While you’re waiting, please go to http://flexspace.org/ and create an account.
Space, The New Frontier: Exploring Learning Space Design To Support Blended Learning

Chris Johnson
Assistant Professor and Co-Director, Educational Technology
The University of Arizona
CGJ@email.arizona.edu

Learning Research Studio - SDSU
Don’t bother taking notes about anything on the screen

http://ichrisjohnson.com/olc19/
About you – Who is in the room?

Please go to bit.ly/olc19-who and let us know your position at your institution
What one thing would you like to learn today?

Please go to bit.ly/olc19-learn and let us know your position at your institution.
Perspective – Then and Now

https://en.wikipedia.org/wiki/Lecture
Look familiar?

https://news.virginia.edu/content/faculty-grant-winners-bring-tech-enhanced-hybrid-courses-online
And some things haven’t changed
Why space matters

Flexible Classrooms - Michigan Engineering - https://www.youtube.com/watch?time_continue=105&v=Lfnf5s16fcs
We shape our buildings; thereafter they shape us.

Winston Churchill
October, 1943
We need to remember.
we are social animals
And we need to build social spaces
The Learning Ecosystem
The Learning Ecosystem
The Learning Ecosystem

Student

Digital

Teacher

Community
The Learning Ecosystem

Student

Physical

Teacher

Digital

Community
The Learning Ecosystem

- Student
- Digital
- Community
- Teacher
- Physical
- Passion
- Creativity
- Wisdom
- Innovation

OLC Innovate Education Reimagined
Blinking words are words, phrases, or tones with a wide range of possible definitions, meanings, and connotations

Peter Sengé, The Dance of Change
Blinking words are words, phrases, or tones with a wide range of possible definitions, meanings, and connotations.

Peter Sengé, The Dance of Change

active learning
Blinking words are words, phrases, or tones with a wide range of possible definitions, meanings, and connotations.

Peter Sengé, *The Dance of Change*

active learning

What does active learning look like?
What does active learning look like?
Holding the conversation - Stakeholders

Faculty
AV-IT
Facilities
Registrar

Campus or external architects and designers
Department and Program Admins
Holding the conversation - Stakeholders

Please spend a few minutes identifying your potential stakeholders.

If possible, look at your institution’s website and identify the actual person.
Guiding questions

What are we trying to accomplish?

What makes us unique?

What questions are driving our curiosity?
Design Thinking Process

1. **Empathize**
   - Learn About Your Audience

2. **Define**
   - Construct Point of View Based on User Needs
   - Brainstorm and Come up with Creative Solutions

3. **Ideate**
   - Build Representation of Your Ideas

4. **Prototype**
   - Test Your Ideas

5. **Test**
Research is abundant


Center for Teaching at Vanderbilt - https://cft.vanderbilt.edu/guides-sub-pages/learning-spaces/

Steelcase 360 - 360.steelcase.com/

Herman Miller - https://www.hermanmiller.com/research/
Should Haves

- Campfires in Cyberspace
- The Language of School Design: Design Patterns for 21st Century Schools
- Make Space: How to Set the Stage for Creative Collaboration
- The Third Teacher
Campfires in Cyberspace - David Thornburg

Campfire
Where you learn from storytellers
Campfires in Cyberspace - David Thornburg

Campfire
Where you learn from storytellers

Watering Hole
Where you learn from peers
Campfires in Cyberspace - David Thornburg

Campfire
Where you learn from storytellers

Cave
Where you learn from yourself

Watering Hole
Where you learn from peers
Campfires in Cyberspace - David Thornburg

Campfire
Where you learn from storytellers

Cave
Where you learn from yourself

Watering Hole
Where you learn from peers

Life
Where you apply what you’ve learned
Two Free Toolkits

**LEARNING SPACE RATING SYSTEM**

- Quantitative benchmarking to measure learning space potential
- Alignment of Learning Spaces with Campus Strategic Planning
- Encourages master planning for learning environments
- LSRS and FLEXspace Core Teams working to align and integrate tools

**FLEXspace®**

Flexible Learning Environments Exchange

Free to .edu’s and K-12, open, global repository of learning spaces
Launched 2012 by SUNY (Learning Environments Task Group)
- 2400+ user accounts,
- 1,100+ academic institutions
- 40 countries
Learning Space Rating System

Version 2

February 2017

Development Team and Authors
Malcolm Brown, EDUCAUSE Learning Initiative
Joseph Cevetello, City of Santa Monica
Shirley Dugdale, Dugdale Strategy
Adam Finkelstein, McGill University
Richard Holeton, Stanford University
Phillip Long, University of Texas at Austin
Carole Meyers, Dartmouth College

Thank you to Rebecca Frazee for the LSRS and FLEXspace slides.
Measuring the potential of learning spaces - http://tinyurl.com/eliLSRS

Learning Space Rating System

Overview
The Learning Space Rating System (LSRS) project provides a set of measurable criteria to assess how well the design of classrooms support and enable active learning. Noting the success of several architectural programs to promote sustainable building design, the LSRS provides a scoring system to serve as an indicator of how well a classroom’s design serves the goal of active learning. The LSRS credits form the basis for a rating system that will allow institutions to benchmark their environments against best practices within the higher education community.

The LSRS measures formal learning spaces, defined as classrooms typically scheduled centrally and designed to accommodate all course participants for synchronous meetings. The information in the About section contains more detailed background and information on the LSRS project. In the Resources section, you will find articles, websites, and other resources relevant to the project. We highly recommend an article in the Journal of Learning Spaces for a conceptual introduction to the LSRS project.

Access the LSRS Version 2
Download LSRS version 2 of the rating system and the scoresheet. The ELI invites community members to participate in the community input process. We will use the input to revise the current version in a process of continuous improvement. We invite you to share your comments through the community input form.

Access the French and Japanese Translations of LSRS Version 2
John Augeri, of Paris Ile-de-France Digital University, prepared the French translation of version 2 of the LSRS credits and scoresheet. Yu Urata, of Osaka University, and John Augeri, on the behalf of Kyoto University, prepared the Japanese translation. The ELI and the LSRS team would like to thank them for their valuable contributions.
Learning Space Rating System v2 - [http://tinyurl.com/eliLSRS](http://tinyurl.com/eliLSRS)

- Focuses on *formal* learning spaces
- Measures the *potential* of a space
- Measures *progress* towards desired goal
- Provides a *common language*

<table>
<thead>
<tr>
<th>Section</th>
<th>No. of Possible Credits (1)</th>
<th>Weighting of Section (2)</th>
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<tbody>
<tr>
<td>ICC Integration with Campus Context</td>
<td>5</td>
<td>10%</td>
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<tr>
<td>PDP Planning &amp; Design Process</td>
<td>7</td>
<td>15%</td>
</tr>
<tr>
<td>SO Support &amp; Operations</td>
<td>8</td>
<td>15%</td>
</tr>
<tr>
<td>EQ Environmental Quality</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>LF Layout &amp; Furnishings</td>
<td>14</td>
<td>20%</td>
</tr>
<tr>
<td>TT Technology &amp; Tools</td>
<td>9</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>51</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>
LSRS: Six Sections for Scoring - [http://tinyurl.com/eliLSRS](http://tinyurl.com/eliLSRS)

**Part A: Campus Context and Readiness**
1: Integration with Campus Context
2: Planning & Design Process
3: Support & Operations

**Part B: Physical Space**
4: Environmental Quality
5: Layout and Furnishings
6: Tools and Technology
Organizational Considerations

Integration with Campus Context
- Alignment with Campus Academic Strategy
- Learning Space Master Plan
- Compatibility with Campus IT Technology Infrastructure and Plans
- Commitment to Evidence-Based Research and Assessment
- Campus Leadership for Learning Spaces

Support and Operations
- Space Orientation and Training
- Training of Support Team
- Faculty/Instructor Development
- Financial Sustainability of Operations
- Scheduling Systems
- Diverse Patterns of Use

Planning Process
- Stakeholder Engagement
- Evidence-Based Planning and Design
- Pilots and Prototypes
- Evaluation Plan
- Dissemination of Findings
Physical Space Considerations

**Environmental Quality**
- Interior Visibility
- Lighting Control
- Thermal Comfort
- Acoustic Quality
- Environmental and Cultural Inclusiveness
- Accessibility and Universal Design

**Technology and Tools**
- Electrical Power
- Network Connectivity
- Visual Displays
- Sound Amplification
- Audio/Visual Interface and Control
- Distributed Interactivity
- Session Capture and Access

**Layout and Furnishings**
- Proximities within Space
- Movement Through Space
- Seating Density
- Furniture Configuration Flexibility
- Work Surfaces
- Seating Comfort
- Movable Partitions
- Transparency
- Access to Adjacent Informal Learning Areas
- Writable Surfaces
- Physical Storage
- Future Proofing
<table>
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<tr>
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<th>Credit Title</th>
<th>Maximum Points</th>
<th>Earned Points</th>
<th>Notes on Evidence for Credit</th>
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<tr>
<td><strong>PART A</strong></td>
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<tr>
<td><strong>Section 1. Integration with Campus Context</strong></td>
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<tr>
<td>PP</td>
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<td>Evidence-Based Planning and Design</td>
<td>1 or 2</td>
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<tr>
<td>PP</td>
<td>2.3</td>
<td>Pilots and Prototypes</td>
<td>1 or 2</td>
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<tr>
<td>PP</td>
<td>2.4</td>
<td>Evaluation Plan</td>
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<tr>
<td>PP</td>
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<td>Dissemination of Findings</td>
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<tr>
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<td>Space Orientation and Training</td>
<td>1</td>
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<tr>
<td>SO</td>
<td>3.3</td>
<td>Training of Support Team</td>
<td>1</td>
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<td>SO</td>
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<td>Faculty/Instructor Development</td>
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<td>Financial Sustainability of Operations</td>
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<td>Scheduling Systems</td>
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<td>Diverse Patterns of Use</td>
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<tr>
<td></td>
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<td></td>
<td>7</td>
<td>0</td>
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</tr>
</tbody>
</table>
Your Turn to Rate a Space!

Your task:
In groups, review one of these rooms and score it
Then we’ll share

- Learning Space Rating System - Full system, for reference only (pdf)
- Section 5: Layout and Furnishings (LF) (pdf)
- SDSU LSRS Activity (Word)
- SDSU LSRS Activity (Pages)
- SDSU Rooms for LSRS Activity (PowerPoint)
- SDSU Rooms for LSRS Activity (Keynote)
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- SDSU Rooms for LSRS Activity (Keynote)
Have fun

LSRS Debrief

• How did it go?
• Thoughts?
**Vision:** A comprehensive, searchable, open access, peer-reviewed learning space repository.

**Mission:** To build a *robust community* and integrated planning tools that provides a source of best-practice models and learning environment data to help campuses:

- Save time, money and effort
- Improve planning, design and promotion of campus learning spaces
- Improve communication, ideation and consensus-building among campus stakeholders before engaging architects, donors and other resources.
Operative Phrases:
“Learning Environments” = Inclusive of all spaces (active, lecture, labs, simulation...)
“eXchange“ = showcase, share, swap, highlight

More Subtle Mission: Non-Commercial, Safe to share, Community of Practice for broad array of stakeholders....
Three Robust Taxonomies

**Learning & Assessment**
- Pedagogies and learning activities enabled

**Facilities**
- Wall, ceiling, floor finishes
- Electrical, lighting, acoustics
- Square footage, dimensions, accessibility
- Furnishings
- Cost for renovation, furnishings, technology

**Technology Integration**
- AV/IT Academic Tech & Equipment
Multiple ways to tag a space

- Active/Flexible Classroom
- General Purpose Classroom
- Group Study/Meeting Room
- Lecture Hall / Auditorium
- Media/Computer Lab
- Science / STEM Lab
- Art Studio
- Maker/Build Lab
- Recording/TV Studio
- Learning Commons / Information Commons
- Performance Space
- Transitional Area
- Outdoor Space
- Other
Virtual Site Visits

Search and Browse
Tag and Save Favorites
Export and Share
Gather Examples to Drive Conversations

**Campus Librarians**
SDSU Director of Instructional Technology Services and the CSU Council of Library Deans discuss possibilities for converting library spaces into flexible learning spaces.

**Facilities / Architects**
CIO at Sonoma State University shows campus architects and facilities planning group examples of the kinds of spaces he wants to build.
Document, Report, and Showcase

Upload projects: before, during, after

Teams can divide exploration, export to PPT and report out
FLEXspace Browse!

It’s your turn to browse and search the collection and save some of your favorites for later viewing

• Task One: Try to find examples of:
  • Active learning spaces
  • Makerspaces
• Save a few records
• Task Two (optional) add a space
FLEXspace Debrief

• How did it go?
• Thoughts?
Last Task

Go to [http://www.emailfuture.com/](http://www.emailfuture.com/) and send your self an email

In the message, write your self three things you will do based on this presentation.
Evaluate Sessions and Win!

- Download and open OLC Conferences mobile app
- Navigate to specific session to evaluate
- Select “Evaluate Session” on session details screen (located under session type and track)
- Complete session evaluation*

*Each session evaluation completed (limited to one per session) = one contest entry

**Five (5) $25 gift cards** will be awarded to five (5) individuals
Must submit evals using the OLC Conferences mobile app or website