



LSC Roundtable Collection I: Essays on Designing for Diversity, Equity, and Inclusion

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THINKING METAPHORICALLY ABOUT SPACES FOR LEARNING

REPORTING OUT: A ROUNDTABLE GROUP

"We began with an overarching discussion about student-centered, student-focused, student-driven learning spaces. We were fluid about the particular spaces we were thinking about: a lecture hall, lab, makerspace, whatever. **Our feeling was that the ideas we were discussing spanned many different kinds of learning and learning spaces, from libraries to spaces for career counseling, and more.**

Several metaphors emerged early on that were quite useful. We would like to share one with you: the metaphor of a stage or stage set. Our thought is that "stage" is an appropriate metaphor for a learning space as it is a space in which various engagements happen—engagements that make possible the kind of learning we desire for our students. Spaces as stages have drama associated with them. These spaces ultimately enable meaningful and memorable experiences of learning."

"Thinking metaphorically was helpful, perhaps a bit audacious. We talked about how stages are understood as places where faculty give up control and actually learn along with students—where faculty are partly responsible for setting the stage and creating the experiences, but where students also have responsibility to shape what happens on the stage. **Students will be elevated and visible as full partners in planning just as they will have been given the central role as players on the stage.**

It seems critical that institutions prioritize the role of students as stakeholders, influencers, and participants in imagining, planning, and assessing learning spaces.

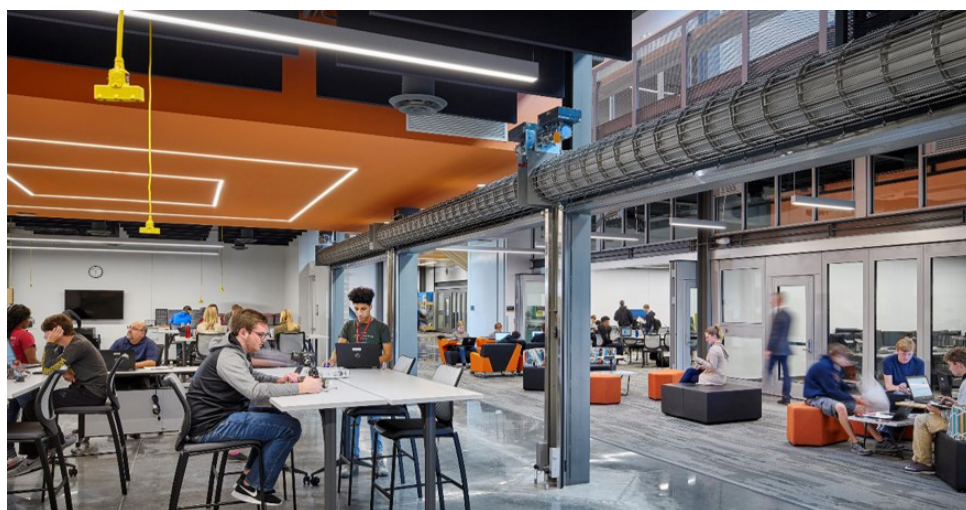
I am thinking about spaces that can serve a variety of learners, ways of learning.

I am wondering if there are ways that we can stop building sorts of single-use spaces like makerspaces, like digital media labs.

Are there ways that we can have spaces accommodate multiple kinds of activities?

What comes to mind is a space that can be furnished with a Murphy bed...coming down with all the tools and whistles for one kind of activity that can be put away and opened up for another.

— David Woodbury, NSCU
Hunt Library
LSC Roundtable, North Carolina State University



Gould Evans - Missouri Innovation Campus



Imagining a space as a stage means considering it to be transient, in a very positive way. These spaces would be dynamic, alive, with different kinds of engagements emerging and dissolving. Groups would nest in different parts of these spaces, and as they fledge—fly away, if you will—others would come and nest.

There will be a transitory sense on different scales, spaces for nesting, homing, fledging and more. Along the way, the idea of space as stage attends to the important attribute of visibility—not only the visibility of the activity itself but also of the outcome of that activity. There would be a visibility that celebrates and values what is happening on the stage.”



Photo Courtesy Wendy Newstetter

“Such a metaphor to drive planning is utterly absent when the focus is on a traditional lecture hall. Most often, in such spaces no engagement is expected. They are spaces in which profound moments tend to be missed because right before that moment there was nothing, right after nothing, and only for a moment was there something happening. Learners are audiences, not participants, in the action on the stage.”

“Why is this an important metaphor for driving planning now and into the future?”

“Times are changing. We now understand that engagement and interaction is at the heart of learning; we also have a better understanding of how students today are different from those of past—even recent—generations. We also have a better understanding of the norms and behaviors, the physiology of how students learn today—they’re up after noon and they’re down at 3:00 a.m.

They are expecting something more entrepreneurial—in how and where they learn. They are expecting spaces that allow for and promote opportunities to imagine their role on stage. That opportunity comes in the nature of the visibility of the space, its dynamism. They look for places in which they can imagine their own role because they can see other students in that role in that space.+

“Our bottom line, our audacious strategy, is to involve students in planning, with faculty somewhat stepping back and giving students and other stakeholders a prominent role in creating the stages for learning.”

“There was a social visibility in what is happening at this roundtable: we are seeing, experiencing how learning happens. We are here exploring the question of why and how to create spaces for experiences of engagement that are memorable and emotional. The metaphor of the stage works for us because it signaled how such a space allows for spanning and overcoming differences, enabling different modes of interaction. This is what learning is about. This was what we are doing here.”



Rebecca Sharkey, EHDD
An Institutional Roundtable at the California
State University, Los Angeles

2016 LSC Roundtable
Boston University

[http://pkallsc.org/
events/2016-roundtable-
boston-university](http://pkallsc.org/events/2016-roundtable-boston-university)



HOW DO WE DISRUPT THE SYSTEM?

REPORTING OUT: A ROUNDTABLE GROUP

"We were asked to articulate and visualize the most audacious question to be asked by a planning team of academics or of academics and architects at the very beginning of planning.

We intend to challenge the current planning process, by asking this question:

How do we disrupt the system?

We began, as most early planning discussions do, talking about how faculty might be involved, how to accommodate different styles of teaching and learning, how to accommodate generational differences. **It quickly became clear we were going around in the usual circles and that the only way a big change in the process could happen was if we disrupted the entire paradigm of planning from the first."**

"If you look at how much disruption is going on in businesses today, you will see how those that are challenging the status quo, that have found a new way to disrupt the old paradigm of doing business are changing the game and having success in doing so.

We want to disrupt, break away from some of the planning processes now in place; we want look at how we plan learning spaces by asking questions that are disruptive.

*How do we create the platform for experimentation?
What does it look like to explore?*

The sandbox classroom is an example of a platform for experimenting used on many campuses. This is a space intentionally designed or repurposed for active-learning, one in which faculty can sandbox (to coin a verb), gaining insights about how teach in such spaces--what works and why--and report back to the planning team. **Faculty could experiment in the sandbox, trying new things, failing and trying again."**

"Our third question is not really disruptive or audacious, but one that must be asked at the very beginning of planning:

How will communities of learners on our campus inform the planning process as we move forward?

Earlier we had discussed existing learning communities—primarily of faculty and staff. Then we thought about student learning communities. **Our main idea is utilizing a community to inform the process. Individuals alone can't bring forth what a group can bring in the overall planning process."**



"This diagram represents our overall process of what questions to ask and when to ask them.

- The middle square represents the learning communities.
- The bubbles are the stages of the process.
- The little sparks are the "disruptions" that create the lightbulbs or the ideas that help to inform the process.

There is a feedback loop to and from the learning communities at each stage of the process. Planners are informed from the very beginning of the planning process all the way through post-occupancy, but always, again and again, going back to the learning communities."

"Why do we suggest this planning process: to support and guide and realize innovative change.

This process should not be top-down exclusively because if administration tells you 'this is what we are going to do' and if faculty doesn't buy in, it will not work. If faculty are the innovators, that's good, but if they don't get support from higher up, it's not going to work. Having an integrated process that includes experimentation from the very beginning and allows all stakeholders to be involved, to have informed input into the process, based on their experiences within and beyond the sandbox, is critical. When do we do this?

We suggest always.
Start yesterday and forever.

The message of our visual is the importance of the feedback loop from the questions we are asking, what we are learning from the experimenting and exploring that is underway, from mining the data from those exploring that informs future planning. Recursive evaluation."



2017 LSC Roundtable
University of Colorado Boulder

Question posed to
Roundtable participants:
*What is an audacious
question to ask at the earliest
stages of planning?*

EXPERIENCE OF THE USER LEARNER

REPORTING OUT: A ROUNDTABLE GROUP

"What spaces should be designed for is to motivate students to take risks. So a space has to be comfortable enough for them to get out of their comfort zone."

This is not an audacious question, but an audacious proposition.

I am sure that on campuses like this where GPA is important, you have students reluctant to take risks. But on my campus students ask "what does it take to get an A?" **So you have to create a space for them to feel comfortable to fail. As an educator, I note that it is also important to have a space where students can feel comfortable navigating gray areas. In learning as in life, things are not always black and white.** One way to make students begin to feel comfortable in a space is to bring them into a space that they don't necessarily expect."

"The space should surprise them. It should invite exploration."

"The space should disrupt them. They should be uncomfortable; their senses and their antennae should be up. And yes, it should motivate them to move out of their comfort zone."

"This brings me back to our earlier conversation within our team about how to motivate the next generation of diverse students, about planning for the students who we know now but also for those in our population that we do not know now."

"I think the essence here is that spaces should appeal to the innate sensibilities of students no matter who they are. **As an architect, I want to bring the intuitive back into thinking about and experiencing spaces and ask what it is about a space that is motivational. How do we bring this conversation to the planning table?"**

"I am thinking about spaces of transcendence, spaces that are remembered as students look back on their college years."

"Spaces that are transcendent go beyond spaces for problem-solving. I am thinking about research on biophilia, about something that students can connect to as a human being that can be tapped into in the planning process. **It is not always just about putting the people in the right place to have the right collision to have the right conversation; all that is important. But there is that intrinsic intuitive spiritual connection that must be made to the space.**"

"That sounds quite impractical at the local campus level—where there are hundreds of spaces, different kinds of spaces."

Think about the impact of a Foucault Pendulum in the atrium of a science building with a stairway wrapped around it. Every time a student walks up the stairway, it becomes a learning experience, an experience that the students will take as they notice that the pendulum was doing something different yesterday.

The notion of visual prompts, of learning on display, of connecting to the history or context of what is being learned in a particular space that can make a space welcoming to students, making them want to be and feel like they are part of a community. "

"But it is more than that. Every space should be considered for its potential as a space for learning—for all students, not just for particular majors in particular fields."



Emily Carr University of Art + Design

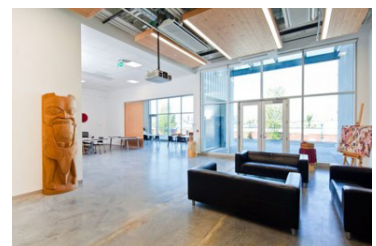
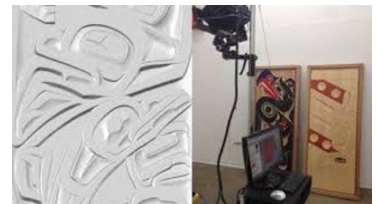


"That happens on our campus, as I assume on many others. Our senior art exhibitions are sited all around campus. Further, faculty in many disciplines beyond the fine arts schedule classes in the museum."

"I really agree with this discussion—emphasizing the role of space in fostering the kind of interdisciplinary communities that campuses are seeking to nurture. Learning is increasingly happening beyond the wall of a classroom, beyond the walls of a single building. **Buildings are increasingly not envisioned as serving a single discipline but as serving many—embracing multi-, trans,-interdisciplinary—initiatives. This reinforces the importance of thinking of about the wider campus green and about "campus as community" when thinking about a major new building or giving attention to the current physical plant.**

What better way to make this happen than through landscapes and traffic patterns—the "desire" lines of people moving across campus to get to different destinations. This gets us back to our earlier conversation about how spaces can be motivational—relevant now and into the future."

"Let me make a closing point about visibility, circling back to our earlier conversation about spaces as motivational. **What I think should be visible is a diversity of people in the spaces. If you want to diversify the population of students on a campus, you have to create spaces where if a person of color or a woman walks into them and sees a person like him or herself, he or she feels like they belong, that they want to be part of that community.**"



Emily Carr University of Art + Design

2016 LSC Roundtable
Georgia Institute of
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THE YARDSTICK: A NEW METAPHOR FOR THE PROCESS OF PLANNING

“Our team began thinking about the dichotomy of approaches to planning learning spaces. One group is concerned about the educational mission and the other about the design work. These are two different perspectives on the process of planning.

Architects are thinking about the start of the design process, the solution at the end, and the design process in between. After the ribbon-cutting, they are off to another project which could be completely different. From the academic perspective, colleges and universities—year after year—are slowly turning through the evolution of programs, cyclically innovating, paying attention to changing culture and context and community along the way. Architects are not familiar with this academic approach to planning, thus our proposition, our audacious question:

What would happen if we decouple the traditional linear architectural process (e.g. programming, designing, etc.) from its position early in the planning timeline and think rather about planning as more iterative...?

The planning team of academics and architects could adopt the academic approach of cyclical, iterative planning of academic programs for a process of prototyping, assessing, and retooling spaces, beginning to think collectively in a new way about learning spaces.

This is a process quite different from beginning planning with the date already set for getting the shovel in the ground. It would essentially give the planning team (academics and architects) more time to understand what works for that campus community.

One example to illustrate this idea.

In terms of complexity, a replacement project that requires swing space. Our idea is to use the existence of swing space as an incubator, a place to test what might be in the new (renewed) spaces and then—as a planning team—analyze what we learn from this experience.”

“It seems rare that such pop-up sandbox spaces happen as part of the planning process once the architects are hired. Why is this?

As architects, we do mock-ups of the exterior wall to look at energy performance. We do mock-ups of interior finishes, ceilings, for example, to gauge performance. Shouldn't we also be mocking up spaces to gauge their performance? **What is the value proposition of how we are working with our clients?”**

“What our group thought about was coupling this new approach to incubating new spaces with the traditional model of beginning with programming. What if we coupled these together to create new kinds of intersections between what campuses do iteratively as new academic programs emerge to what campuses do as new spaces are being planned?

*“I agree with what you are saying and wish to add a slightly different twist. **I think your visual of the yardstick illustrates how much needs to be done before designing and digging.** This dedication of significant time to think through the project is a critical time to get inside the institutional culture, to codify what is important to the institution.*

As you just noted, these are conversations that should be happening before architects are sought or hired. It is time to take the ingredients of what individuals members of the community bring to the table, to begin to shape them into a meaningful language and vision. Many institutions are risk-adverse and not willing to pilot innovative learning environments.”

— Comment from a Roundtable Colleague



Essentially we are thinking about how to open the process up and become more disruptive. We are asking the question about what we can learn from the process of planning while we are doing the planning."

"To highlight our discussion about 'pop-ups,' the idea to about looking at and assessing something that is designed to be a sandbox, rather than a place designed to be permanent. This process frees up the client to say, 'Let's just bang something out and try it for a year. Let's not be afraid to fail. Let's not be constrained by thinking that we have to get it right before we begin design documents.' I think this might be a way an architect can adapt more of the academic modality of planning."

"As a dean, my thoughts about this discussion from our team come from thinking where we are now in the process of planning on my campus. I am doing due diligence in asking my faculty and my students and other constituents to program an innovator space. We do not have one now. None of us have ever seen one. We have not been able to experiment with one. We are all trying to figure out how many rooms, how many square feet we need for something we have never done before."

I found a swing space (unused and unlovable) on our campus. I convinced the administration to let us experiment with the space, to play around in the space. It will probably take us a year for this playing around and by then we will have some valuable data and experiences on which to make decisions about the new building.

I am really aware of the need for and benefit of taking time in the planning process (before the architectural process of programming begins) to have a clear and common understanding of what we want and why."

"As a faculty member, I'd like to extend the yardstick metaphor in two ways. Your visual suggests all the things that need to be known and understood prior to engaging a design professional. From my perspective, I agree academic planning is cyclical and iterative and am intrigued by the notion of coupling episodic attention to spaces of ongoing institutional planning focusing on faculty, program, etc. This brought to mind the thought of building a shell of the new building and then fitting out just part of it and using/assessing it for a year before moving forward and completing the process. That would really be 'loose-fit' planning and perhaps require a different way institutions could think about budgeting for a project."

"From the architect's perspective, that would be a tough sell, proposing to take \$90 million of a \$100 million project to build out, reserving the rest for piloting, assessing, and then completing the entire facility. But one could argue that this process might be less expensive in the long term than remodeling of spaces that do not work from the time they are occupied."

"This approach would also encourage campuses (and design professionals) to do a better job of post-occupancy assessment. **We need to get a better handle—hard data and anecdotal stories—about what difference the spaces make in meeting the institutional vision and goals set for the project.**

- Current trends in higher education value a culture of openness and sharing in the academic culture. How can our planning and spaces promote strategic partnering between students of different backgrounds and disciplinary interests?

Can this happen if we push the boundaries of learning beyond the formal classroom?

- What do we know about different learning styles? What might be the appropriate balance and blend of learning modes in the spaces we are planning?
- What do we know about how content can be delivered and explored to optimize the learning of diverse groups of students?
- How will students, how can students, understand how to use the spaces we are designing and constructing?
- Collaborative environments are as much a result of a collaborative programming and design process as they are the result of an architectural response.
How do we integrate our clients and community more effectively into the design process?
- As a prototype spaces, how will the new classroom help the broader University community beyond the Physics Department access and appreciate active-learning environments?
- How can we create a "place of choice" for the broader community?
- How do we manufacture spatial configurations that drive awareness of the learning experience through visibility, vertical integration, and cultural connectivity?

— From LSC spaces that work portfolio

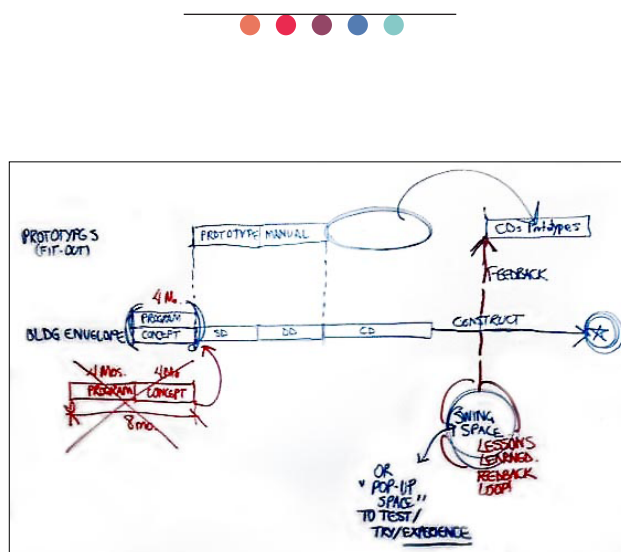


As an architect, I would like to roll such information back into our work. We are all guilty of this, often meeting a client for whom we've designed a building some years back and when I ask for feedback the usual, generic answer is, '...it's wonderful, but....' And I realize that the building was not designed to do that; it was not how it was supposed to be used. Most critically, I realize that we just did not think about that as we were planning. I agree with this conversation that we have to be more deliberate.

I also think there is a systemic problem with the existing process in that it does not give us any time for such experimentation. Everyone negotiates a set program with tight fees and an efficient planning schedule to get to construction as fast as possible to save money."

"After being in private practice for many years, for the last decade I have been on my campus as campus planner/architect. What I've learned over the past ten years is that campuses do not understand the design process and they do not know how much advanced planning needs to happen before an architect is brought to the planning table. We found space in the library to mock-up the kinds of new spaces we were imagining—formal and informal. We invited campus-wide comments on these mock-ups, particularly from students. We were looking to plan a schoolhouse on steroids and through this process we accomplished that."

"My final thought is that the sense of prototyping and looking into the future should never stop. I am now teaching in a classroom that was designed five years ago. It reflects best practices that are perhaps ten years old, given the time it took to plan the building after the architects were engaged. There is no thought if or when this space will be renewed, probably at least not in my academic lifetime. **I propose we always think of the spaces for learning we are building as prototypes, living spaces, spaces that might fail in the future and spaces that are already ready for repurposing, renewing...."**



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HOW CAN SPACE FACILITATE THE PROCESS OF MAKING KNOWLEDGE?

REPORTING OUT: A ROUNDTABLE GROUP

"How can space facilitate the process of "making" knowledge, including demystifying failure, nurturing, and embracing students as assets, and promoting life-long-learning?"

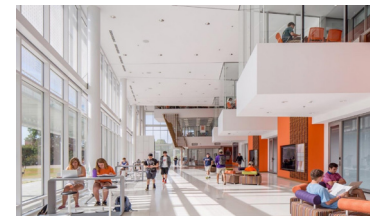
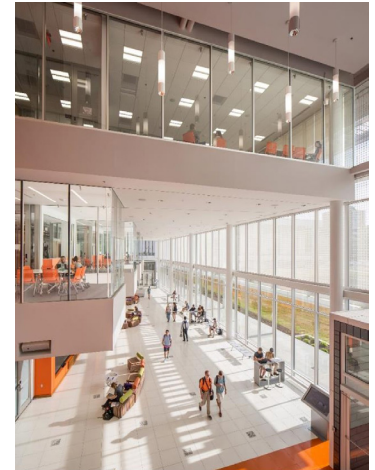
"Our group saw this as an important question as we began to think about students as assets in the learning process. **We understand failure as an integral part of the process of generating knowledge and also understand that this is threatening to students who find failure uncomfortable.** Students know they are coming to our campuses to learn. That does not mean that they are inherently ready to fail."

"Your question about demystifying learning, about nurturing and embracing students makes me wonder how we can build student support services into our spaces, sort of demystifying or destigmatizing the idea of needing help or support or tutoring."

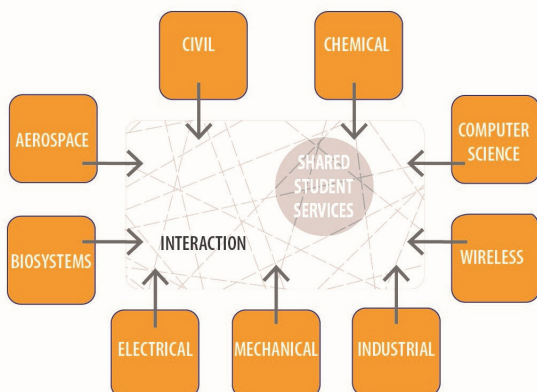
"We thought about that in our group discussion, then we begin to explore other questions about how spaces in how they are designed can demystify failure. **One thought is the visibility of learning. Students should be able to walk by and see into these spaces.** They see learning happening. They will see that experience of learning will happen at different stages and in different ways all along their career as learners."

"As an architect, I think we do not do a good job of convincing our clients how the spaces we design make a difference. I think they make a profound difference to learners, but I know that we have not analyzed our work enough to make a persuasive case to clients. **We have to recognize how institutions struggle with planning without deep understanding about why spaces make a difference to student learners and indeed to all who will experience the spaces we are planning.** We need to be having different kinds of discussions with campus leaders, but also with students."

"Something to keep talking about."



The Watt Family Innovation Center
Clemson University



Auburn University

Focusing on the Future of
Planning Learning Spaces: An
LSC Forum at
George Washington University

<http://pkallsc.org/events/focusing-future-planning-learning-spaces-lsc-forum>



ASSESSING HOW SPACES ENABLE COMFORT AND BELONGING

REPORTING OUT: A ROUNDTABLE GROUP

"We began by exploring questions of diversity, sparked by a question from a person on our team about how to meet the needs of the individual learner in a time when the focus is on team-learning and we soon focused in on this question. We were intrigued by the notion of a learning space as lab, a space in which both student and faculty have agency, where both student and faculty have a sense of wellness, control, and belonging."

"How space for the individual learner can be incorporated into spaces designed for collaborative, team-learning?"

"Then we considered how to determine whether a learning space enables such a sense of comfort and ownership. This is when attention to assessment and research methodologies came into our discussion. **We talked about the importance of mixed methods research, particularly the importance of triangulating qualitative research with quantitative research, the importance of bringing student and faculty voices into that space.** The importance of asking them about affect, control, comfort, community, belonging in the context of a particular space.

Findings from such research are of great value on many levels. **On many campuses such assessments can be a driving force for change, particularly at institutions where numbers are valued (quantitative research).** Moreover, the importance of the individual voice can be particularly powerful for faculty and administrators not yet convinced of this model for learning and spaces for learning (qualitative research)."

"As an architect, I would like to know why these questions are important?"

"We are talking about not privileging one type of pedagogy over another. We've been stuck in the lecture phase for a long time. Now we are in the active learning phase and we should be cautious about becoming stuck again without continuing to assess how spaces matter to all students."



For me this discussion, was a reinforcement about the importance of the role of the faculty member in this environment.

Reminding me that we really have to think about a learning space as a tool that enables each person to do his or her best work.

Ultimately, it is giving everyone a sense of agency, that everyone in the space feels as though I can do my best work here.

If I feel like this space is my own, if I have a sense of belonging, this space is going to be important to my success.

We all knew that intuitively, but this discussion really reinforced that for me.

— Comment from a Roundtable Colleague



PLANNING AND DESIGNING FOR INCLUSIVITY

REPORTING OUT: A ROUNDTABLE GROUP

What would a comfortable learning space be for you?

What would a safe space for learning be for you?

"Our group was drawn together by the similarity of our individual introductory reflections on what keeps us up at night. **Each of us said something about not being quite sure we have a clear understanding of who our learners are, about the students for whom we are planning learning spaces.** Speaking as an architect, this is particularly true for me."

"We moved quickly to talking about conversations that needed to happen early-on between academics and architects if we are to understand whether we will be able to trust each other enough when we start planning. We think some hard questions need to be on the table. We need to be comfortable in bringing forward our questions and concerns relating to students."

We asked, how can questions about who our student population is now and what it will be in the future shape our planning? Although this might seem too broad a question to begin with, we think that questions such as these about students should frame the discussion from the very first. Perhaps in a setting like this roundtable or with focus groups, we thought this would be a good prompting question for a conversation with students.

We think a good question for the planning team to ask each other would be:

How do you describe or define yourself as a whole person?"

"We should enter these conversations without assuming we know the answer. In my recent conversations with prospective and first-year students, some say, 'who I am is all a social construct; I refuse to be identified by race or gender.'"

We have to figure out new tools and questions to understand students entering our campuses today. We cannot continue identifying populations in ways that they do not identify themselves."

"So in the planning process, as we begin to work together, we should be recognizing that our student population is diverse, has so many facets. We hear campuses talk about first generation students, about students of color, about returning and mature students. As we begin to work with clients, we should be asking:

How do we design in a way that eliminates all biases--no matter how an individual student defines her 'whole person/persona'?

I am posing this as a question. I am assuming that we do not have a choice to ask or not to ask this question."

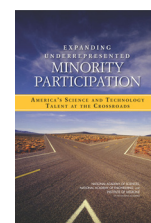
Efforts to promote inclusivity... are not enough unless they are carried out through proactive efforts to encourage the social interaction that is needed to realize inclusivity and the benefits of peer-to-peer and faculty-student interactions.

Peer-to-peer interaction can help increase cross-racial understanding, reduce barriers to integrations in educational and extra-curricular activities, and improve retention and success. Faculty-student interaction promotes the development of educational aspirations, academic persistence, and self-concept.

...[F]urther, institutions should

- 1. Involve faculty in efforts to increase diversity that are consistent with their roles as educators and researchers.*
- 2. Increase students' interaction with faculty outside class by students in research and teaching activities.*
- 3. Create a student-centered orientation among faculty and staff.*
- 4. Initiate curricular and co-curricular activities that increase dialogue and build bridges across communities of difference.*

— National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. 2011. *Expanding Underrepresented Minority Participation: America's Science and Technology Talent at the Crossroads*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12984>.



"Questions about how spaces are comfortable, how they are safe is a good way to start conversations within the planning team. Everyone can come at these questions from a different angle. The architects can say to the client, '**I am uncomfortable in thinking about questions about diversity and inclusivity.** Can you help us understand who your students are, what is going on on your campus?' These are conversations architects have little experience with."

"For me take-away questions from this roundtable will be how to understand the campus culture for addressing questions such as these. **We should know if and how hard face-to-face discussions about diversity are being facilitated on the campus, then work with the client to determine how those discussions (or lack of them) will influence the planning and design of spaces for learning.**

It would be helpful, as a prompt to planning for inclusivity, to talk with clients about what makes a space comfortable, safe for us as individuals and for all learners, rather than for a particular sub-set of today's students. We should also understand our own biases and how they are represented in our interactions with clients and prospective clients.

For architects, perhaps the questions should be: 'What kind of conversations do we need to be cultivating on our client campuses?'

Or perhaps a different question: 'What kind of conversations should we be aware of and reinforcing?' 'What would a comfortable learning space, a safe learning space, be for me, for you, or for your students?'"

"These are hard questions. It is really essential to have such face-to-face conversations about current campus culture at the beginning of planning discussions. "Maybe the questions that architects must be asking each other are:

*What kind of conversations should we be cultivating on our client campuses?
What does our team look like when we walk into the interview?
What are the biases that we bring to the table?"*

"I think that architects today should come to work with a client with the assumption that you will be doing as much inclusive design as possible. The beauty and the challenge is that our population of students changes radically and there is an increasing diversity. **The future flies at us every year.**

The questions are not just about who is on our campuses now, but who will be coming during the lifetime of the spaces we are now planning."

AAC&U CONFERENCE ANNOUNCEMENT: 2017 VOICES LEADING CHANGE

Affirming that people will be the drivers of the institutional and structural transformation needed to support the success of today's postsecondary students and prepare these students for unscripted challenges, conference attendees will explore strategies for leading inclusive campus dialogues and strategic visioning that value and embrace diversity of thought, identity, and beliefs.

The conference will focus on several key questions about individual and collective voice:

- *What do students' stories tell us about the work educators and community partners need to do to help create educational experiences that promote higher levels of learning and engagement?*
- *How do institutions value students' cultural capital and lived experiences when working to advance student success?*
- *How can institutions build capacity for educators to ask—and to respond to—questions about diversity, equity, and social justice?*
- *How do educators prepare students to be productive citizens in a diverse and inequitable society—and to advance the democratic ideals of our country?*
 - *How are campuses designing curricular pathways and learning experiences that encourage students to be intentional and culturally responsive learners, and that address the barriers to student success?*

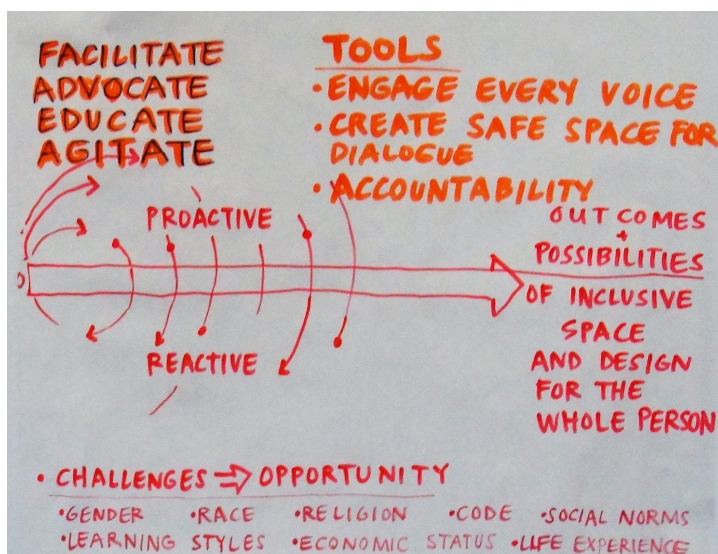
<https://www.pkallsc.org/association-of-american-colleges-universities-aacu/>



"Are you recommending a specific question relating to inclusivity that those responsible for shaping learning spaces have in their tool box of questions to ask at the beginning stage of planning?"

"Not really. We think you walk into planning recognizing the opportunity to design for inclusivity rather than designing to address a "diversity" problem. **We receive feedback from students on planning teams when they feel they are representing the "x" minority community of students rather than all students.** It takes time to talk together without being afraid of pronouns, without people feeling anger and incriminated by language others are using. It takes time to become aware of personal biases. This takes time, especially when the campus does not have a culture of conversations about diversity."

"What we are saying is that we recognize that this is a problem. It is a new problem. It is a new, contextual problem and the response to this problem is too often 'someone else will fix it' rather than having a whole bunch of conversations about who our students are and their self-perceptions even before we start thinking about what the spaces what the spaces might be like."



I am wondering if there is a way to tie institutional goals for student learning, particularly in regard to the context of diversity, to the discussion about spaces and inclusivity and spaces?

Should we be asking our clients what they are doing to create an inclusive culture?

— Anonymous UW Colleague



THE PRINCIPLE OF CHOICE

REPORTING OUT: A ROUNDTABLE GROUP

"How can the principle of choice be leveraged into planning and designing high-performance settings for learning?"

This is the question we ended with; we did not begin with it. We started with a lot of discussion about students, about the experiences of students as learners, and about the potential of empowering the principle of 'choice' for students.

The idea of the principle of choice is when the individual student has a role in making choices about their settings for learning. Having this choice makes the student feel big in comparison to the institution as more choices are available and settings become less prescriptive. This phenomenon relates to the idea of building community, of creating a naturalness of access, of spaces that are not intimidating but rather spaces that signal to students that they can make choices, of spaces in which students have the option to form communities from within and not be dictated to from without."

"Our discussion was informed by a side-bar conversation how a "choice" environment evolved on my campus. We all thought it was a success and set out to determine the attributes of that success. **One was that it was shabby; another that it was centered. It also had a collective dimension while enabling a wide range of individual and group activities. The space was multi-functional, adaptable, and non-institutional.**"

"We understood these spatial attributes as relevant to our concept of choice from the students' standpoint, attributes that could be leveraged more directly in designing and planning settings for learning. We tried to filter that institutional story through the concept of choice, beginning by translating attributes of environments that could be seen as choice-rich or could support choice. **We saw that the principle of choice has something to do with the formation of a common ground, that it is a setting for learning that students feel is theirs, not someone else's space for learning.**"

"This relates to the idea of ownership and freedom of choice within that field of ownership. A sense of ownership and of community scale, the idea of empowering not just individual choice but choice within a broader community of students brought us back to the attribute of centrality.

This is not only in terms of how these attributes are programmed in the planning process, but how they are laced together with different design attributes. The idea of simplicity or plainness (or perhaps messiness) was potentially related to the concept of choice."

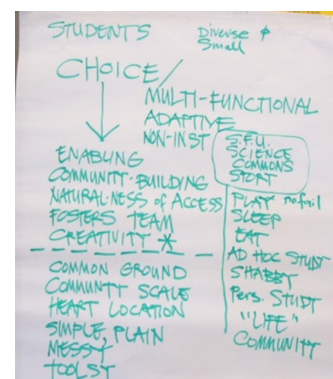
"We thought about learning as being messy, very hands-on. That is the way learning happens and research happens. In planning, we tend to think too much about the end product; we think the space should be like this or like that.

Our spaces should expose more of the process of learning, which is indeed part of the product. **So our idea here is about choice. It is about potential and not so much about product. Without any scientific process guiding our work, we developed the principle:**

Let Happen; Make Happen."

I remember thinking as a kid that the neighborhood hardware store was the best place in the world. That wasn't just because it was full of weird stuff to discover but that you could do something with that stuff.

— Comment from a Roundtable Architect Colleague



FOSTERING INCLUSIVITY

Spaces for Making

How do we, can we, make 'spaces for making' inclusive?

How can inclusive relationships foster meaningful making?

What makes one feel welcomed into or excluded from a particular space serving a particular community of learners?

Can makerspaces feel inherently exclusive for students who are not in a particular disciplinary field or who do not look like everyone now using the spaces?

We began with these questions about inclusivity. **We are aware that spaces for learning influence relationships and interactions and wondered how thinking about scaffolding relationships in 'spaces for making' would foster inclusivity.** We thought about the various users of the space and how they might interact.

The Venn diagram on our poster suggests that everyone can be included in a space and that there can be relationships within and beyond a space. But are they really inclusive relationships?

We considered the idea of meaningful making, which for us implies making in a context in which a multitude of relationships and interactions are allowed and fostered. **This is when we began to put some frameworks around spaces for making that promote inclusiveness.**

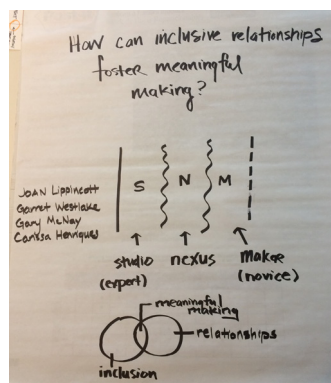
The inclusivity of spaces relates to both users and uses. Greater diversity of tools for making—from yarn, needles, and sewing machines to larger 3-D printers—encourages a greater inclusivity of users.

Spaces identified with certain names (studio or innovation center) or that are located at the nexus of traffic patterns rather than sequestered away in a STEM building are more likely to signal a welcoming space.

Windows into the spaces further promote inclusivity and become windows into a new world of possibilities, spaces where various users can see themselves engaged in a different kind of learning. **We thought about the scaffolding of different uses of the space, irrespective of gender, ability, race, or discipline.**

We keep coming back to the notion of spaces for mentoring, spaces in which different kinds of interactions can happen and relationships can be nourished—peer to peer as well faculty to student.

Makerspaces in libraries are models of inclusive spaces for making. They are open to anyone. There is available expertise, including of student staffers who reflect the diversity of the campus. For beginners, this is a welcoming space in which to join the on-campus community makers.



It is also important to consider what's decorating the walls and how power dynamics within these spaces play out.

WHAT KEEPS ME UP AT NIGHT WHEN THINKING ABOUT LEARNING SPACES

"Thinking about the disconnect in the design of spaces and the notion that students need to be able to feel that the space is personal to them, that when they go into a space, it is not daunting."

"Thinking about community, about bricks and mortar, about online, about what cannot be done online. Thinking of physical spaces as something that is increasingly important and I don't mean classrooms."

"Makerspaces are popping up all over our campus and my observation is that there seems to be a technological determinism that goes into the design of these spaces, or perhaps it is disciplinary determinism."

"What we are talking about on our campus now is co-working spaces, accelerators and incubators. Is this a coming thing?"

— Roundtable Questions & Answers

An LSC Roundtable on Spaces for Making: VentureWell Post-Conference Event

<https://www.pkallsc.org/venturewell/>

