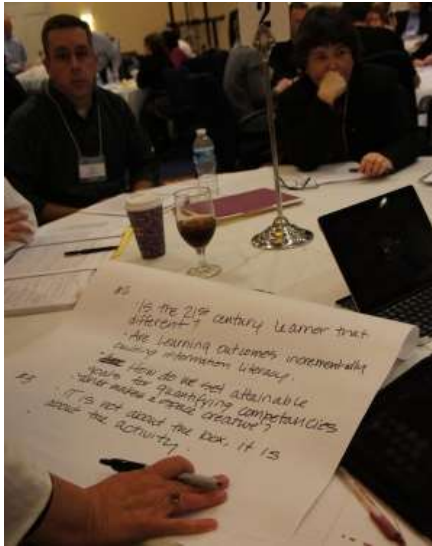# Learning Spaces Collaboratory

Assessing the Impact of Spaces on Undergraduate Learners: Building a Community of Practice

Jeanne L. Narum, Principal, LSC; Cathy M. Wolfe, Director of Campus Planning, George Mason University; Anthony J. Lucarelli, Principal, Grimm + Parker Architects; Edward D. Gomes, Associate Dean of Technology Services, Trinity College of Arts & Sciences, Duke University

January 19, 2012

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Questions woven through the Colloquium

- How does space matter to learning? What difference do spaces make?

- How do we know? How to integrate attention to audits and assessment through the planning process?

- How to build communities of practice committed to such integration, within and beyond single campuses or offices?

Emerging responses to those questions

- Spaces matter as they enable particular learning experiences that reflect particular learning goals.

- Conversations about what difference spaces make need to engage each and every stakeholder, at appropriate times in the planning process

- Sustainable communities of practice evolve when there are multiple opportunities for informed participation in reflective planning, when all are involved in shaping the feedback loop between learning, learning experiences and learning spaces, when each takes personal responsibility for their role in shaping spaces that serve learners.

Questions: Setting the Stage

- From each of your personal experiences, what is the one most positive outcome of: a) working toward such a community—within your personal sphere of practitioners; and b) achieving such a community?

- What is the one biggest challenge to making such progress and achieving such a community?

Responses:

- Cathy M. Wolfe, Director of Campus Planning, George Mason University

- Anthony J. Lucarelli, Principal, Grimm + Parker Architects

- Edward D. Gomes, Associate Dean of Technology Services, Trinity College of Arts & Sciences, Duke University

You have opportunity or responsibility for shaping and reshaping undergraduate learning spaces.

What kind of questions need to be addressed?

- Identify the use cases
- Confirm the tech, furniture and space needs based on use cases
- Develop the service model
- Assign the curriculum
- Confirm the operational costs
- Communicate with leadership and the campus community
- Plan for the assessment

Where and how do you incorporate a feedback loop of information about how and where students learn?

- Gather data from multiple sources
  - Other institutions and colleagues
  - Student and faculty web surveys
  - Systematic observations
  - Staff and faculty discussions
- Share data with the community

Who needs to be engaged in the discussions?

- Establish a project champion
- Engage senior leadership early and updated throughout the project
- Include key stakeholders and consult with the user community
  - Faculty across disciplines
  - IT professionals
  - Instructional technologists
  - University Registrar
  - Architects
  - Librarians

What process and sequence works?
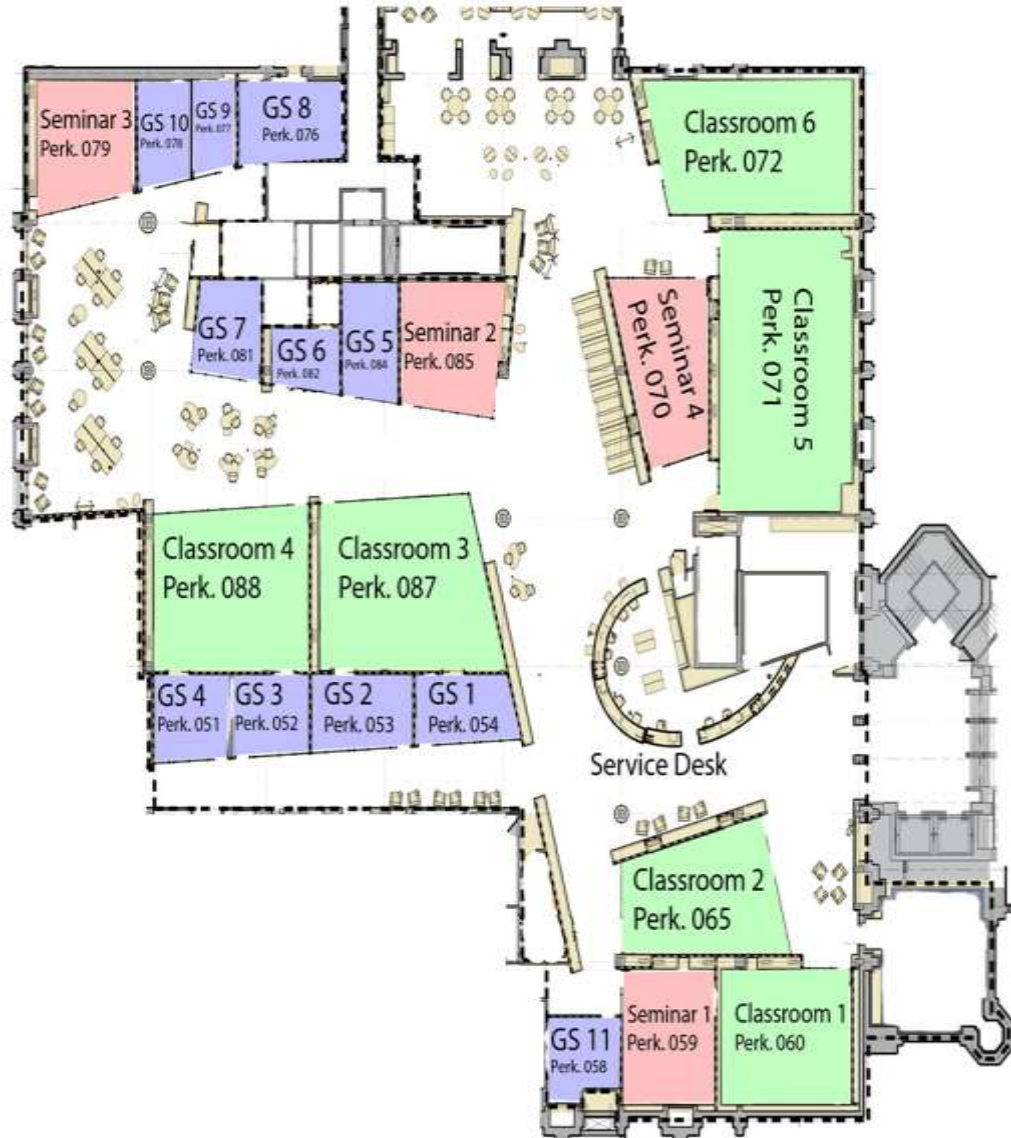
- Develop use cases early
- Architecture and design concept
- Technology package approved
- Service Model
- Evaluation/Assessment plan

What are the characteristics of a culture of learning that influences how spaces are designed, constructed, and used?

- Greater consistency & coordination to the equipping and scheduling of learning spaces

- Increasing support for teaching & learning innovation

- Focused resources on new applications of technologies and teaching models that fit culture and goals

- Support for diverse disciplines, learning styles, pedagogies

- Lessons learned are captured and shared broadly with the community

Questions from the field

Question: Setting the Stage

- As individuals in different spheres of responsibility for getting spaces right for learning, what works for you?

Responses:

- Ed Gomes

- Anthony Lucarelli

- Cathy Wolfe

- **Institutional buy-in at a high level** – connecting the importance of learning spaces to the value proposition – *How do these learning spaces/platforms for learning contribute to why a student would choose to start and finish at Mason?* Impacts on Level of Academic Challenge, Retention Rates, Recruitment of High Achievers, Employment, Increased Critical Thinking Skills……

- **Campus Culture** – ongoing conversations about learning and why space matters - *broadly raising awareness* of the possibilities and the challenges – when you know better you do better….

- **Participation** – Faculty, Students, Administration, Facilities, Registrar's Office, Information Technology, Center for Teaching Excellence, Robinson Professors, outside experts and consultants – PKAL

- **Removing the actual and perceived barriers** – Regulatory and Funding Realities

- **Being Nimble and Testing it out** – piloting is invaluable – small steps are ok

Context - 2008:
- Existing underutilized Computer Training Lab – 1104 ASF
- Shortage of Registrar Scheduled University Classrooms on Campus
- COS– Master Planning for Facilities

Components:
- *Space* – flexible
- *Furniture* – moveable tables, chairs and podiums – 36 seats
- *Technology* – combination of high tech and low tech

Upgrade/Renovation Costs:
- Construction $24,000.00
- Technology $60,000.00
- Furniture $17,000.00
- Total Cost $101,000.00

Metrics:
- *Space:* 31 ASF/Seat
- *Utilization Rate:* 52.5 hr./wk. Fall 2011
- *Cost/Seat:* $2,800/Seat

Registrar Scheduled Instructional Spaces

Room Type	# of Rooms	ASF	Seats	ASF/Seat
General Classrooms	153	199,000	12,059	17
Class Laboratories	83	115,000	2,738	42
Total	236	314,000	14,797	21

General Classroom Size Distribution

0-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-149	150-199	200-300
9	18	48	37	10	7	8	4	1	6	2	3

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2008
"Sandbox" Pilot

1 **1**   "Active Learning" Instructional Spaces

2011 2011   Year Added

What might work? – An illustration of the Facilities related Impacts

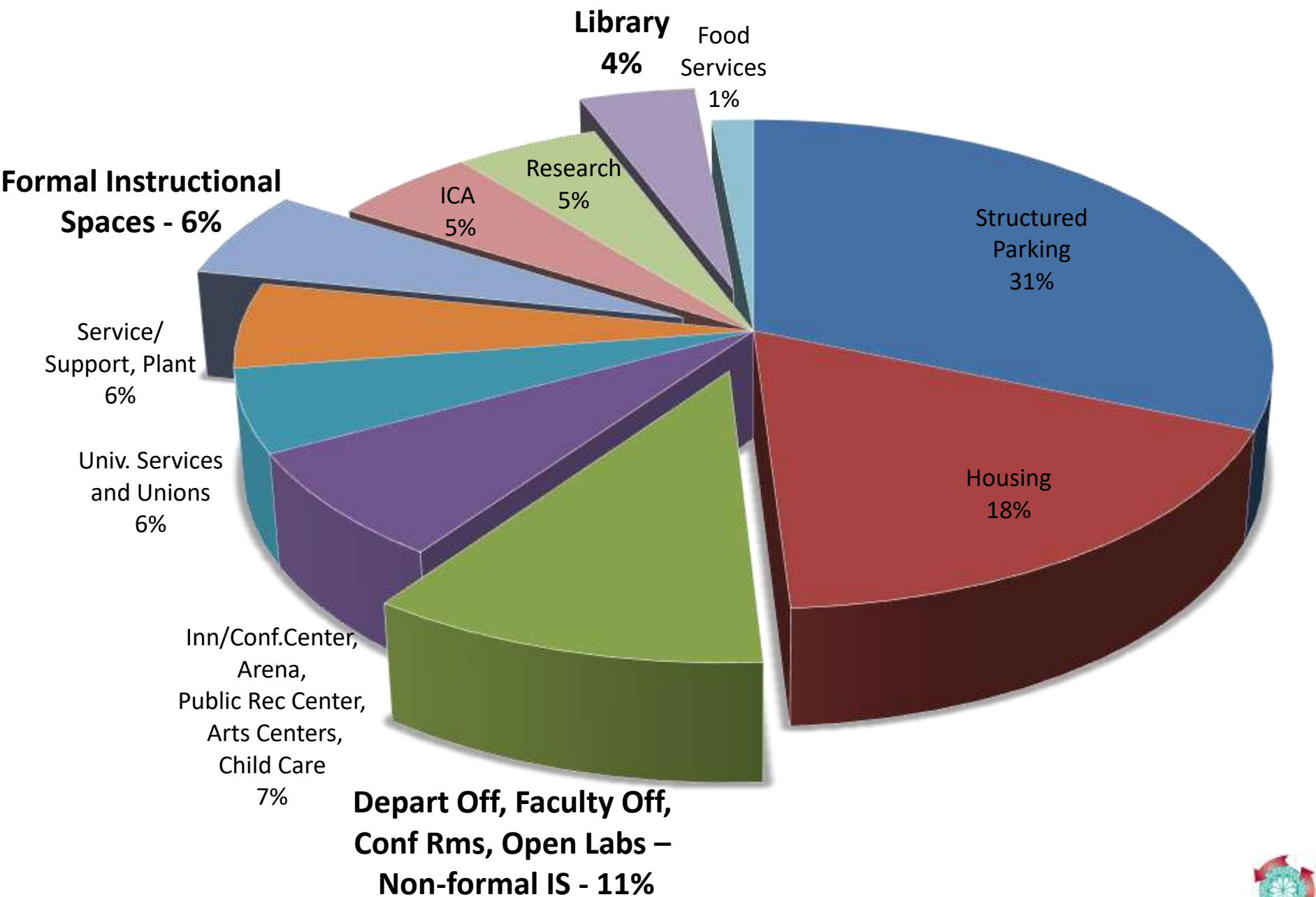| Room Type	# of Rooms	ASF	Seats	ASF/Seat
General Classrooms	153	199,000	12,059	17

What if we convert **_25%_** of our traditional classroom seats to Active Learning Spaces – half of those rooms would have "high tech" technology enhancements:

- *Space Impact* – Approx. 3,000 seats would be converted from traditional instructional seats with 15-17ASF per seat to active learning spaces with 25-28ASF per seat:
  - 3,000 seats x 10ASF per seat = 33,000ASF/50,000GSF additional space required – or overall reduction of available rooms which is non-starter
    - New Space = $10M ($200/SF New)
    - Renovated Space = $2.5M ($50/SF Reno.)

- *Technology Impact* – existing technology classroom baseline cost = $26,000/Rm:
  - 19 rooms x $34,000 = $646,000 plus on-going higher level of tech support

- *Furniture Impacts* – exg. cost per seat for furniture in baseline classrms. = $200/seat:
  - 3,000 seats x $272 = $816,000

Overall Impact Range - $4M + "space challenge" for Reno to $11.5M for New Space plus ongoing increased tech support and "other" costs…..

Campus Space Distribution with Structured Parking Included

Library 4%

Food Services 1%

Research 5%

ICA 5%

Formal Instructional Spaces - 6%

Service/ Support, Plant 6%

Univ. Services and Unions 6%

Inn/Conf.Center, Arena, Public Rec Center, Arts Centers, Child Care 7%

Depart Off, Faculty Off, Conf Rms, Open Labs – Non-formal IS - 11%

Structured Parking 31%

Housing 18%

Institutional Level:

- Re-establishing Learning Environments Group (LEG) – University Committee

- Aligning goals regarding learning spaces

- Institutional level study on how space impacts learning outcomes

- Some initial ideas for how this can be accomplished – adding to existing course evaluation's and adding campus questions to NSSE which is occurring this year

State Level:

- Space Management Roundtable

- Survey of VA Institutions – active learning models – space implications

Questions from the field

Question: Setting the Stage

Given the stories from Duke and George Mason, can each of you suggest what information, data, structure should be in place before connecting to an architect?

Responses:

- Ed Gomes

- Cathy Wolfe

- Anthony Lucarelli

What is the *Learning Context….*

*The involvement an architect or any other resource from outside the community relates to where the community **or** the planning team sits along a **continuum**.*

6   7   8   9   10
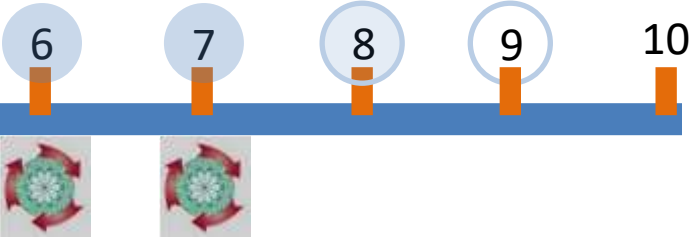
Translating, communicating and embracing a common vision and a common language about learning goals, experiences and spaces……

Space Matters

Mission Accomplished !!

The Institution:
- *Strategic priority – codified?*
- *Implementation – what action taken?*
- *Penetration into departments?*
- *Faculty / staff buy-in? Faculty supported?*

The Project:
- *How is the project defined?*
- *Status of the program?*
- *Alignment of resources?*
- *Shape and nature of the planning team?*

Architects will play the role required.

programming

design

researcher

teacher

facilitator   strategic facility planner

master planner

Diving as deep as we have to - using lifelines when we can afford to…………

*The **Shape** and the **Nature** of the Planning Team….*

A system for decision making…………

What works?

- *Transparency*
- *Inclusion*
- *Trust*
- *Timely involvement of leadership*
- *Consistent participation*
- *Scheduling adequate time*
- *Including students*

What's challenging?
The opposite of what works

Executive Committee

Working Group   *Feedback Loop*   **Expanded Stakeholder Group**

Executive Committee:
- *Leadership perspective / strategic goals*
- *Needs to know progress – timely briefings*
- *Approves fundamental project attributes*
- *Delegates to Working Group*

Working Group: (weekly involvement)
- *Includes Project Shepherd*
- *Day-to-day decisions and direction*
- *Organizes and guides the planning team*
- *Represents facilities, planning and users*

Expanded Stakeholder Group: (monthly Involvement early)
- *Most active during early phases*
- *Assures all constituent issues are covered*
- *Provides detailed direction in later phases*

Audit as Awakening

6   7   8   9   10

Library Design: *Institutional Vision – leadership beginning to influence faculty*
Asking the question "what would students want out of a library if they had a choice".

Context - and the shape of the planning team:
- *20,000 SF Library in an 85,000 SF Community College building*
- *Project Shepherd is the "executive" – fully engaged*
- *Active, committed and consistent Working Group*
- *Library staff is passionate, protective and professional but with an insular view of the "future of their library"*

Students Influence a 180 degree shift:

- The design team provided evidence, case studies and images from outside this community.
- Engaged students, trusted by library staff were assembled to discuss their vision of a library.
- The library staff expanded their vision of the library environment from one of 75% quiet study and 25% conversational - to 25% quiet study and 75% conversational.

Imaging ➡ *Awareness + Vision*
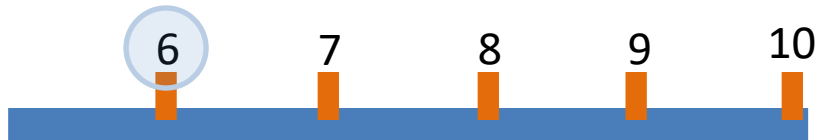
*Programming Science*: *Institutional Aspirations – grassroots effort required.*

Context - and the shape of the planning team:
- *Very large facility - Science, Math and Nursing.*
- *No Project Shepherd – inadequate time and resources.*
- *Inconsistent Working Group – underrepresented, skeptical stakeholder / user group.*
- *Leadership has a vision of "state of the art facilities for teaching science". **Faculty vision was – "anything is better than what we have now."***

Virtually complete reliance on the architect / programmer for a vision of the future of undergraduate science learning:

- *Evidence, and imaging alternative spaces for teaching undergrad science is accepted by faculty and endorsed by the dean.*
- *The program is written for the future – flexible lab environments.*
- ***What may work*** *– the community has spaces that will accept new pedagogies.*
- ***What is challenging*** *- the community may take time to evolve into the full potential of the space.*
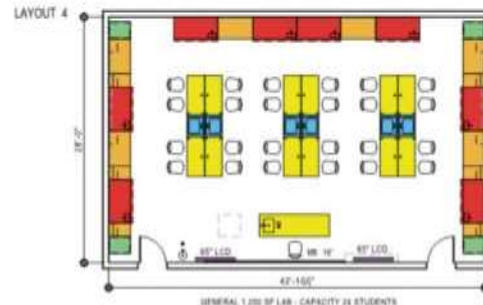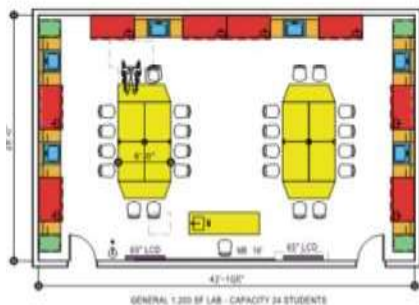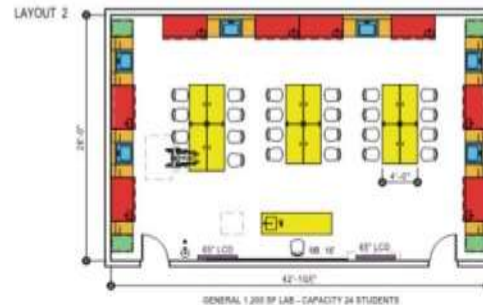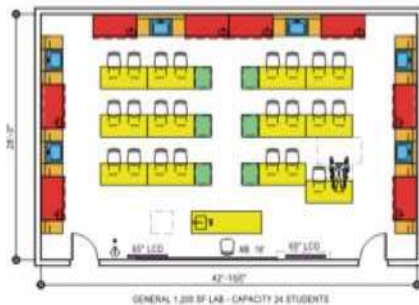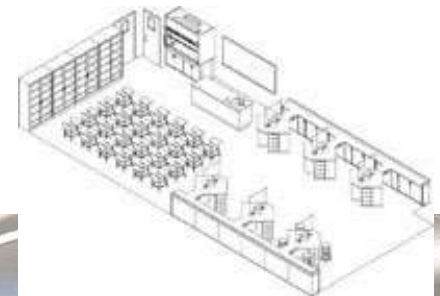
# Architect preparing to play the "role required"...........

- *Design competition inspired by the LSC*
- *Every employee involved – principals to admin.*
- *The Classroom, The Meeting Room and the Dorm Room of the future.*

Placing experience and expertise in context with a national conversation about learning – raising the bar with research based visioning and imaging.
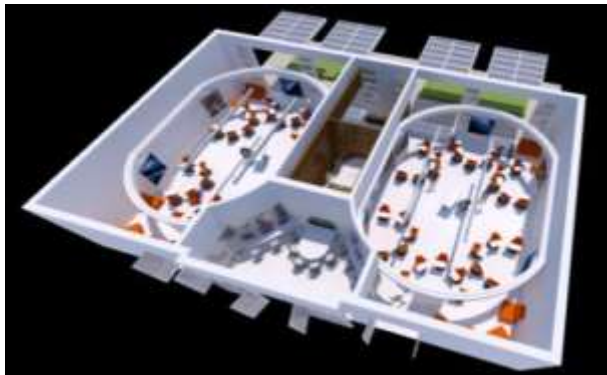
LSC - Inspired enthusiasm, creativity, confidence and productivity in the firm.

- *Existing experience and projects validated + challenged.*
- *Everyone buzzing with conversations about learning.*
- *Results translate immediately to existing projects.*
- *New understandings and enthusiasm inspired design, more research, search for speaking opportunities and a commitment to thought leadership.*
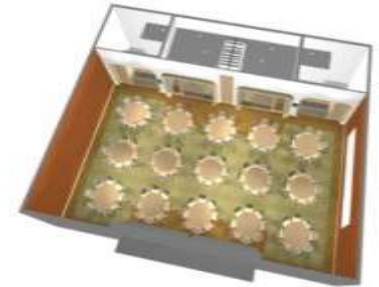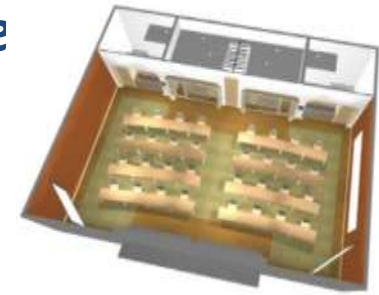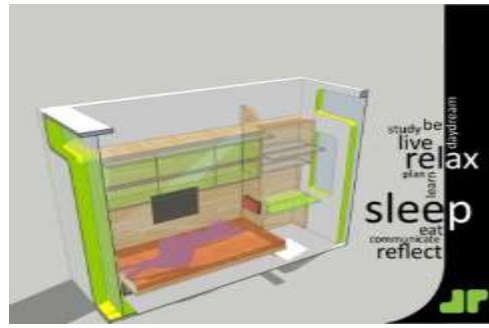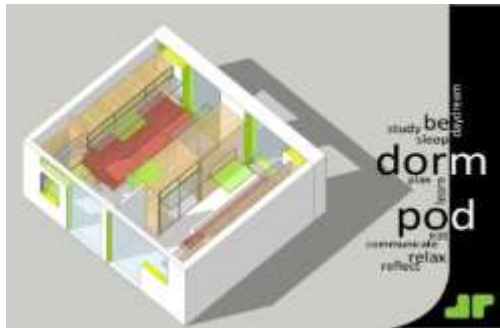
Questions from the field

Community Responses

Sally Grans-Korsh, System Director for Facilities Planning, Minnesota State Colleges and Universities (MnSCU)

- Fueled by the preplanning efforts prior the Nov 2011 presentation, presented at internal MnSCU Chief Academic Officers meeting with Dean Brenda Lyseng of Century College on the importance of finding attributes for learners, getting good learning spaces, mining the campus for learning spaces of all kinds and rightsizing to meet expanding pedagogy needs http://www.finance.mnscu.edu/facilities/studies/docs/CAO_Rightsizing10272011.pdf

- Coordinated with local architect that attended Nov session, Stephanie McDaniel, and other SCUP regional members to facilitate a larger workshop on Feb 24 (see next set of slides). Intent to create broader alignments with academic and facilities planners in both private and public institutions and consultants in the development and ***incremental*** improvement of learning spaces.   The path is paved by 100' increments as rarely can we afford to fund the full mile; but inch by inch we get there!

Community Responses

Joe Williams, Head of Access Services, University of North Carolina at Greensboro

- What the colloquium did for those present was confirm what we know from experience and intuition, that: the work of tackling major initiatives such as shaping and reshaping learning spaces works best when there is an informed and diverse community creating a common vision of student learning -- one that benefits from the best practices and lessons learned from peers and colleagues. We are planning to nurture such a community in the North Carolina region by hosting a one-day workshop that will focus on issues specific to developing learning spaces in State institutions. We will also be providing resources to help individuals initiate campus-wide conversations, which will set the stage for this regional workshop.

NC regional workshop planning group, as of Jan. 17, 2012: Rosann Bazirjian, Dean of University Libraries, UNCG; Kathy Crowe, Assoc. Dean for Public Services, University Libraries, UNCG; Mary Crowe, Director, Undergraduate Research, UNCG; Michael Crumpton, Asst. Dean for Administrative Services, University Libraries, UNCG; Edward Gomes, Sr. Associate Dean, Trinity College of Arts & Sciences Technology Services, Duke University; John Sopper, Assoc. Dean of Undergraduate Studies, UNCG; Joe Williams, Head of Access Services, University Libraries, UNCG; Tim Winstead, Vice President/Principal, The Freelon Group, Durham, NC

Community Responses

Cathy M. Wolfe, Director of Campus Planning, George Mason University and Gary McNay, Principal, Academic Science & Technology, Perkins+Will

- Ways to move forward:
  - Develop a full portfolio of active learning space types and technologies at all scales for all disciplines (a catalog of opportunities)
  - Choose a well traveled location to test, display and prototype the space(s) in a way that builds interest, curiosity and momentum
  - Engage faculty in a way that allows then to adopt and champion the implementation

Questions from the field
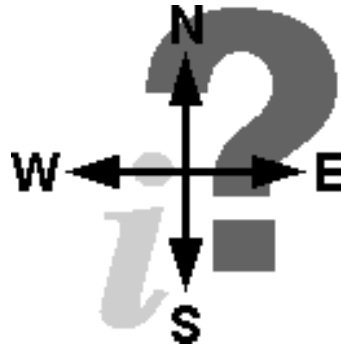
Upcoming LSC Activities

- January 27, 2012 (1:30-2:30 PM): LSC presentation at the AAC&U Annual Meeting (Collaborating Partner Event). Presenters: Jeanne L. Narum, LSC; William La Course, University of Maryland Baltimore County; Anuradha Vedantham, University of Pennsylvania

- February 8, 2012 (Boston, MA); February 29, 2012 (Chicago, IL); April 4, 2012 (Denver, CO): LSC/Herman Miller Regional Seminars (Invitational)

- February 9, 2012: *LSC D.C. Leadership Discussion*

- February 14, 2012: LSC Webinar: *The Chemistry Discovery Center at UMBC*. Presenter: William La Course, University of Maryland Baltimore County

- February 24, 2012: Planning and Executing Active Learning Spaces Seminar at Minneapolis Community Technical College. Organized by: Sally Grans-Korsh, Minnesota State Colleges and Universities

Upcoming LSC Activities

- March 21, 2012: LSC Webinar: *The Athenaeum at Goucher College.* Facilitators: Sanford J. Ungar, President; Marc Roy, Provost

- May 17–19, 2012: LSC Session at The AIA 2011 National Convention and Design Exposition. Presenters: Amy Christmas, The S/L/A/M Collaborative, Inc.; Kent Duffy, SRG Partnership, Inc.; Jeanne Narum, LSC; Wendy Newstetter, Georgia Tech

- May 31- June 2, 2012: MARM 2012: *Chemistry on the Chesapeake.* Presenters: Jeanne L. Narum, LSC; William La Course, University of Maryland Baltimore County

- July 7–11, 2012: LSC Session at SCUP–47 (Collaborating Partner Event). Presenters: Jeanne L. Narum, LSC; Phil Long, The University of Queensland

Thanks!

http://www.pkallsc.org/