



LSC Roadmap Roundtable Collection II: Job Descriptions

1. Stanford University: A 21st Century Classroom for 21st Century Learners
2. Worcester Polytechnic Institute (WPI): Spaces for Project-Based Learning
3. Coalition for Networked Information: Libraries as Spaces for 21st Century Learners & Learning

JOB DESCRIPTION A 21ST CENTURY CLASSROOM FOR 21ST CENTURY LEARNERS

LSC Roundtable at Stanford University — June 2018

Understanding what a space should be, should become, how it enables the desired experiences of those who use such spaces now and into the future is the fundamental responsibility of those who plan, use, and assess spaces and places for learning—all stakeholders in the institutional future.

This understanding of how spaces matter to the experience of learners and learning builds on a foundation of a shared vision among stakeholders of what learners are to become and of the experiences that enable that becoming.

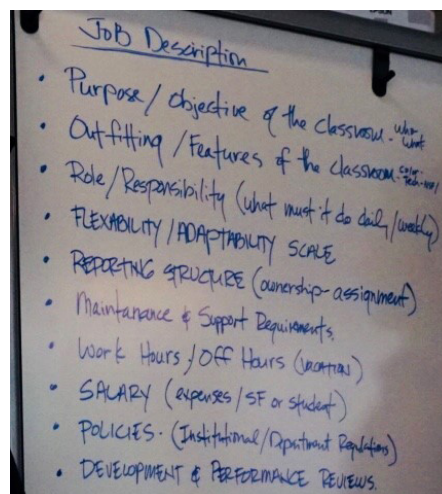
Exploring and realizing such a vision is a complex, iterative process.

Participants in this roundtable began by sharing what they had learned from years of experience—as design professionals and as academics from various spheres of responsibility—in planning, shaping, and assessing classrooms in the undergraduate setting.

From their conversation emerged a set of principles about the “ideal” classroom, they then extrapolated those principles into a job description for the 21st century classroom for 21st century learners.

Examined carefully, the various descriptors of what a classroom should do, as articulated by participants in this roundtable, can be translated into an assessment template, a means by which to determine if the classroom “works” as planners intended, if it serves learners and distinction in the near and far future.

- The classroom must:
 - Provide an environment that supports all learners
 - Be flexible and adaptable, simple to use, supportive of learning goals set by the instructor
 - Be available as needed during business hours, and willing to work evenings and weekends as needed or available.
- The classroom should:
 - Take a leadership role in connecting faculty and building a community of learners
 - Work with little supervision
 - Have a major role on the campus in making new kinds of communities emerge, connect
 - Be “super-duper” flexible
 - Be able to attract and engage a broad “user” base.
- The classroom must fit the culture of the campus, serve the community.



A CONVERSATION BETWEEN ACADEMICS AND
ARCHITECTS — STANFORD UNIVERSITY
June 2018

As an architect, thinking about a job description for a candidate for a position in my firm, I would begin by communicating our culture and language, about who we are as a community.

This is the way we should think about a job description for a classroom because, in the end, the classroom we are planning must fit the culture of the campus, reflect the values and identity of the campus.

I think what we should be communicating is a culture that is student-centered—that the purpose of the classroom is to support the students becoming what the institution or department wants them to become, and what society wants them to become.

I think that is too prescriptive. An institutional culture that is student-centered or, better yet, learner-centered, should be focusing on what students want to become—all students.

I would like some clarity on the kind of space we are talking about? Is it only a formal classroom? Is it only a specialized space that can only be used for registrar-assigned classes?

We are talking about spaces that could serve many disciplinary or interdisciplinary classes, not spaces that only serve one purpose... unless they need particular tools for disciplines with unique needs. This brings us back to the institutional culture—thinking of how adaptable a space would need to be.



A discussion about purpose deserves a longer discussion, but in our group we moved to the section on the “characteristics” of the candidate. In the context of a space as a candidate. In thinking about the “job description,” we talked about what it should be able to do, about its qualities of character.

Here many things came to my mind: how it is outfitted now—floors and walls and furniture and technologies—how long it will serve into the future. We asked, does the job description indicate that the classroom has to anticipate the future, be easily and affordably adaptable, and easily accommodating of emerging technologies? We are really talking about affordances.

We can think about many different things—how much weight the wall will need to carry, how high the ceiling needs to be (what is the aspect ratio) if part of the job description is to show real films. It is important to define what it is you want to be able to do in the space.

Before you start thinking about the space!

Exactly!

Central to the job description should be the ability to support multiple learning modalities and multiple teaching modalities.

The job description should include examples of both—lecture mode, group discussion. We had a high list of physical considerations, including the ability for all to hear and to be heard well, colors that are conducive to learning, and the ability to have a line of sight no matter where you are in the room, even when breaking into groups.

The job description should be that the space will allow people to move about, allow the right amount of real estate per student (which has really changed for us on our campus), and for the instructors to move about the space easily.

Like Maslow's hierarchy: we need light, heat, food, water, and safety.

One thing the room should be able to do is give both instructors and students the ability to display and manipulate information, to create and share things for critiquing—within and beyond the walls of the space. In summary, we were thinking of features and characteristics that facilitate and enhance different learning and teaching modalities.

Does ability to reconfigure fit here?

Yes, but let's say “on demand” in an effective and efficient manner. The classroom has to have a certain level of flexibility. It might be a space that requires a team to go in and change it or it might be a space that the users can change on their own.

Let's think about it this way: there needs to be a space in which a faculty member can try out new approaches, a space designed to be a more effective learning environment for their students. It is not like, "As faculty, these are my goals and as a student, these are my goals."

If the students are to achieve goals set by faculty, the space itself needs to create a partnership between the faculty and the students. Then the space achieves the goals set by a department or the institution.



We talked about sandboxes, a space where faculty actually have the flexibility to try things out as a step to make highest and best use of the spaces.

We talked about this from the perspective of the space having a "performance review," indeed we thought that spaces should always be under such a review, a place in which things are tried, and where things keep being tried. Perhaps we should always be thinking of a classroom as a sandbox.

I agree, because many times faculty want a safe space for trying out something new, to experiment with their teaching, play around with different kinds of pedagogies. For both faculty and students, this cannot happen unless everyone feels that the classroom is a safe place.

The job description should include mention that it will "report" to someone, that there will be people responsible for and influencing how it will be used and maintained.

We should keep emphasizing that the space is responsible to its users. Is a classroom responsible to its stakeholders or are they responsible to it?

I am thinking that those who came together to shape and furnish the room should share some responsibility for making sure that it performs as intended. I think there may be two kinds of reporting structures.

One is the institutional one—the person responsible on campus for different practical aspects (on a daily, weekly basis) and the other more responsible for the more philosophical aspect for fulfilling its roles and responsibilities—like someone at a higher level who makes decisions about who will be using what space when and how it is to be used.

In our group, we thought a classroom needs:

- A concierge
- An evaluator, someone to do the annual evaluation and performance reviews
- Someone responsible for monitoring and reporting on the use of technologies, use of lighting, use of energy
- A means by which it captures usable data from whatever devices are used in it so the information feeds into the assessment process.

What we were thinking about in developing this list was who "owns" this space. We were asking who are the people the classroom will be reporting to, responsible to, working with?

There are two aspects to this: one is reporting as it pertains to the use as an instructional space and the other is reporting as it pertains to how the room functions as a space. Are the chairs broken? Does the media equipment work?

This speaks to the organizational culture. I work in a very collaborative architectural firm where committees make a lot of the decisions. It does move slow, that is the way it is and we tend to make better decisions than we would alone, individually. (Architect's comment.)

At this point of considering roles and responsibilities of a classroom, we need to think of who owns the space, responsible for the success of this room—for developing and mentoring and making certain the classroom is living up to its job description.

This was the missing piece in planning a new classroom on our campus. 'They' had designed an amazing space but no one could figure out who owned it so it slowly faded away. It did not live up to its potential, in part, I believe it was because all the stakeholders were not involved early-on. In our group, we thought of who should be on the list of responsible stakeholders, that it should include maintenance people and perhaps even donors. (Faculty comment.)



If we want this classroom to be low maintenance, we need to think about its salary and about the salary for the people who maintain the space.

Some of this can be taken care of with some redundancy of systems and ways of connecting. Something breaks, use the VGA; one of the projectors is down, get the other one.

Other things to think about—the classroom:

- should be programmed to anticipate future needs and to adapt economically
- have a salary that realizes a reasonable return on investment on several levels, including student enrollment and success
- serve as a venue for professional development of faculty.

If no learning is actually happening, that would be a negative return on the investment.

Perhaps we should say salary “commensurate” with the investment, as we want to recognize the real cost of many of the affordances and other features that help make learning happen. Unlike an individual, here there is an initial cost to build/create this classroom and there are ongoing expenses.

If it is based on ROI, if your classroom is creating a significant return on investment, you will most likely to have put more salary into the room. The approach to expenses should be the life-cycle approach, where you acknowledge up-front that if you invest more in the right way up front, you will reduce your long-term maintenance and operations costs.

One thing related to cost we spoke in our group about was about costs related to keeping the larger building working—costs that are behind the scenes and go beyond annual budgets.

I am now teaching in classrooms that were modeled and opened over 12 years ago and nothing has been done to them since. They are not really active anymore. They would not fit this job description now; they probably never did.

Donors give wonderful gifts for the initial project but rarely an endowment to support the spaces as they age. We tried annual budgets for years to do some essential updating—for the space or for the technologies. (Faculty comment)

This brings us back to the issue of assessment, to our discussion about how you realize the highest return on the investment in space and how you know.

Can we say it is the responsibility of the stakeholders to undertake the performance review?

How often should these reviews happen? Will the classroom's “salary” depend on its performance?

Is support for continuous improvement part of the initial investment in the classroom?”

This might seem like a minor thing, but I think it has to be both a development and performance review.



= *Performance* means “how did you do relative to what you were supposed to do this year?”

= *Development* means that stakeholders continue to develop the identified gaps (it's been three years since the technologies were upgraded, etc.).

Both reviews have to be recognized in the job description for a space, just as they would be in reference to a potential or current employee.

A performance review is to rate how you met your roles and responsibilities. On our campus, everyone has a personal-action file. I think something like that needs to be included in a checklist for the classroom's job description, that it would maintain a personal-action file.

What might it mean if there were mentors to classrooms, that classrooms learn what works in peer spaces and that ultimately a family of classrooms evolves intentionally on a campus?

During the process of reviewing if a classroom works as had been outlined in the job description prepared by the planning team, might we also be reviewing the planning team?

- Was it a good team, a lousy team?
- Did people on the team know their business, take ownership of the process all along the way?



The classroom should:

- Take a leadership role in connecting faculty and building a community of learners
- Work with little supervision
- Be a self-starter
- Have a major role on the campus in making new kinds of communities emerge, connect
- Model for its peers what a classroom is to be
- Take advantage of some of the new technology architecture to bridge and scale classrooms
- Be “super-duper” flexible
- Able to attract and engage a “user” base
- Be flexible and adaptable, simple to use, support learning goals
- Be available as needed during business hours, and willing to work evenings and weekends as needed or available
- Be low maintenance and available for maintenance and support, as needed.



JOB DESCRIPTION FOR A CLASSROOM

Facilitate and enhance learning.

The successful applicant will be much more than an indoor space with chairs and a chalkboard. The classroom must be multi-purpose (lecture/workshop/collaborative/laboratory) and adaptable on demand. The applicant must provide ways for learning to be student-centric, where appropriate, and must provide the ability for small group learning and reporting out.

Reconfigure on demand in an efficient and reliable manner.

As a modern space, you must be flexible, multi-configurable, and easy to return to basic layouts. Your space must be flexible enough for easy reconfiguration multiple times during a single class. Your structure should never force a particular learning mode; rather, you must support multiple existing learning modes and be flexible enough to support future ideas about learning.

Supporting student engagement means changing things up every so often, and taking a moment for students to stand up and move their chairs and tables around can provide both a needed break from sitting, as well as changing the space for a different learning activity.

Take a leadership role in connecting faculty with students, and students with students.

Inclusive learning spaces facilitate faculty and students understanding and supporting each other's perspectives and understandings, setting the stage for a true meeting of minds. You must serve as a model so that faculty and academic leaders see possibilities rather than barriers. The successful candidate will attract the attention of academics interested in exploring new teaching possibilities.

Take a modest role in building new kinds of communities.

Capable, flexible, fluent work spaces are always in demand. With sufficient time set aside for faculty professional development, you will lead conversations about the future of teaching.

Serve as a model of an ideal classroom.

Be flexible, forward-looking, and non-dogmatic.

Provide a venue for professional development for faculty.

If the classroom is a great place for learning for students, then it should be a great place for learning for faculty as well. Schedule sufficient time for faculty to experiment.

Play well with other classrooms.

Activities within this space should not in any way disturb learning in any nearby or adjacent spaces, demanding excellent sound isolation, no direct paths of light extending from, and so on. The learning curve for using this classroom will be shallow enough that it won't scare late-adopters away.

Attract and engage the user base.

Regularly highlight the dynamic environment enabled by your design, through social media postings, conference presentations, and journal articles. Include live feeds from the classroom to highlight the evolving pedagogical environment.

Must work hours assigned.

Reliability and predictability are of prime importance: state-of-the-art tools are expensive nuisances if they can't be relied upon to work first time, every time. Likewise, interface design should support untrained users, emphasizing ease of use over novelty. Appropriate support and downtime should be scheduled to ensure high reliability during scheduled hours.

LSC Roundtable at Stanford University - June 2018



JOB DESCRIPTION: SPACES FOR PROJECT-BASED LEARNING

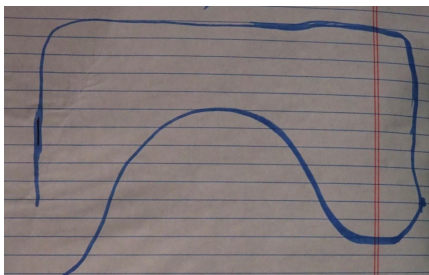
LSC Roundtable at Worcester Polytechnic Institute (WPI) — June 2018

In imagining the ideal learning space for project-based learning, I asked myself "how to build a space that allows for creative thinking?" My first thought was "how to think outside the box?" To do that I felt I needed to tear down the walls. So naturally, a place with no walls is an outdoor environment.

I then tried to incorporate aspects of the natural environment that served as a metaphor of the creative and problem solving processes. The hill is a natural obstacle or problem and represents the process of how you think about problems, incubate solutions, work to overcome them and the euphoric moment of summing / solving the problem / obstacle.

Then I realized the hill could evolve into a sine wave to more accurately represent the innovation process where there are natural periods of discovery, problem solving, summing, and then realizing the next challenge or obstacle and finding yourself at the bottom of the next hill.

— Kelly Ivanoff, Colonel, U.S. Army, Chairman, Fellows Program– U.S. Army War College



This June 2018 LSC Roundtable focused on a specific pedagogical approach—project-based learning—and on the spatial characteristics and affordances important to the success of that pedagogy.

The Roundtable began with participants drawing and describing their mental image of the ideal space for PBL. This was followed by conversations between individuals and teams—about the characteristics of spaces that support the goals and vision of project-based learning.

Attending to a job description for spaces and places for a particular pedagogical and programmatic approach (such as PBL) is an opportunity to consider the utility of learning spaces and places into the future, thus an opportunity to bring diverse voices to the table beyond faculty immediately responsible for that particular approach.

Questions, such as these posed by participants in this roundtable, substantiate the value of having diverse voices involved in planning learning spaces of all types:

- How to overcome the impediment of an academic culture classroom learning where "learning by doing" is considered an inferior mode of learning?
- How can the library optimize limited space to provide space appropriate for PBL learners?
- How might the project-based learning approach work for graduate students in the social sciences?
- How can we ensure all learners—beyond those involved in PBL—have choices of spaces and the authority to shape spaces to have a sense of ownership in their learning?
- When the ideal space is not available, how can we be creative with existing spaces to embrace project-based learning, active learning, learning by doing?
- How to make the case to leadership that funds—capital and/or annual—are needed if our spaces are to reflect and enable us to realize our vision for our learners?



A POSTER SESSION CONVERSATION BETWEEN
ACADEMICS AND ARCHITECTS — WORCESTER
POLYTECHNIC INSTITUTE
June 2018

I.

Our team defined project-based learning spaces as spaces for learning collaboratively. They are spaces designed for connectivity—in terms of technologies, with people on campus and in remote parts of the world.

These spaces should be flexible in many ways from the perspective of discipline and of how many things are movable, including the walls.

These spaces should accommodate multiple or differing group sizes and be adjacent to all things relevant to students engaged in their individual projects.

These spaces should be designed to give those using them a sense of ownership of the space. We are thinking of a space, of a learning environment in which students can begin to solve problems relating to a real-world need. It has to allow students to focus directly on a particular need rather than making it difficult to do so—which might not be the case in a traditional classroom.

We spoke about spaces that are flexible but with boundaries, spaces that promote private thinking and public expression, for individual and small group work and for presenting and showcasing work.

For me, it is clear that project-based learning requires safe places for tinkering, incubating, innovating, sharing, and celebrating work-in-progress, work done. Such spaces have a good balance between time for working alone and working together.

It is a space that breathes, that allows people and ideas to go in and out.

A PLACE THAT
TAKES INDIVIDUALS
AND COMMUNITIES
TO NEW PLACES,
OVER A LIFETIME.

Further, learners involved in PBL learning want time to work independently, yet to be surrounded by colleagues. Part of the sense of comfort of being in such a community is that it allows people to speak their mind, but also to be on their toes so they are being “in the present” with others.



II.

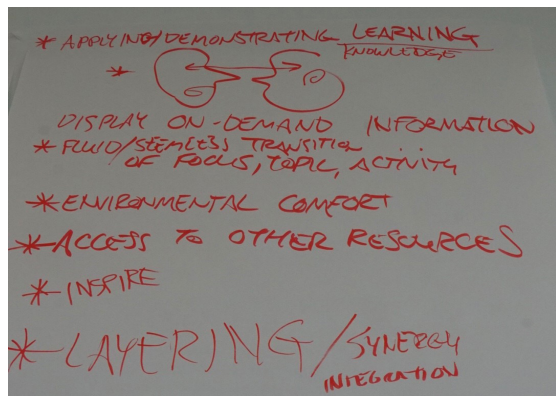
Our team thought it important to know each other before talking about a job description of a space for learning. We began by sharing our personal job descriptions at work and realized how diverse we were and that this was an attribute that made our discussion rich.

Our discussion was further enriched because we went outside on the grass for the two hour discussion. That we were not actually in a classroom influenced how we began defining what a classroom was—that it is really just a place to go.

Then we talked about who would go to these spaces and about why they would go there, about what would happen there: doing and creating things, exchanging ideas, thinking critically, getting out of their comfort zone. (These, as we all know, are key attributes of a liberal arts education.) We imagined these PBL spaces as somehow elevating users to places they did not know they could reach or even could aspire to reach.

Being such a diverse group meant we had an interesting dynamic in our conversation. We each talked about what worked best for our discipline and sphere of responsibility.

Collectively we arrived at the sense that a layered learning space would be best to encourage the engagement of students with students, and students with instructor. We all feel like we learn best from each other, whether student or instructor.



Perhaps this is most certainly the case in project-based learning. PBL calls for the opportunity to share and integrate knowledge and experience in a way that allows all to improve on what they know and how they innovate.

This space would have different possible layouts, perhaps captured and defined by planners in a "catalogue of layouts."

This catalogue would be a tool for selecting the particular spatial layout for a particular assignment, project, etc. It would illustrate how the space could be used collaboratively, for independent learning, or for a lecture (top-down content presentation).

This is because immediately when someone walks into a PBL space, they should be able to tell what will happen, what they will be able to do at that time, in that place.



III.

In our group, we discussed the many different approaches to project-based learning—sometimes individual, sometimes in small groups, and sometimes in designed PBL spaces for 30 – 60 people. These different approaches require different spaces.

We thought of how learning in PBL happens, that it takes place with a fluid transition of learning as collecting knowledge to learning as experimenting with materials, developing projects.

We think *place* of learning might be better than *space* for learning.

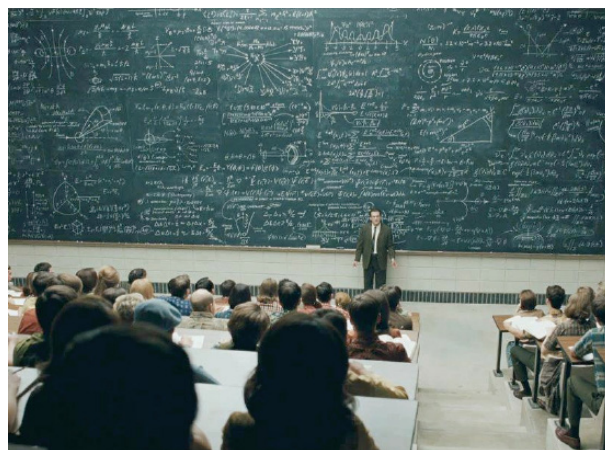
A place of learning has boundaries, but is flexible. It has warmth, life. It has personality, an identity. This is for us an important aspect of an ideal learning environment. Project-based learning is not a place; it is a process for learning.

The expression "deep dive" was appealing to us. We took it to mean that those in a particular learning environment can make a deep dive into a particular subject and—with a wonky fanaticism—have room for thinking differently from ways they had thought of before.

Those involved with project-based learning are hyper-focusing on the business of learning, of learning information, and of learning from each other and doing so in a fanatical way.

This is what I personally think of project-based learners: a fanatical group of people learning in quite a different way than those sitting in rows in front of an instructor who is pouring knowledge into their heads.

What happens in PBL spaces is the face-to-face sharing that is really important in project-based learning, on and beyond the campus.



IV.

In thinking about our charge to define a job description, we thought the space had to reflect the culture of the institution, just as an employee would be expected to do. Both accountability and responsibility are tied to this notion of culture. We were also thinking about mission, about the pedagogic expression of that mission and how that influences the spatial expression of the institutional mission.

The mission over a lifetime of spaces and places for project-based learning is to create responsible citizens as our learners go out into the world.

WPI is a sub-community and our intent is that when they go out and join larger communities they know how to engage and encourage each other. This is our institutional mission.



It is hard to think about a job description for a single space if you do not pay attention to its relationship to everything else. It is the same when hiring a person; they are part of a whole, broader organization. And, just like for a person, spaces and places we are talking about must be accountable.

For WPI the measure of the success of a physical space for PBL is that the students produce reports that show their projects are innovative, based on good science or good engineering, or good understanding of a social situation.

Every few years we do reviews of the major and interactive qualifying projects to answer the question, "is what our students are producing good enough?"

When I think about assessing the impact of space, it is easier to define from negatives to positives. A PBL "project" that might receive a negative review most likely has been done start to finish in a very large university laboratory where students have to fight to hear each other and their advisor over the din of other experiments.

Size and acoustics may not be the best possible correlation of architectural environment to outcome of learning, but it is one thing that we can measure.

If we are defining a job description for a space based on a job description for a person, we might also want to explore how well it plays with other spaces.

- Is it visible?
- Is it on the way to someplace else where you can see it?
- Does the space feel present?
- Is it connected to places where people are actually going anyway?
- Does the student engagement continue after they leave your space?
- Are faculty and students always talking in the hallways?"

These might not be really measurable attributes, but perhaps the qualifications of the space are the attributes of colorful, variety, and messy; they should not be fixed or precious. We've not yet mentioned art or plant life as prompts for creativity; I always feel more creative in the presence of art and plants.

Spaces should inspire. They should be beautiful, calming, with the art perhaps like a visual Mozart, something that will make you feel comfortable and well-proportioned, not too jarring, not too low.

There is both an art and a science in it and that is why I am an architect.

Because I am too practical to be an artist and too creative to be an engineer. It's the foot in both worlds and the convergence of everything that is exciting to me to be working on educational projects.

Everything is beginning to converge; everyone is beginning to see all these connections.

And really, when we all begin to do the deep dive in this business of giving attention to spaces (places) for learning, the more we all begin to see new kinds of connections. [Architect comment.]

V.

What is happening on our campus now is that art is more than décor. It is art that is an idea that is representative of the mission of our institution or somehow connects to the pedagogy, or it is a product of what our students and faculty have created.

Our art is about engaging with the campus and local communities. We are trying to use art in a way that seems seamless, not confined or programmed to serve a particular place.

Our team also spoke about measuring success. I think the space should be monitored every hour or two for a week and see/if how the room is being used in different ways by multiple instructors and groups of students and maybe by others in the community.

That would be a sign of success—that the space is flexible, that it allows people to own it, and that it does not always have to return to a default position. If it were a truly successful space, it would allow being changed all the time.

My personal measure of success is that the space is not a roadblock for my working with my students in enabling and engaging them as learners as I plan and hope for.

Let me ask, looking at this list of items for a job description for project-based learning, could not many descriptors also fit the traditional lecture hall that the Socratic method values: to encourage, inspire, engage learners, showcase results. I am not saying there is a strong similarity between lecture and project-based learning. There are many differences, but much overlap. Perhaps as a job description for a PBL space becomes final, we could note that many values mentioned here can be applied to other spaces/places for learning on a campus. [Faculty comment.]



Since 1970, project-based learning has been the core of WPI's undergraduate curriculum, known as the WPI Plan, providing students a professional and social context to apply their acquired skills and abilities. (<http://wp.wpi.edu/projectbasedlearning/proven-pedagogy/project-based-learning-at-wpi/>)



LIBRARIES AS SPACES FOR 21ST CENTURY LEARNERS & LEARNING

Report of an LSC/CNI Roundtable

Setting the Stage

A group of librarians, architects, and facilitators gathered in Washington, DC, for an LSC/CNI Roundtable in December 2018, in which they would draft documents, or “job descriptions,” identifying and describing key characteristics of spatial types within 21st century academic libraries. These documents would eventually serve as a foundation for assessment of those spaces. The event was co-sponsored by the library/IT organization the Coalition for Networked Information (CNI) and the Learning Spaces Collaboratory (LSC), a non-profit organization dedicated to improving the process of planning learning spaces.

LSC Roundtables are designed to focus on the future of planning learning spaces for 21st century learners. CNI’s work in this area focuses on spaces that have a particular connection with information organizations and professionals, such as digital scholarship centers, learning or information commons, libraries, computing labs, multimedia centers, and centers for teaching and learning. This roundtable was designed as a resource for the LSC emerging Research Initiative (RI); participants were challenged to identify key characteristics of spaces that are becoming the kaleidoscope of spaces in 21st century academic libraries. The conversation would set the stage for post-occupancy evaluation of these particular environments.

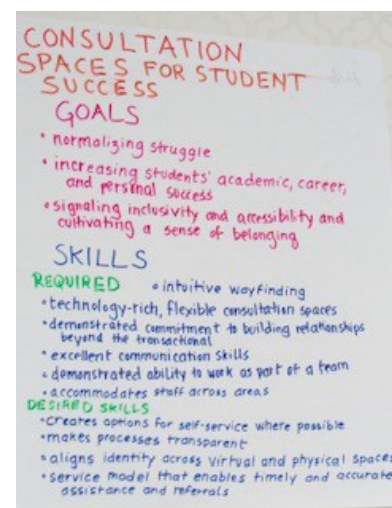
In her opening remarks, Learning Spaces Collaboratory (LSC) principal and lead workshop facilitator Jeanne Narum emphasized the effect of space on the experience of the user, noting this is one of the persistent issues for librarians in planning spaces. She suggested that prompting questions can spark creative conversations within the planning team about how to connect students and experts, and how to make a space less mysterious and more welcoming to users.

Priming participants in this manner, Narum urged the librarians and architects present to be thinking, continuously throughout the Roundtable, about ideas to take back to their campuses and offices for their colleagues to explore.

At this time, she also planted the first seed of the notion of “permeability,” an emerging concept of what spaces should be, what kind of serendipitous collisions, interactions they enable, the kind of interactions—immediate and virtual—that are becoming the hallmark of the 21st century academic library.

One aspect of LSC Roundtables is the involvement of architects who provide perspectives on learning spaces projects, share stories about recent projects and interact actively with academic participants throughout. The four participating architects at this event presented aspects of their own recent experiences with library design.

Another feature of LSC Roundtables is that these are working sessions, with participants engaged in small groups to discuss issues and ideas presented in opening remarks and to translate them into resources that are useful for their individual campuses and the broader community. This LSC/CNI Roundtable focused on developing job descriptions for different spatial types within a 21st century academic library.



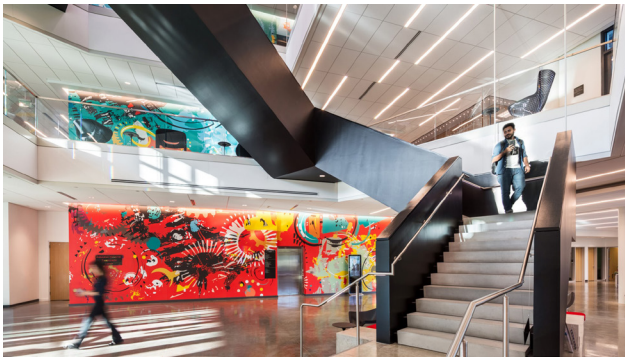
LSC POST-CONFERENCE
ROUNDTABLE: CNI FALL 2018
MEMBERSHIP MEETING

Report by Diane
Goldenberg-Hart, CNI

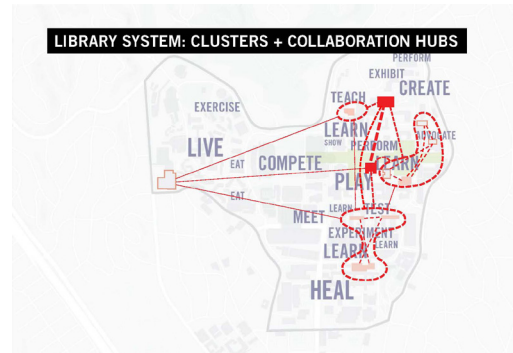
THE ARCHITECTS



Damon Sheppard presented HOK's work at the US National Library of Medicine. He described the challenges of reconfiguring and improving the efficiency of both the public and staff spaces, incorporating strategies to help promote permeability that foster chance encounters. Project drivers included creating a flexible and collaborative work environment, increasing the amount of workspace, and preserving the site's historic character while meeting programmatic needs.



Kalyn Pavlinic of Shepley Bulfinch described the processes and goals for the Alfred R. Goldstein Library at the Ringling College of Art and Design in Sarasota, FL. The idea was to create a collaborative space that could serve as an extension of the studio experience and the student union, blurring boundaries between the interior and the surrounding landscape. The strategy was to create an environment that was approachable, with transparent, glass entryways, and with stairs as sculptural objects that could serve to connect and orient visitors.



Today's students are digital nomads with a new relationship to time, place and education.

Derek Jones of Perkins+Will described renovation work on the Douglas Schumann Library at the Wentworth Institute of Technology in Boston and the Waldo Library at Western Michigan University. In these projects, designers tapped into lessons from other space typologies, especially from the fields of hospitality, retail and branding. Derek discussed the idea of the 'uncommons'—the zoned 'connective tissue' between destination programs, that flex and adapt to changing demands. The design strategies sought to foreground culture and serendipity over transactional operations to meet the growing experiential expectations of students.

Janette Blackburn, based on her experience with library planning in her work at Shepley Bulfinch, outlined challenges inherent in libraries in all settings, as well as approaches to dealing with those challenges. She discussed several projects, including the library at Virginia Commonwealth University, the EdLab at Teachers College Columbia, and the library at the University of Notre Dame. Challenges included explaining the idea of the library to those who might or might not normally go inside, breaking down facility scale and creating neighborhoods within the space, and designing flexible spaces that could be open or closed depending upon needs.

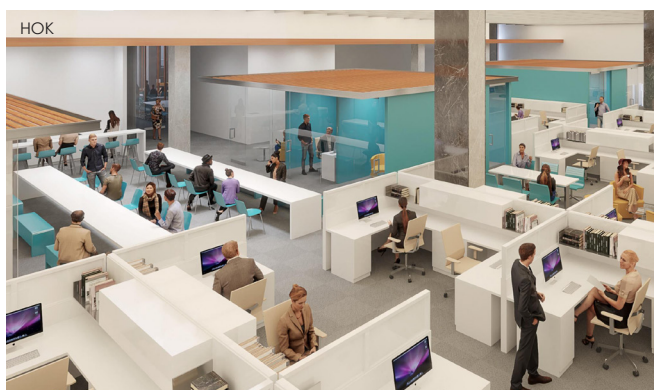


THE JOB DESCRIPTIONS

1. STAFF SPACES

In addition to being a supportive, welcoming area for staff, this space should encourage permeability with students: security/glass doors could be open or closed depending upon the time of day, and the space could be used by students outside of staff work hours while maintaining its security.

It should be an approachable, inviting space with attention paid to flexibility and inclusion, perhaps in the iconography on display, as well as sensitivity to the privacy needs of staff and of the data with which they work.



Must be able to:

- Support staff morale and retention
- Be flexible enough to accommodate staff and student needs
- Manage permeability
- Balance professional collaboration and personal space
- Accommodate “choice” work environments
- Reduce barriers based on hierarchy

Must:

- Be approachable
- Reflect culture/personality and goals of the institution
- Be sensitive to privacy needs
- Support staff wellness and sustainability
- Be able to leverage technology to optimize room scheduling
- Support and encourage social interaction

Must accommodate/nurture experiences:

- Be welcoming/purposeful/comfortable
- With a digital promotion wall
- With nested services—concierge/navigator/expert
- Accommodates/welcomes external communities
- Promote serendipity
- Be as hospitable as hotel lobby bar for receiving and orienting users

THE JOB DESCRIPTIONS

2. INNOVATION ZONES

This space should support various types of experiences: it should incorporate robust multi-media, making, recording, consultation, collaboration, and focus areas. Small enclosed/semi-enclosed spaces are important components, as is a large, flexible/changeable area.

Friendly and welcoming to non-academics as well, designers of this space would look to the hospitality industry, co-working spaces, and other spaces outside of libraries from which to draw inspiration.



Must to be able to:

- Bring together: Faculty/students/industry/public partners with library and learning expertise
- Encourage exploration through a variety of means:
 - New pedagogies
 - Curricular assignments
 - Faculty/ student projects
 - New ideas

Must have technology and equipment to accommodate:

- Data visualization
- VR/ AI/ immersion/ gaming
- Digital & physical making
- Long-distance collaboration
- Team-based activities

Must have spaces that afford a variety of activities:

- Small enclosed & semi-enclosed
- Convertible-day/evening use
- Ubiquitous writable surfaces
- Seamless, easy to use technologies
- Variety of environments
 - User-controlled lighting
 - Many types of furniture
 - Multiple scales and atmospheres
 - Inclusiveness—gathering without segmentation
 - Support of food and drink
 - Large/reconfigurable/enclosed teaching space



THE JOB DESCRIPTIONS

3. ENTRY SPACES

This group defined their space, which they also called “hawker” space, as that area encountered right at the front of the library, just as visitors enter the facility, and they took their inspiration, in part, from retail models.

This should be an engaging space, tailored to the audience so visitors know it is for them. It should regularly offer something new and unpredictable, and it should be flexible in programming format, capable of reacting quickly to the environment.



Purpose:

- Engages
- Communicates a message
- Listens/empathic resource
- Customizes
- Commands Attention
- Leads to Purpose

Position Requirements:

- Delightful/charming & engaging
- Unpredictable to visitors
- Flexible—ambiguity and change
- No limitations on time
- Superb geo-location skills
- Fluency in digital and analog platforms
- Ability to create a 52-week schedule and willing to change at the last minute
- Aware of current events
- Ability to work with multiple bosses

Assessment

- Repeat customers
- 5-star social media rating
- Went viral
- High referral index
- Attracts donor interest

THE JOB DESCRIPTIONS

4. QUIET SPACES

This group envisioned their space as part of an ecosystem to support learning, rather than as one single type of space. Conceptualized in part to respond to a universal need for focus, participants pointed out that, often, students don't even have a private living space, and that even staff might need respite from the 'cube farm.'

The elements of this space should attend to both acoustic and visual sensibilities, and can be considered as on a continuum, between being alone versus being alone together.



Shepley Bulfinch

Purpose: intentionally supporting students' and staffs' needs for focus, concentration, and contemplation

- Features: to have a variety of quiet spatial types giving attention to:
 - Acoustics and visual
 - Alone vs. together
 - Support vs. independent
 - Proximity to support mindfulness programs, learning commons, student success support centers
- Roles and Responsibilities
- Teach for focus, concentration, contemplation—attention to program and to space design
- Counterbalance to collaboration spaces
- Providing privacy (however that might be designed)
- Supporting student academic achievement
- Supporting life-long learning for faculty, staff, alumni

SPATIAL CONSIDERATIONS: Acoustic, visual, tools, support

alone-----together

enclosed/focus booth open focus/carrel "reading"/room

THE JOB DESCRIPTIONS

5. CONSULTATION SPACES

A consultation space should signal diversity, equity and inclusion. Barriers to the site itself, and to resources within it, should be low, incorporating self-service options, including mobile and kiosk service points. It should also be flexible, capable of accommodating a variety of different partners.



Goals:

- Normalizing struggle
- Increasing students' academic career and personal success
- Signaling inclusivity and accessibility and cultivating a sense of belonging

Skills – Required:

- Intuitive way finding
- Technology-rich, flexible consultation spaces
- Demonstrated commitment to building relationships beyond the transactional
- Excellent communications skills
- Demonstrated ability to work as part of a team
- Accommodates staff across areas

Skills – Desired:

- Creates options for self-service where possible
- Makes processes transparent
- Aligns identity across virtual and physical paces
- Service model that enables timely and accurate assistance and referrals

PLANNING FOR ASSESSMENT

One purpose of this LSC/CNI Roundtable was to inform an emerging LSC research initiative. Joan Lippincott, CNI, discussed the importance of assessing library spaces in order to determine if a project has met its goals. Planning a needs assessment can help establish project goals or objectives, which can then be used as assessment measurements after a space or facility has been completed and is in use.

To prepare for assessing a project, Lippincott suggested determining what information would be needed in order to plan the space for maximum benefit, especially related to the overall goals and interests of the institution. She encouraged participants to think particularly about goals related to student learning.

Lippincott encouraged participants—in the planning process—to consult known sources for credible information—such as the LibQual Survey and published, qualitative literature on studying habits—which have already gathered a great deal of information related to student preferences. With such reliable resources readily available, there is little need to repeat that type of study on the local level.

Instead, the considerable effort of new assessment projects can then be put toward examining locally unique or distinctive variables, particularly those related to learning. Furthermore, it is important to determine which sub-groups need be studied, such as graduate, commuter, or adult students, etc., for information about learners of particular importance to a particular campus.

Lippincott noted that many assessments of library spaces focus on places for “studying.” She asked if broadening and/or deepening links to learning would be a priority: focusing on providing spaces that support specific programs (e.g. makerspaces or virtual reality spaces), supporting capstone projects or undergraduate research, or promoting student creativity through new media projects.

She provided some sample questions she would like to see libraries ask in post-occupancy assessment:

- Has the availability of new facilities and library expertise led to faculty making different types of course assignments, such as those that result in student content creation?
- Are students more competitive on the job market due to new library offerings/workshops?
- Do students spend more time on academic work when they have access to new/renovated spaces?

Lippincott urged participants to build these kinds of measurement strategies into their space planning to allow for before-and-after analyses.



TAKE HOME IDEAS

As a wrap-up to the stimulating workshop, Narum called upon all participants to share the strategies and lessons they felt were most valuable from the morning's discussions and exercises, and which they would take back to inform their work going forward.

Several common themes emerged from the participants' take-home ideas:

- using the exercise of creating a "job description" to conceptualize spaces
- the concepts of cross-pollination, positive disruption to blend people into conversations who may be from other areas or specialties, but may be impacted by the work of libraries
- looking to others outside of the immediate library/higher education sphere; look at the activity you want to encourage and see who is doing it well
- tying in virtual and physical spaces deliberately and strategically, via branding and other methods
- developing greater appreciation for quiet and/or focus spaces and their value, and thinking about wellness in the library

Additional takeaways mentioned by workshop participants included:

- having a holistic view of spaces: how faculty assignments could shape services, bringing new people to the table, and stepping back and thinking about the link between students' various activities and spaces.
- how a physical space can reflect values and encourage diversity and inclusion
- creating "collision zones" and bringing people together informally to promote serendipitous encounters
- paying attention to staff needs, including how their spaces require fluidity and choice, even in small ways, and how it is as important to consider staff working styles as it is to think about those of students
- how/what spaces communicate

As the LSC shapes its program for the coming year, CNI will work as a collaborator to assist in understanding how institutions can make the most of their learning spaces and how they can assess the contributions new and renovated spaces make to the teaching and learning program of their institution.



The Coalition for Networked Information (CNI) is a joint program of the Association of Research Libraries (ARL) and EDUCAUSE that promotes the use of information technology to advance scholarship and education. Some 250 institutions representing higher education, publishing, information technology, scholarly and professional organizations, foundations, and libraries and library organizations, make up CNI's members. Learn more at <https://www.cni.org/>.

The Learning Spaces Collaboratory (LSC) informs the work of campus planning teams with responsibility for shaping, maintaining and renewing undergraduate learning environments—whether the focus be remodeling a single classroom; recycling an out-dated library; renovating for interdisciplinary STEM learning and research; redesigning the landscape/greening the campus; imagining, designing, constructing, and maintaining a major new facility; developing/implementing a multi-year agenda for shaping formal and informal learning spaces campus-wide. Learn more at <https://www.pkallsc.org/>.

