A Campus-wide “Space Matters” Culture

October 5, 2016
Focusing on the Future of Planning Learning Spaces
Spring 2016
LSC Regional Roundtables

STUDENTS

CHOICE/

MULTI-FUNCTIONAL

ADAPTIVE
NON-INSTR

S.F.U.
SCIENCE
COMMONS
START

PLAY
SLEEP
EAT
AD HOC STUDY
SHABBY
PERS. STUDY
"LIFE"

COMMUNITY

COMMON GROUND
COMMUNITY SCALE
HEART LOCATION
SIMPLE, PLAIN
MESSY
TOOLSY

LSC Roundtable
University of Washington
LSC Roundtable
Georgia Institute of Technology
LSC Roundtable
University of Illinois at Chicago
Learning Outcomes

• How establishing a culture for planning works, how it matters—what difference it makes
• How to understand the experience of the users of the spaces—learners as individuals, as members of the campus community
• How to design and engage a collaborative process for planning that serves the institutional context and culture
• How to anticipate the future.
Facilitators

• Howard S. Wertheimer, Director, Capital Planning and Space Management—Georgia Institute of Technology
• Ameet D. Doshi, Director, Service Experience and Program Design, Subject Librarian for Public Policy—Georgia Institute of Technology Library
• Ryan Jones, Associate Partner—Lake|Flato
Plan targets for 2014

13,500 Undergraduates
8,700 Graduate Students
7,600 Faculty/Staff
15.6 M GSF
2015 Existing Conditions

- 14,682 Undergraduates
- 8,427 Graduate Students
- 6,727 Faculty/Staff
- 15.29 M Gross SF
1997 - 2015

- 435,650 gsf average growth per year
- Faculty/Staff: 161 increase per year
- UG Students: 248 increase per year
- Grad Students: 297 increase per year
- Total Population Growth: 706 per year
Overview:
The Georgia Tech campus is home to a 15-piece international exhibition by various artists. The exhibition, on loan to the institute, features a soaring 50-foot steel piece titled Le Tour by the internationally acclaimed, Chattanooga-based sculptor John Henry, who also is the curator for the exhibition.

Engineered Art is part of Arts@Tech, an initiative to enhance the Georgia Tech community by fostering programs and events spanning the arts spectrum at the intersection of technological innovation and creative expression. The initiative is an outcome of the Institute’s Strategic Plan.

The sculpture exhibition is free and open to the public.

About the Exhibition:
Each of the 15 works represents the best of contemporary sculpture by some of its most recognized artists. Made from a variety of materials including steel, aluminum, cast-fiberglass, copper, concrete, wood, and rubber tires, the pieces represent a diversity of styles, themes, and technical approaches characterizing our times. The location of each sculpture was chosen to complement Georgia Tech’s lush and open green spaces.

The exhibition’s curator, John Henry, is known for his large-scale public sculptures. Since the early 1970s, he has produced monumental works for museums, cities and public institutions across the United States, Europe, and Asia.
Albert Einstein sculpture
G. Wayne Clough Undergraduate Learning Commons (2011) LEED Platinum
Architect: Bohlin Cywinski Jackson, CM: Turner Construction Co., TPB: $93.6M
G. Wayne Clough Undergraduate Learning Commons (2011)
Classroom Improvement Program - Case Study

Project team:
• Students
• Faculty
• Capital Planning & Space Management
• Facilities
• OIT
• CETL (Center for the Enhancement of Teaching & Learning)
Long life, loose fit

- Full circle of chairs (no tables)
- 4 separate tables each with 4 chairs
- Arrange in a big square or rectangle with no gaps
- One long table with chairs on both sides

Flexible and adaptable to meet various pedagogies
Maker Spaces...many sizes and shapes
Interdisciplinary Design Commons
Interdisciplinary Design Commons
Architect: Praxis3 with BNIM; CM: Brasfield & Gorrie; TPB: $88M
Questions & Comments
Reimagining the Library for the 21st Century

The Georgia Tech Library will enable people to explore the past and design the future by bringing together inspirational spaces, curated content, expert guidance, and scholarly communities.

Library Renewal Context

- **Data** Trends
- Core **Principles** and Values
- **Preserving and Expanding Access** to the “Universe of Scholarship.”
- **User-Driven** Spaces, Services and Collections
- **Pilot / Prototyping** Library Renewal Program
Use of physical library buildings is at a record high.
Use of print book collections was at a record low.
Use of library’s digital collections (e-books, e-journals) is very robust.

1,000,000+ clicks to library e-books and e-journals (2015).
context: five laws of library science

1) “Books are for use.”

2) “Every user, his / her book.”

3) “Every book, its user.”

4) “Save the Time of the User.”

5) “The Library is a Changing Organism.”

(S.R. Ranganathan, 1931)

Georgia Tech’s “Five Laws” as adapted for the 21st Century:

Scholarly Resources (e-books, datasets, gadgets, copyright help, research experts) are for use.

Every User, his / her Scholarly Resource at point of need.

Every Scholarly Resource, its User in the format they require.

“Save the Time of the User” by being proactive, creating a great UX, and anticipating user needs.

“The Library (and the Librarian) is a Changing Organism.”
core values: preservation and access

Enduring core values for all research libraries include preservation of the scholarly record, and providing access to that content in a way that “saves the time of the user.”

Library Service Center of Emory University and Georgia Tech:

- Climate-controlled to preserve print book and archival collections for 200+ years.
- Technology-rich environment suitable for on demand scanning and e-delivery to campus.
- Reading room
- Modular
White Paper: Reimagining the Georgia Tech Library

Defining the Technological Research Library for the 21st Century

As research libraries across the nation seek to reimagine their spaces and services, the Georgia Tech Library is leading the way in defining what it means to be an innovative, user-centered research library for the 21st century.

As a research institute, Georgia Tech needs a research library, and it needs capable Library faculty and staff to operate that research library.

The Library Renewal Project is a 5-year plan to transform the Library’s services and spaces to match the changing research, teaching, and learning needs of Georgia Tech.

This white paper will discuss the major elements of the Library Renewal Project, including:

- The work of a technological research library beyond the physical books
- The importance of Library as space
- The Library’s role as an interdisciplinary platform for innovative scholarship and learning
- Library services as an integrated network of resources

Download Now!

http://librarynext.gatech.edu
user experience: exploring research behavior

In partnership with brightspot strategy, the library did a deep-dive to gain insight into the unique Georgia Tech research experience. The Library also maintains three advisory boards to provide strategic guidance.

Understanding the UX
- Advisory boards
- Observation / dScout
- Surveys

Campus Engagement
- Social Media
- e-Newsletters
- Library Renewal website

Library Faculty + Staff Insight
- “Reimagining” White Paper
- Open Forums
- Working Groups
The Library maintains three highly engaged advisory boards who provide continual strategic input to the Library’s top leadership. Additionally, Faculty “shepherds” were identified to provide specific insight regarding the Library Renewal programmatic design.
A core principle for the Library Renewal is making the “invisible” world of e-books, e-journals, librarian expertise, and digital scholarship, highly “visible” to the user.
malleability: infrastructure adapts to lights, fabric dividers, appliances
Buildings For:
People       Books
transforming space for people

EXISTING

FUTURE

DIFFERENCE

<table>
<thead>
<tr>
<th>Service</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiential Learning</td>
<td>32%</td>
</tr>
<tr>
<td>Stacks</td>
<td>-38%</td>
</tr>
<tr>
<td>Staff</td>
<td>Faculty</td>
</tr>
<tr>
<td>Food Service</td>
<td>1%</td>
</tr>
</tbody>
</table>
CT LOBBY RISERS – wood wrapped risers
Energy Model Evolution

Annual Energy Use Intensity [kBtu/sf]

**Existing Building data is measured, not modeled**
• Program and design aligned with GT Strategic Plan, Landscape Plan and Sustainability Plan
• Design led by innovative process of piloting new services and spaces to predict the future
• Create new services for students and faculty
• Doubled seat count
• Create porosity of library buildings and connect interior spaces to campus
• Replace underutilized book space with space for people
• Integrated learning technology infrastructure for evolving future needs
• Increase space utilization by 100%
• Removed brick walls and replaced with windows for daylight and views
• Reduced energy use by 60%
Questions & Comments
ENGINEERED BIOSYSTEMS BUILDING
GEORGIA INSTITUTE OF TECHNOLOGY
LAKE|FLATO ARCHITECTS + COOPER CARRY ARCHITECTS
ALTERNATING BREAK ROOMS
+
SHARED SPACE AS MAGNETS FOR ACTIVITY
ENGINEERED BIOSYSTEMS BUILDING
GEORGIA INSTITUTE OF TECHNOLOGY
Collaborative environments are as much a result of a collaborative programming and design process as they are the architectural response.

How do we better integrate our clients and their community into the design process?
CREATE + FOSTER A CULTURE OF INCLUSION

VISIONING CHARRETTE
- Supportive Alumni
- Thought Leaders
- Academic Alliances
- Industry
- Revenue Streams
- Outreach Programs
- Campus Engineering
- Campus Planning
- Students
- Colleagues
- Campus Planning
- Facilities Management
- Geophysics
- Sea Collaborative
- Earth Systems Science
- Geophysics
- Geological Sciences
- Students
- Graduate Research Staff
- Admin
- Program Verification
- Interdisciplinary
- Adjacencies

CONTEXTUAL PLACE MAKING
EXPERIENTIAL PLACE MAKING
INNOVATIVE PERSPECTIVES
BUILDING CAN EXEMPLIFY
UNIQUENESS
UNIFY

PLANNING CHARRETTE
- Energy Resource Engineering
- Earth Systems Science
- Geophysics
- Geological Sciences
- Students
- Graduate Research Staff
- Admin
- Program Verification
- Interdisciplinary
- Adjacencies

INTEGRATED DESIGN CHARRETTE
- Thought Leaders
- Campus Engineering
- Students
- Campus Planning
- Facilities Management
- CC: Securing the Energy Future
- Stanford at Sea
- CC: Food & Water Security
- CC: Climate Solutions
- CC: Reducing Disaster Risks
- Educational Farm
- CEEs
- Feed Collab
- Research Staff
- Post Doc
- Graduate Affiliated Faculty
- Teaching Faculty
- Life Support Systems
- Building Support Systems

PROGRAMMING: 8 WEEKS
INTEGRATED DESIGN CHARRETTE

CONCEPTUAL DESIGN: 18 WEEKS
Establish a diverse user focus group:
Departments
Critical challenge areas
Research methodologies

Diverse interaction + Leadership
A catalyst for innovation, entrepreneurship and service; that leverages GIT’s world class experience operating labs; creates a campus community bound by a shared ecological identity; nurturing discourse that leads to a culture of innovation and creativity.
INTEGRATED PLANNING PROCESS
Questions & Comments
Final Remarks
... a challenge to academic leaders is to think of new metaphors for shaping goals for student learning, a challenge particularly relevant for those with responsibility and opportunity to shape learning experiences and learning spaces.

(To have) meaningful and productive lives in our increasingly flat world (students) must be great collaborators, leveragers, localizers; they must be ‘green’ (yup, just green); they must be great explainers, great synthesizers, great adapters, and they must be passionate personalizers.
Truly creative spaces are flexible.

They are easily reconfigured, modular, and responsive to the needs of different people and different projects.

Creative places make it easy for people to discuss, share, and argue ideas, whether in the laboratory or the cafeteria.

By maximizing both formal and informal contact between individuals, such spaces encourage cross-fertilization of thinking.

From the LSC Archives: — Report on Places of Invention
The Lemelson Center for the Study of Invention & Innovation. 2007.
People are not born with inherent innovation skills, but they can learn them.

They can acquire the social skills to work in diverse, multidisciplinary teams, and learn adaptability and leadership.

They can develop communication skills to describe their innovation.

They can learn to be comfortable with ambiguity... ...to translate challenges into opportunities and understand how to complete solutions from a range of resources.

From the LSC Archives: — National Innovation Initiative Council on Competitiveness. 2005
Creative individuals want to arrange, modify, and adapt their personal work spaces to meet their own needs and whimsy.

It is almost a cliché that creative people have messy spaces and espouse a hands-on mentality.
Learning Spaces Collaboratory

Join the conversation – send us your ideas about questions to ask in shaping learning spaces
pkallsc@pkallsc.org

Fall LSC Webinars

• *Spaces for Dissolving Boundaries between Communities*
  November 1, 2015

• *Transformative Renovations and New Connections*
  December 1, 2015