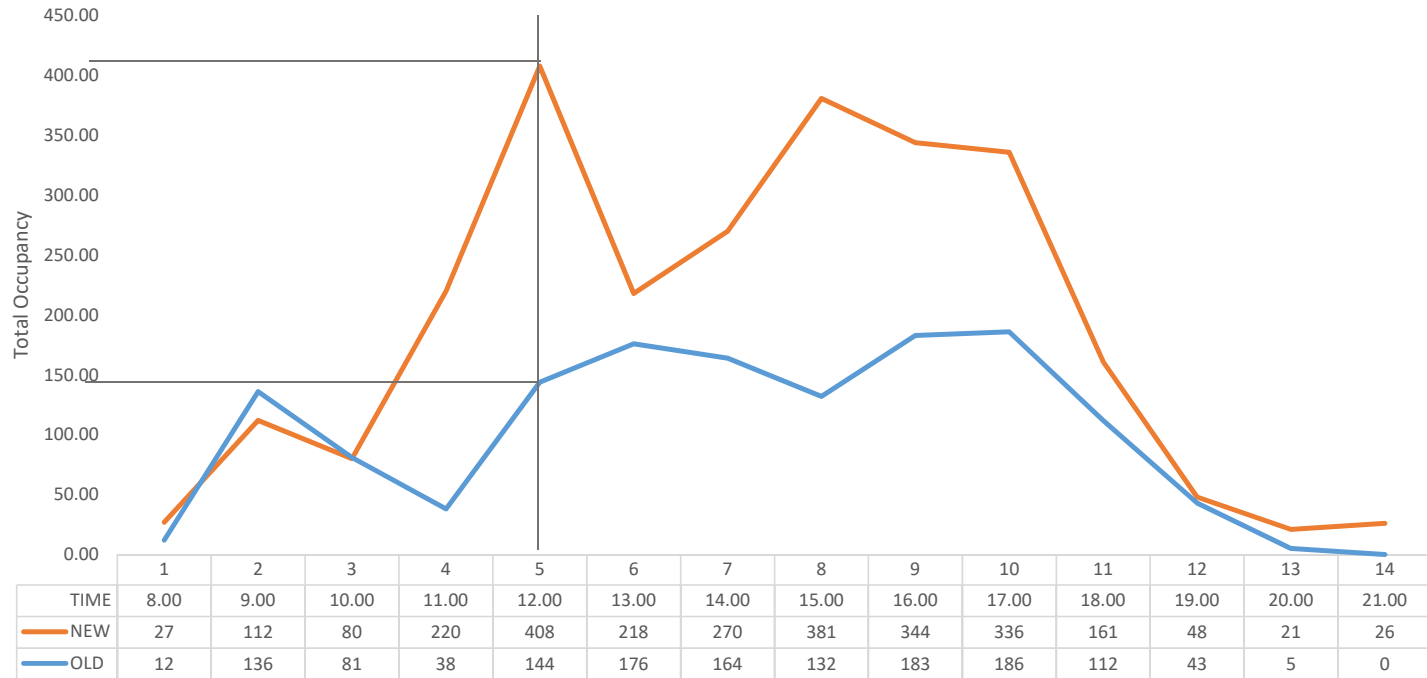
# Informal Learning Spaces

**all non-classroom spaces**



*new* ————



*old* ————

*2.8 X more people using informal learning spaces*



Total Occupancy

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 |
| —NEW | 27 | 112 | 80 | 220 | 408 | 218 | 270 | 381 | 344 | 336 | 161 | 48 | 21 | 26 |
| —OLD | 12 | 136 | 81 | 38 | 144 | 176 | 164 | 132 | 183 | 186 | 112 | 43 | 5 | 0 |

32

# Informal Learning Environments



### Learning continuum
"I have seen several of my students for my classes sitting around some of the tables downstairs and talking…I don't recall seeing that in the old building."

### Faculty-student interaction
"Faculty members get to observe students and see them in those informal setting, where they can say hello and talk. In the old building, I would walk in and never see a student. I don't have to make a special effort…to see students."

## Student Engagement in Non-classroom Spaces

| | Old | New 2016 | New 2017 |
|---|---|---|---|
| Working alone | 3.56 | 3.89 | 4.12 |
| Working with tech | 2.56 | 3.97 | 3.88 |
| Discussion with students | 2.67 | 4.10 | 3.94 |
| Collaborate with students | 2.78 | 4.00 | 3.81 |
| Discussion  with faculty | 2.56 | 3.79 | 3.75 |
| Collaborate with faculty | 2.61 | 3.38 | 3.18 |

5 = extremely well 1 = not at all

# Informal Leaning Spaces- Change

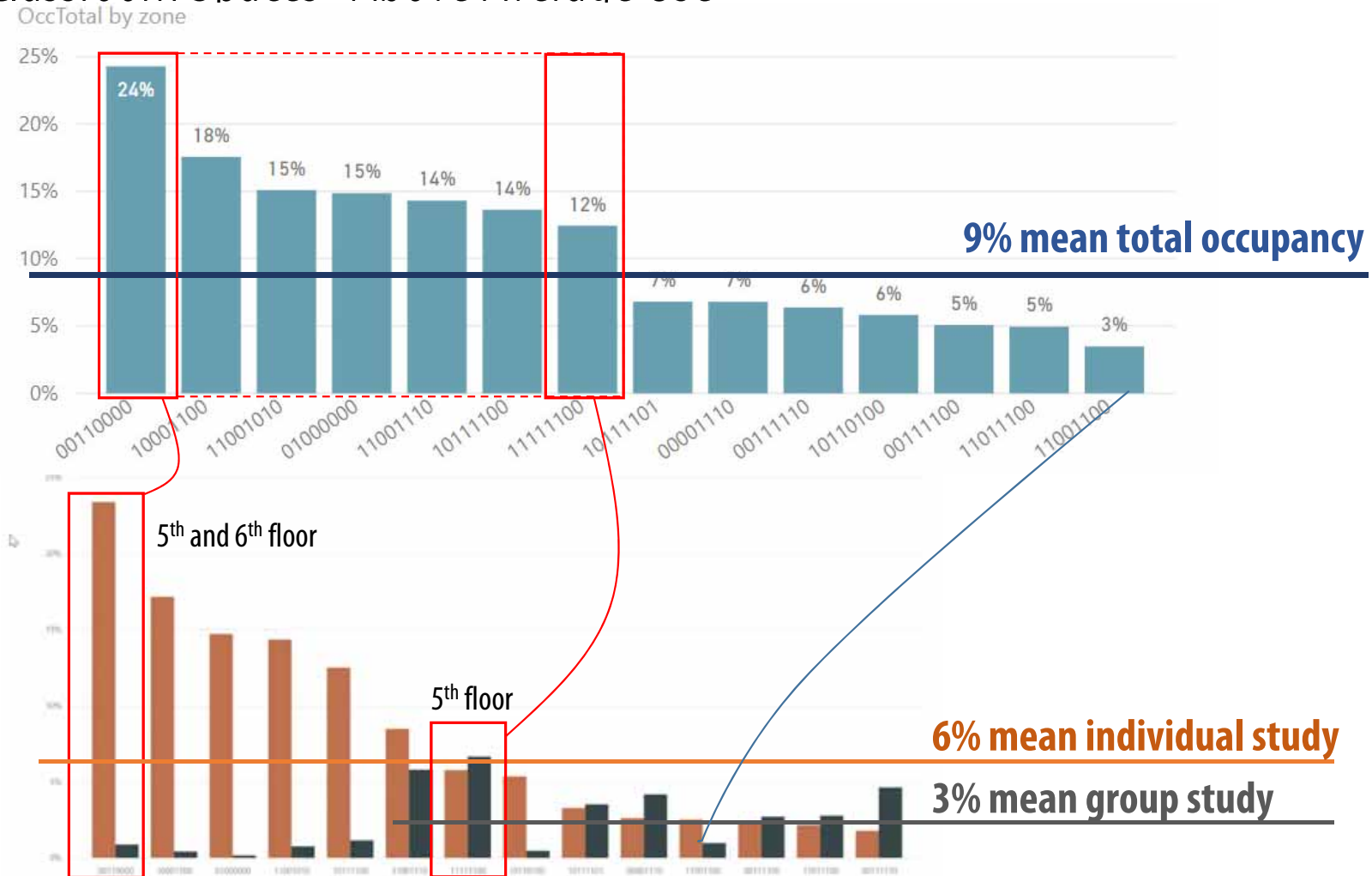**+157 %**



Individual
Engagement
(resources or expertise)

Old   New

**+370%**



Group
engagement

Old   New

*Takeaways:*
*variety increases engagement*
*Increased need for group work space*

# Non Classroom Spaces– Above Average Use



OccTotal by zone

24%

18%

15%   15%   14%   14%   12%

7%   7%   6%   6%   5%   5%

3%

**9% mean total occupancy**

5th and 6th floor

5th floor

**6% mean individual study**

**3% mean group study**

# Informal Leaning Spaces- Library Design

formal reading room

**6th floor quiet study**

**5th floor active**

group
collaboration

open study
and carrels

cafe

active learning hub

# Library Spaces– Individual Study High Use

# Library Spaces– Group Study High Use

**Takeaways:**

- A primary objective is to increase collaboration; active learning hub promotes engagement

- Variety increases both individual and group work

- Formal reading room and carrels increase focused individual study

- Groups prefer enclosed areas without distraction

- Furniture type is a key component

# Building Community – Intangibles

**Inspired**

"People are more excited to stay" and "the building's amendable to just kind of coming here and staying all day."

**Staying**

"I've certainly spent much more time in the law school now versus in the past."

**Variety**

"As far as day to day life as a student, it definitely meets every need."

# Events – College of Law Strategic Plan 2014–2020

**GOAL 3**

Serve as a dynamic hub that engages diverse communities for the advancement of law and public policy.
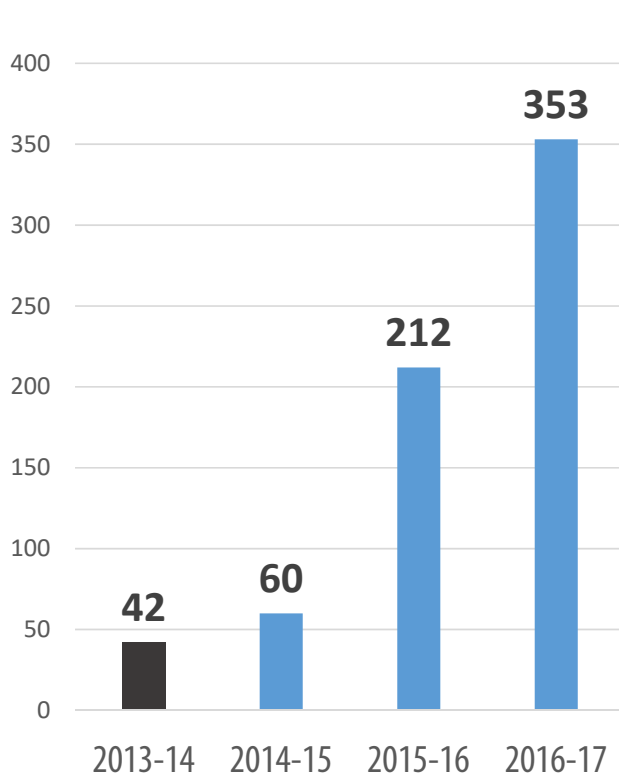
**Metric**
Attendance at extracurricular programs and community events at the College of Law will increase by **10 percent each year** beginning one year after initial occupancy of the new building.
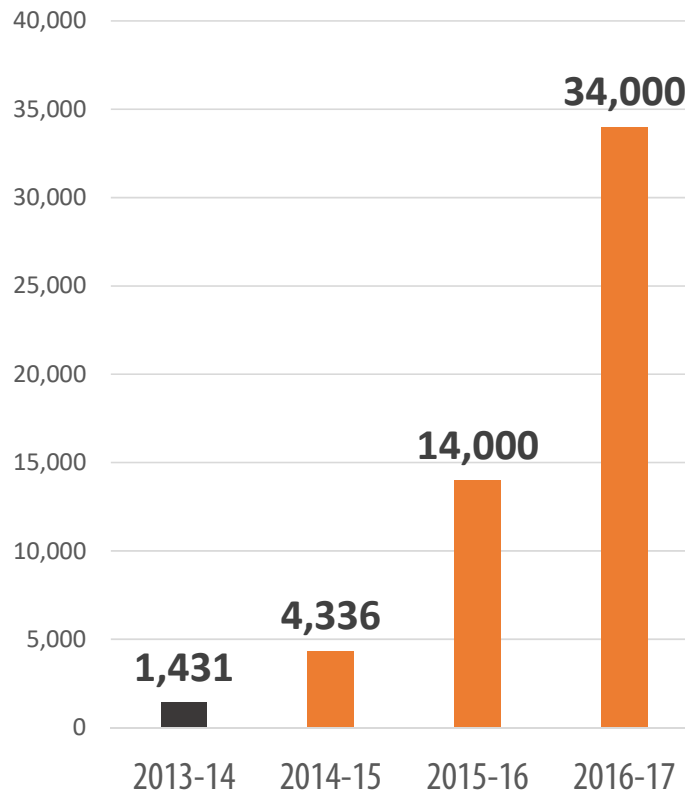


*Legal 'public square,' venue for international dispute resolution, formation of alumni identity,*

# Events Space-Engagement with Professionals and Public

**Events -External to University**

- 2013-14: 42
- 2014-15: 60
- 2015-16: 212
- 2016-17: 353

**Attendance -People External**

- 2013-14: 1,431
- 2014-15: 4,336
- 2015-16: 14,000
- 2016-17: 34,000

Faculty felt a sense of pride in hosting the event, "I ran into some judges who had recently held court in the law school…they commented on how wonderful it was…"

Students feel proud to invite alumni and visitors to the building. They thought the facility helped the entire school recruit. They also report seeing alumni more in the building.

# Bringing the Community in





"I love the advanced technology . . ."

"The interior has a lot of light, which I find attractive."

"Beautiful functional space!"
"It's absolutely fantastic!…compared to having to endure law school at the urban life building."

"We will host more events there."

"Would love to hold a Summer and Winter bar course at the law school. "

"Should I need space for our executive programming, it will be at the top of my list."

New Building Experience

|  | + | 0 | — |
|---|---|---|---|
| Comfort | 92% | 8% | 0% |
| Accessibility | 88% | 4% | 8% |
| Air Quality | 96% | 4% | 0% |
| Temperature | 96% | 4% | 0% |
| Light | 96% | 4% | 0% |
| Acoustics | 79% | 21% | 0% |

American University

# American University– A Balancing Act

# American University– Goals for the Project

## Washington College of Law



Express fundamental purpose of: breaking down barriers, **creating connections**, and reinforcing a strong sense of community

Create highly effective teaching spaces and a **student-centric facility**

Maximize the **advantages of the Tenley Campus site** and its location in **Washington, DC**
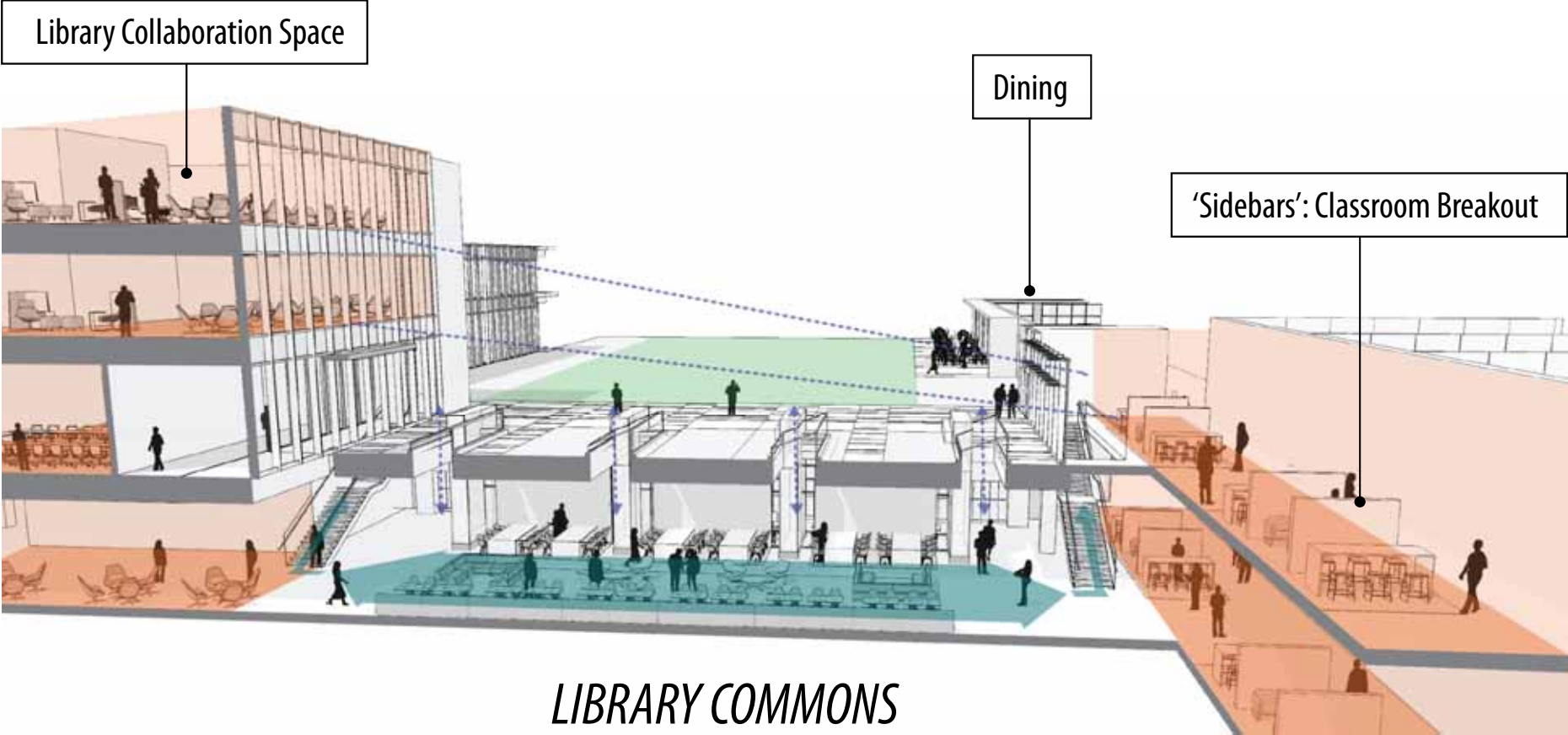
## Neighborhood and Historic Context



Ensure that the new facility will **respect historic nature of site**

**Maintain the central green space** and historic allee

Break down the scale of the overall building footprint = **3 discrete buildings**

44

# Library Commons as Connection



Library Collaboration Space

Dining

'Sidebars': Classroom Breakout

*LIBRARY COMMONS*

# American University Informal Learning Environments



## The student experience
"It really is a night and day difference. ...library and common spaces throughout campus have made it much easier to study on campus, work in small groups, and find quiet space...I do find myself on campus more often now."

## Faculty-student interaction
"The main way my work life has changed is actually about students...they stay in the building longer, seem to do more studying in the building, and have more of their social life in the building, all of which makes it a more welcoming school."

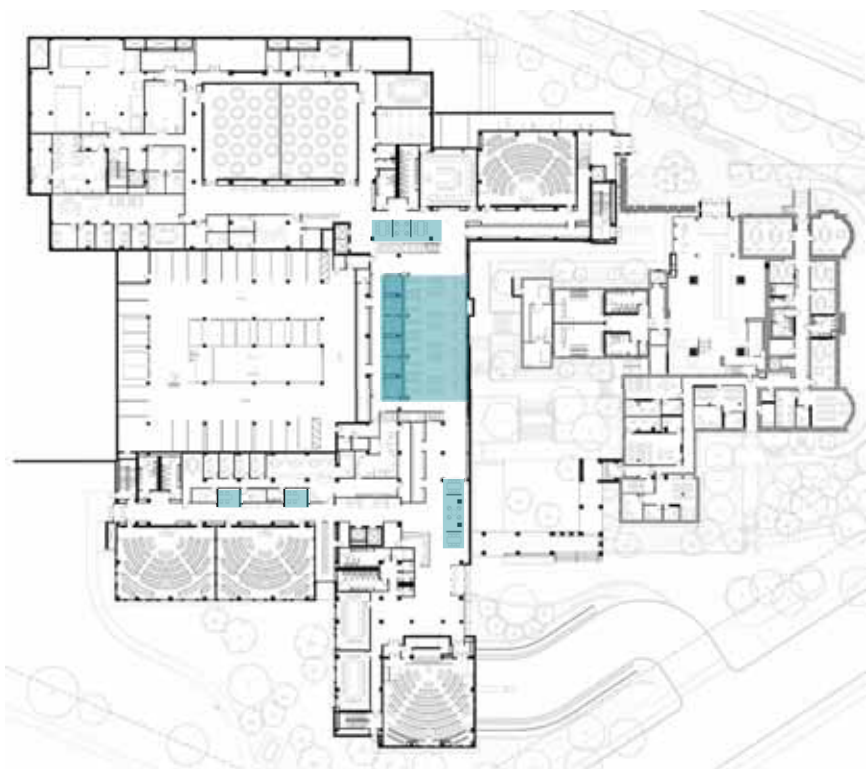### Student Engagement in Non-classroom Spaces

| | Old | New 2017 |
|---|---|---|
| Working alone | 3.20 | 3.91 |
| Working with tech | 3.00 | 4.06 |
| Discussion/Collaboration with students | 2.73 | 3.96 |
| Discussion/Collaboration with faculty | 2.87 | 4.01 |

5 = extremely well  1 = not at all

# The Right Mix



9% mean total occupancy

5% mean individual study

4% mean group study

48
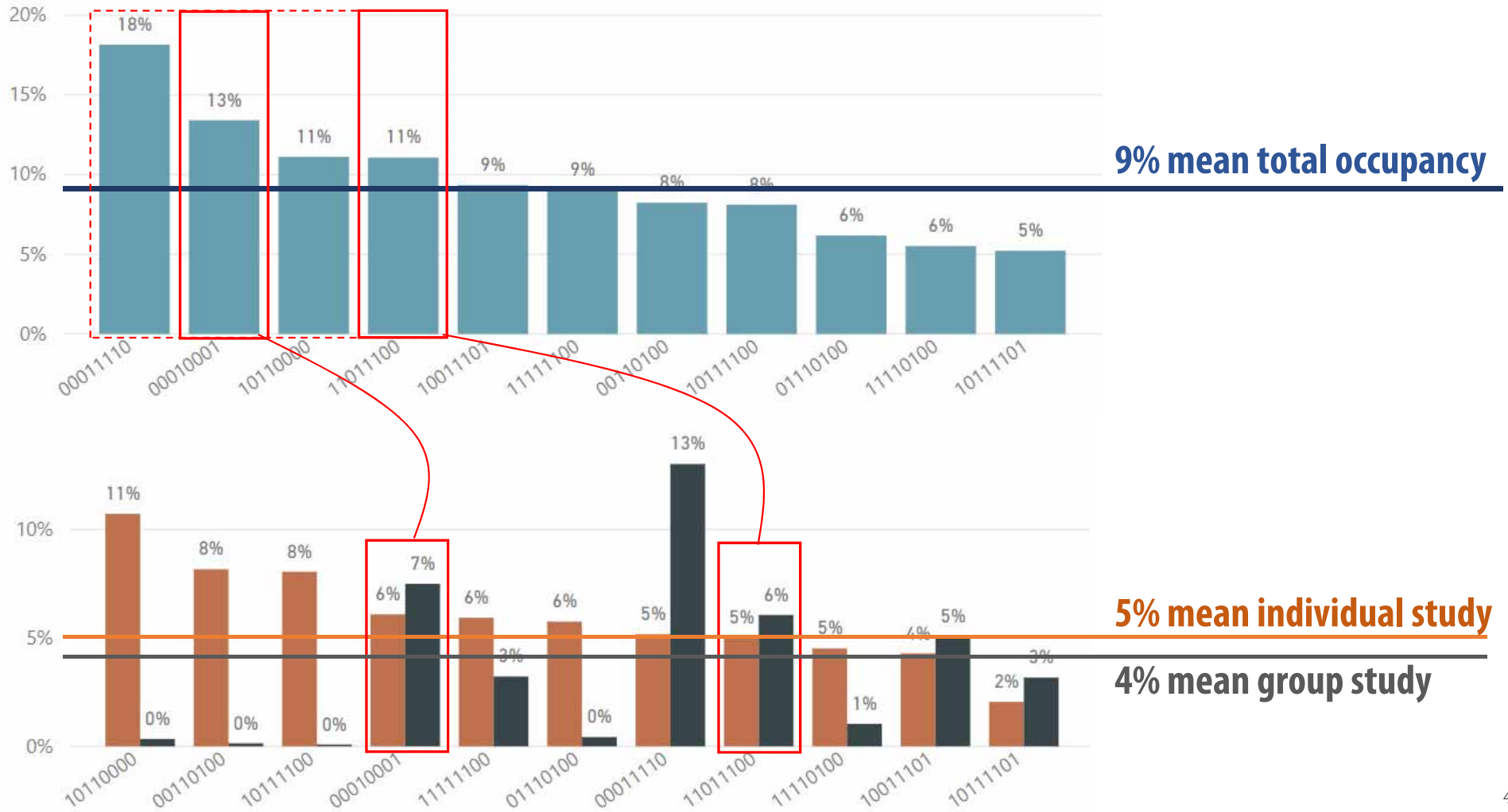
# Variety of Spaces



Learning Commons



'Sidebars'

# American University- Intangibles

"The old law school's classrooms were terrible, and they made me depressed. I didn't know it back then until I entered the new law school and my attitude changed because of eco-friendly design of the classrooms and law school. I think it was all the brightness and glass that made me feel energetic, and **there was plenty of natural sunlight beaming from every direction, which simply made me a happier person**."

"If you're going to a professional school and you want to be in this career, it's nice to come and feel **like the space that you're learning is as respectable as the subject that you're learning** and the career you want to go into."

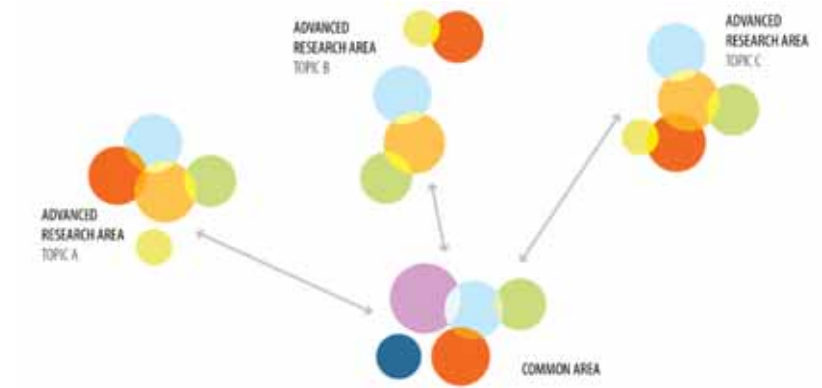**When people come to visit, "they are in awe."**

University of Utah
SJ Quinney College of Law

# University of Utah – Goals for the project



Traditional Law School Program

Redistributed Program

Support the College's innovative pedagogical objectives by providing the **ultimate collaborative environment**

**Break down conventional programmatic silos**, resulting in research, instructional, experiential learning, with clinical spaces being distributed throughout the building.

Reinforce the College's core values, the commitment to high-quality legal scholarship and **community-engaged learning and public service**

PROGRAM COMPONENTS
- INSTRUCTIONAL
- ADMINISTRATION
- FACULTY/CENTERS
- LIBRARY
- STUDENTS
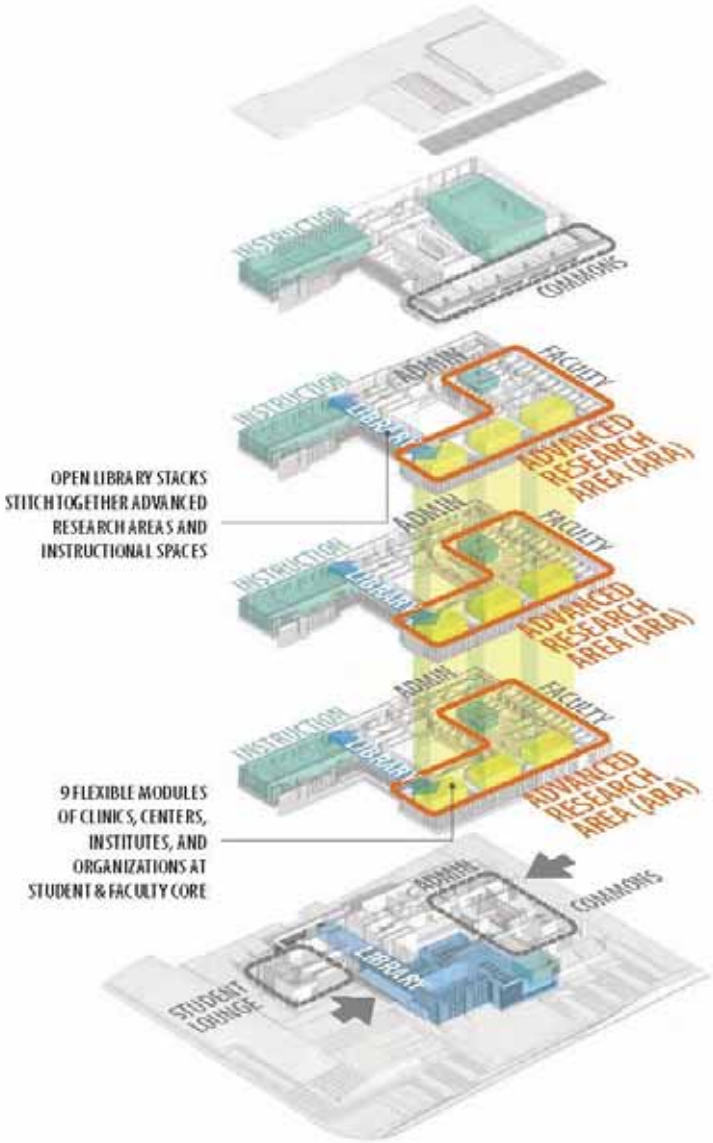- CLINIC
- RECEPTION/EXHIBITION

51

# University of Utah – Advanced Research Areas



Innovate　　　　　　Collaborate　　　　Access to resources



OPEN LIBRARY STACKS
STITCH TOGETHER ADVANCED
RESEARCH AREAS AND
INSTRUCTIONAL SPACES

ADVANCED
RESEARCH
AREA (ARA)

ADVANCED
RESEARCH
AREA (ARA)

ADVANCED
RESEARCH
AREA (ARA)

9 FLEXIBLE MODULES
OF CLINICS, CENTERS,
INSTITUTES, AND
ORGANIZATIONS AT
STUDENT & FACULTY CORE

# University of Utah Informal Learning Environments



## The student experience
"The vast open space in the center of the building is without a doubt one of the best features of the building, but the library reading room and study rooms are the best places to study."

## Faculty-student interaction
"Much easier to bump into students now that they're not all cloistered in the Gibby all the time. I also have far more random interactions with my colleagues as well."

### Student Engagement in Non-classroom Spaces

|  | Old 2015 | New 2016 | New 2017 |
|---|---|---|---|
| Working alone | 3.79 | 3.71 | 3.73 |
| Working with tech | 3.00 | 4.16 | 3.95 |
| Discussion/Collaboration with students | 3.94 | 3.49 | 3.58 |
| Discussion/collaboration with faculty | 3.16 | 3.34 | 3.58 |

5 = extremely well   1 = not at all

# Utilization by Floor



**5% mean total occupancy**

**3% mean individual study**

**2% mean group study**

48
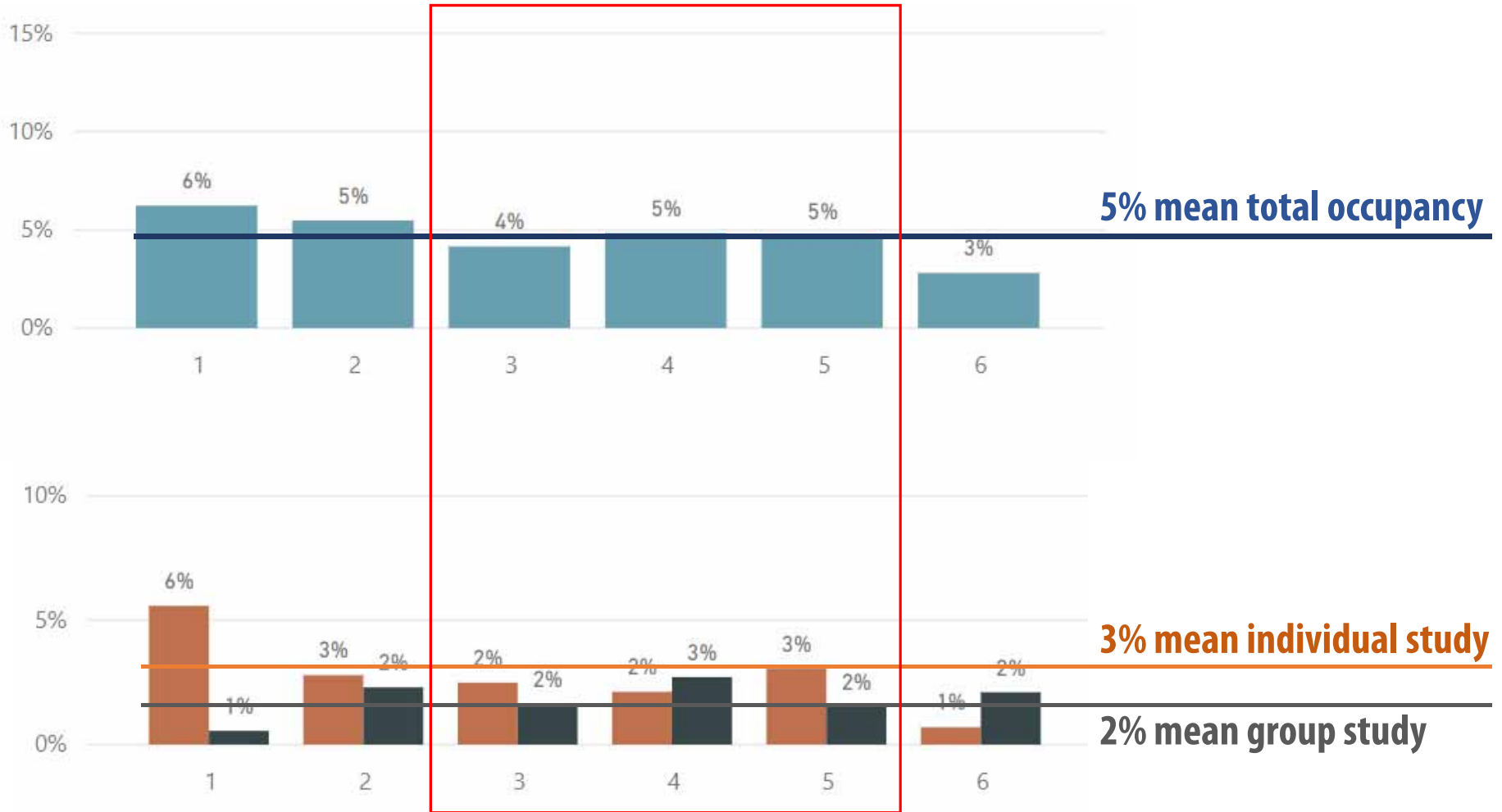
# Informal Learning- Beyond the ARAs

# Positive Attributes Across Institutions

- Discussion/Access to faculty
- Discussion/Access to other students
- Supports independent and group study
- Inspired-Spending more time in the law school
- Improved communication between students in classrooms
- Pride in environment
- More outreach/event activity access to professional community
- Impact of design mental alertness, attitude and pride in the environment

# Challenges Across Institutions

1. Difficulty with transition -Change management
   a. Missing culture from previous building
   b. Unfamiliarity/difference/perceived loss of identity
   c. Larger more complex building and systems
   d. Disconnect between intended and actual use
2. Connection between users and community is highly impacted by space
   a. Some found it improved others expressed frustration
3. Impact of using new technology
   a. Tethered technology
   b. Newness and complexity

# Activity

**Anonymous Live Poll**
2 ways to participate

**Smartphone Text**
TEXT   22333 once to join
ENTER  sghighed

**Website**
Pollev.com/ sghighed