

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.

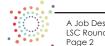
The job description should be that the space will allow people to move about, allow the right amount of real estate per student (which has really changed for us on our campus), and for the instructors to move about the space easily.

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 day 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.

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