3x3 - A 3 Year Study of 3 Buildings
Measuring Spaces for Student Engagement

Facilities Officers Conference, 2018
The Team

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Learning Outcomes

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

2. Implement assessment techniques to aggregate and verify outcomes.

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

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

<table>
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<tr>
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$S = \text{almost always} \quad 1 = \text{almost never}$
3 New Buildings

Georgia State University
College of Law
Fall 2015
200,000 gsf
800 FTE Students
163 NSF/Student

American University
Washington College of Law
Spring 2016
320,000 gsf
1,700 FTE Students
115 NSF/FTE

University of Utah
S.J. Quinney, College of Law
Fall 2015
155,000 gsf
445 FTE Students
218 NSF/FTE
Design for Community

Outcomes

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

**network**
- discipline
- alumni
- donors
- Partnerships

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

Engagement

**accessing resources**

**interaction with professionals**

**discussion with students**

**discussion with faculty or experts**

**simulation/experiential**

**self directed learning**

Space

(learning Ecosystem)

**library/research**

**faculty/ga/staff offices**

**events space**

**partnership space**

**formal learning space**

**social spaces**

**informal learning spaces**
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
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

CURRENT STUDY

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

FUTURE

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

<table>
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<tr>
<th>Engagement</th>
<th>Method</th>
</tr>
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<tbody>
<tr>
<td>with material</td>
<td>observation</td>
</tr>
<tr>
<td></td>
<td>seat counts</td>
</tr>
<tr>
<td></td>
<td>focus groups</td>
</tr>
<tr>
<td></td>
<td>Classroom</td>
</tr>
<tr>
<td></td>
<td>observation</td>
</tr>
<tr>
<td>with each other</td>
<td>events data</td>
</tr>
<tr>
<td></td>
<td>existing data</td>
</tr>
<tr>
<td>with experts</td>
<td></td>
</tr>
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**Variety, access to technology, natural light increases student engagement**
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
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

Table 5: Relationship between Law School Support and Student-Reported Gains in Personal and Professional Development

<table>
<thead>
<tr>
<th>Self-Reported Gains</th>
<th>Non-academic Support</th>
<th>Social Support</th>
<th>Extra-curricular Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring a broad legal education</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Acquiring job or work-related knowledge or skills</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Working effectively with others</td>
<td>++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Understanding yourself</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Developing a personal code of values and ethics</td>
<td>+++</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

Correlation coefficients are reported at the following levels: + indicates r>.2, ++ indicates r>.5, and +++ indicates r>.8.

*To what extent does your law school emphasis help you cope with your non-academic responsibilities (work, family, etc.)?
*To what extent does your law school emphasize providing the support you need to thrive socially?
*To what extent does your law school emphasize attending campus events and activities (special speakers, cultural events, symposia, etc.)?
GSU College of Law – Location

Downtown Atlanta
- Law firms
- Government agencies
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
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
• 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

<table>
<thead>
<tr>
<th><strong>Goals</strong></th>
<th><strong>Metrics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare students for success - innovative pedagogy,</td>
<td>Acquire a broad legal education and job or work-related knowledge and skills.</td>
</tr>
<tr>
<td>experiential learning, professional development</td>
<td></td>
</tr>
<tr>
<td>2. Enhance scholarly contributions to legal education</td>
<td>The quality of scholarship produced by a school’s faculty is recognized</td>
</tr>
<tr>
<td>3. Serve as a hub for interaction</td>
<td>Attendance at extracurricular programs and events will increase by 10 percent each year</td>
</tr>
<tr>
<td>4. Increase global awareness for students</td>
<td>students will complete at least one course with a substantive international or comparative law component</td>
</tr>
<tr>
<td>5. Adapt and lead in a changing environment</td>
<td>Increase scholarship funds for high achieving and diverse students</td>
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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**

“meeting people in your classes... that semicircle classroom shape is really conducive to that.”

**Relationships**

“I think inside the classroom, developing relationships and being more comfortable with classmates has improved...”

**Energy**

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

**Flexibility**

“It’s really quite wonderful to be able to have that flexibility.”
Teaching and Learning

Student Engagement in Classrooms

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<td>4.82</td>
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<td>2.48</td>
<td>2.94</td>
<td>3.29</td>
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<tr>
<td>Discussion with students</td>
<td>2.76</td>
<td>3.00</td>
<td>3.53</td>
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5 = almost always 1 = almost never

Desired Classroom Features from Student Survey

- Layout: 63%
- Furniture: 58%
- Technology: 47%
- Lighting: 32%
- Appearance: 32%
- Windows: 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?”
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

2.8 X more people using informal learning spaces

<table>
<thead>
<tr>
<th>TIME</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
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<tbody>
<tr>
<td>NEW</td>
<td>27</td>
<td>112</td>
<td>80</td>
<td>220</td>
<td>408</td>
<td>218</td>
<td>270</td>
<td>381</td>
<td>344</td>
<td>336</td>
<td>161</td>
<td>48</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>OLD</td>
<td>12</td>
<td>136</td>
<td>81</td>
<td>38</td>
<td>144</td>
<td>176</td>
<td>164</td>
<td>132</td>
<td>183</td>
<td>186</td>
<td>112</td>
<td>43</td>
<td>5</td>
<td>0</td>
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Total Occupancy
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

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<td>3.89</td>
<td>4.12</td>
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<td>Working with tech</td>
<td>2.56</td>
<td>3.97</td>
<td>3.88</td>
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<td>2.67</td>
<td>4.10</td>
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<td>Collaborate with students</td>
<td>2.78</td>
<td>4.00</td>
<td>3.81</td>
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<tr>
<td>Discussion with faculty</td>
<td>2.56</td>
<td>3.79</td>
<td>3.75</td>
</tr>
<tr>
<td>Collaborate with faculty</td>
<td>2.61</td>
<td>3.38</td>
<td>3.18</td>
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Takeaways:

- Variety increases engagement
- Increased need for group work space
Non Classroom Spaces - Above Average Use

9% mean total occupancy

6% mean individual study

3% mean group study

5th and 6th floor
Informal Learning Spaces – Library Design

6th floor quiet study

5th floor active

open study and carrels

active learning hub

formal reading room

cave

group collaboration
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.”
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

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– 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
Library Commons as Connection

- Library Collaboration Space
- Dining
- ‘Sidebars’: Classroom Breakout

LIBRARY COMMONS
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

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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Discussion/Collaboration</td>
<td>2.87</td>
<td>4.01</td>
</tr>
<tr>
<td>with faculty</td>
<td></td>
<td></td>
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The Right Mix

9% mean total occupancy

5% mean individual study

4% mean group study
Variety of Spaces
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.”
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**.
University of Utah - Advanced Research Areas

Innovate  Collaborate  Access to resources
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

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<td>3.00</td>
<td>4.16</td>
<td>3.95</td>
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<tr>
<td>Discussion/Collaboration with students</td>
<td>3.94</td>
<td>3.49</td>
<td>3.58</td>
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<td>Discussion/collaboration with faculty</td>
<td>3.16</td>
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Utilization by Floor

5% mean total occupancy

3% mean individual study

2% mean group study
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