



WE'RE IN THE MIDST OF A CALCULATED SHIFT AWAY FROM STRICTLY TRADITIONAL LEARNING AND WORKING MODELS.

The creative economy, the Internet of Things, the Digital Revolution, and the democratization of learning have had a tremendous impact on educational institutions, business enterprises, workplace dynamics, and personal behavior. Innovation culture and creative disruption are altering the terrain of pioneering industries and permeating the educational landscape. **The need for connected, experiential environments is driving the design of spaces that enhance collaboration and encourage creative problem-solving.**

CBT recently hosted a roundtable discussion at our design firm to explore how innovation spaces affect human behavior, how to best leverage unique programming opportunities, and how to measure the success of these non-traditional spaces. Attendees represented colleges, universities, think tanks, tech companies, museums, and other cultural and creative engines.

Some of the findings of our lively discussion came as a surprise; and all were of great value for schools and companies considering innovation space. The following pages outline what we heard.

WHAT IS THE POINT OF INNOVATION SPACES?

Broad access to information and social technologies has amplified the public sharing of resources, skills, and services. Our culture of social sharing has changed how we collect and evaluate information and created new avenues for greater cross-disciplinary collaboration. Innovation spaces (interchangeably called "iLabs," "iSpaces," and "innovation centers" here) have become the bridge between physical space needs and creative problem-solving arenas. On campus, innovation spaces augment diverse curricula and enrich social and intellectual development. At work, a place away from the workstation or conference room which is meant to awaken other areas of the mind can provide a jolt to creativity and add valuable dimension to otherwise predictable work results.

Whether community-based, privately held, or a workplace novelty, these environments spark interest in learning, making, and exploration. No matter where they are, they aim to support the same core activities of research, exploration, discovery, and ultimately, progress. In all cases, innovation spaces are key tools for recruitment and differentiators in a competitive environment.



BEFORE YOU EMBARK, YOU SHOULD ANSWER THESE QUESTIONS

01. WHAT SHOULD COME FIRST — THE PEOPLE OR THE SPACE?

The inception of innovation spaces can take on many models: top-down, where the leadership designates the space to create the activities or shape behavior; bottom-up, where the innovation community emerges and the needs are met with a new space; or through a concurrent model, where the need and the resources grow in parallel, resulting in a needed innovation space at the right time.

It's not news that good (and bad) design can influence human behavior in traditional spaces like classrooms, offices, homes, and gathering places. However, the question is whether these newer experimental/innovation spaces can be a positive influence if there is not yet an established culture of innovation. A proverbial chicken-and-egg problem, there is no clear consensus whether one must necessarily precede the other. The

success of an iLab may rely on a pre-existing culture ready for it, and can fail without that support. Likewise, an innovation culture without a home base for exploration can dwindle and disappear without the minimum resources available. The space needs to reflect the organization's culture and identity if it is to take root as a real part of the community experience. Often, there are already individuals or groups engaging in innovation and maker-culture, so creating spaces that respond to existing needs and interests is a welcome event. Users must feel the space reflects them.

02. HOW TO DESIGN AND PROGRAM AN INNOVATION SPACE?

Flexibility is key! The innovation space must be highly adaptable. It needs to leverage discovery using technology and furniture that will respond to different configurations and

activities. They need to be physically durable and be three-dimensional canvases for experimentation. These spaces are living, breathing, evolving environments. Their design must anticipate a state of flux and provide appropriate infrastructure to maintain the evolution of the space.

Consider the space less like a laboratory and more an intellectual resource center. If over-programmed, the space can feel rigid and unresponsive to the needs of a changing user base, limiting the opportunity for innovation. Fluidity is critical for user engagement and cross-pollination. Ultimately, trust the iterative approach: improve upon what works and make changes to what doesn't.

03. HOW CAN THESE SPACES PROMOTE ENGAGEMENT AND ENCOURAGE RISK-TAKING?

With the support of community leaders for progressive risk-taking and discovery, innovation spaces can be built in a way that will drive new behaviors and creative thought processes. They can open the door to activities which can't be achieved in traditional classroom and workplace settings. When done well, they can seize on social behaviors, leverage curiosity, and encourage collaborative engagement.

Progressive, boundary-pushing innovation spaces make their missions known, often through transparent and open design. A visual opening into the space acts as a billboard broadcasting the activity within.

Transparent innovation spaces at once lure curious passersby and instill pride and motivation for those working inside. With everything on display, this "see and be seen" phenomenon pushes users to take greater risks and stretch the bounds of their creativity.

04. WHAT IS THE VALUE OF PUBLIC VS. PRIVATE AREAS IN INNOVATION SPACES?

Designing an open, transparent studio with moveable furniture is not enough to guarantee a successful iLab; innovation spaces are most successful when supported by adjacencies. Large, unprogrammed spaces enable collaborative group input and creative disruption, but noise control and neighbor distractions can hinder small-group and focused work. By positioning innovation spaces adjacent to other types of working environments (and integrating break-out and huddle spaces into the design itself), these labs can support a wider user base spanning diverse working and learning styles. Finding the right balance between large-scale collaborative spaces and intimate focus zones will increase the usability and utilization of the space — and ultimately impact its success.

05. WHAT WILL BE THE ROLE — AND COST — OF TECHNOLOGY?

Many people think of makerspaces and innovation spaces as places wired to the hilt with tech tools, equipment,

gadgets, and other tech-dependent functions. This can be a non-starter for administrations who perceive an ever-escalating price to maintain the innovation space and keep pace with competitors. It's important for groups who are looking to create an innovation space to determine what it is they wish to accomplish within the space. This will determine the level of commitment to evolving technology, so that long-term needs can be better evaluated.

Some of the most vibrant and successful innovation spaces integrate little to no technology, relying largely on basic electrical and internet connection to propel a range of individual experimentation and creativity.

06. FUNDING THE ISPACE: HAVE YOU BEEN ASKING THE RIGHT PEOPLE THE RIGHT QUESTIONS?

Most experimental creative endeavors come with the risk of potential failure — not exactly music to a head of finance's ears. Because of the non-traditional nature of these spaces, how they will perform and what your company or school will get from them financially is going to require a leap of faith. So, unlike for a new performance hall or added workspace, the traditional ROI evaluation process may be null and void. The champions who can make the case for a new innovation space will be those whose role is focused on culture, advancement, innovation, and wellness within the community. These are the people who can identify the qualitative value of such

a space, and help determine its place at the organization. It's important to accept that the metrics used to evaluate traditional learning and working environments fall short when measuring the potential of a great innovation space. Today, anecdotal reports and an eager user base may be the best gauges to evaluate the potential of such a space.

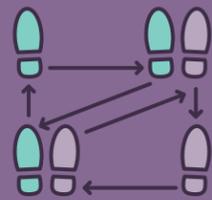
07. HOW WILL AN INNOVATION SPACE FIT INTO YOUR GREATER MISSION?

The success of innovation spaces depends largely on aligning the needs of the users and the culture of their organization with the appropriate spaces and related infrastructure. If the sole purpose of an innovation space is to recruit the next generation of users, it can be very effective in the short term as a competitive tool. However, the ways that innovation spaces are used vary dramatically and should be seen through the lens of your institutional mission. This will support longevity, meaning, and drive the tenor of activities that will take place there.

Evaluating the space and activities of users over time — from the location of the innovation space, defining relationship between overall building organization, influence of adjacent spaces and the opportunities of social and psychological factors — help inform how a space can continue to evolve and support the larger mission of the institution or organization.

TAKEAWAYS: TRAITS OF SUCCESSFUL iSPACES

Successful innovation spaces have several characteristics in common, whether supporting academic, workplace, or community organizations. They can erase the lines between teaching, learning, research, experimentation, and discovery, and they support an inclusive and diverse user base.



Both the place and the experiences are curated to offer guidance; activities and where they happen must be planned.



There is a champion – or many – for the innovation space. It is not considered frivolous.



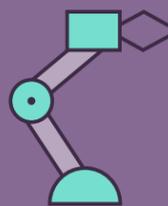
The space is managed by engaged personnel; it is not a self-sustaining environment.



There is a clear – if flexible – mission for the role of the innovation space, and this mission supports the greater organizational mission.



The programming of the space is specific to the organization, and it acts as a flexible tool for progress when and as needed. This offers a mutual give-and-take between the users and the space.



Finally, don't rush to purchase an arsenal of 3D printers and soldering irons; focus instead on the value and adaptability of the space itself, and technology can be added as needs arise.

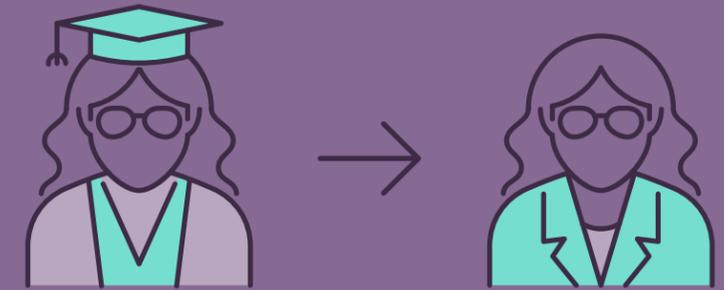
SUCCESSFUL iSPACES ERASE THE LINES BETWEEN TEACHING, LEARNING, EXPERIMENTATION, AND DISCOVERY — **IN THE MOST POSITIVE WAYS.**

THE DESIGN TEAM AT CBT SAYS...

Think about where you are going to put your innovation space. Too many times, there is an “if you build it, they will come” attitude. Whenever possible, innovation spaces should be centrally located for successful reception. They are still a new type of environment for workplaces and campuses alike, and placing them at the campus edge or in the building basement can set up some unfavorable odds for the space’s success. An accessible innovation space that will tap into curiosity and creativity has the best chance of thriving when users have an easy time getting there and can see it as part of their daily routine. This isn’t to suggest that the only path to a good innovation space is to build one in the center of the front lawn, however. Creative adaptation of existing assets can be the best route to a great innovation space, while remaining a smart investment. Institutions and companies have transformed their libraries, copy rooms, machine shops, courtyards, conference rooms, and even corridors into places dedicated to innovation.

Visibility matters. While it’s tempting to reclaim underused space on campus for a new iLab or innovation space (such as storage areas or basements), if the space and its activities are never seen or exhibited, you lose the curiosity component of new participants — not to mention opportunities for recruitment. So, the extra funding you may need to put an innovation space front-and-center can be justified in the long run.

Don’t forget to think vertically! For all of the double-height glass boxes that are built to house innovation activities, institutions would do well to consider the ways that the vertical space can enrich innovation. Using this “dimensional bonus” expands the space’s potential upward.

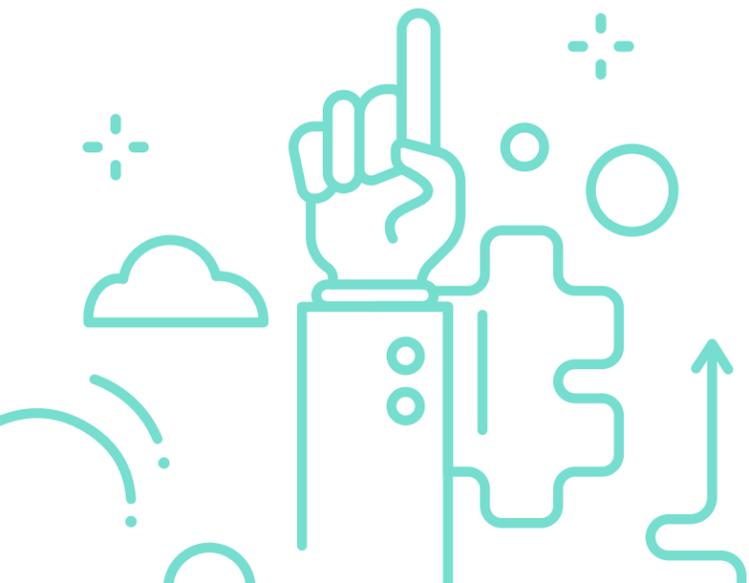


iLABS AFTER GRADUATION: WHAT IS THE ROLE OF INNOVATION SPACE AT WORK?

While innovation spaces at academic institutions and workplaces can share many overlapping traits, the role of innovation spaces can take a distinct form in office culture. How can an innovation space support professional advancement, make way for future/desired ways of working, but also help maximize real estate in a fast-changing economic climate? Forward-looking employers today are seeking dynamic workplace designs that — in addition to supporting business goals — add dimension, meaning, and productivity to the daily experience of employees. Answering the following questions can help identify the design needs of any workplace innovation space:

- How much creativity do you expect from your employees?
- In your business, how do you define “innovation” in a way that is meaningful to your mission?
- Do your leaders believe that nontraditional innovation and discovery can help your advancement?
- How will you help employees use an innovation space to meet goals?
- How important are employee happiness, social equilibrium, and creativity to your business model?
- Could an innovation space keep up with your changing ways of working over a year? Over five or more years?
- What do your target employees look like?
Is innovation important to them?

We have found that some institutional/organizational soul-searching can go a long way in shaping space.



GREAT INNOVATION SPACES PROMOTE INTELLECTUAL ADVANCEMENT, LEVERAGE SOCIAL PROGRESS, AND SUPPORT MEANINGFUL COMMUNITY GROWTH.

The culture of hands-on learning, experimentation, and making has promoted positive change on a very large scale and has transformed our society. In this spirit, today's innovation spaces allow individuals to express themselves, feel engaged, and remain connected to others. The spaces can foster a robust social ecology and give back to their organizations. They are places that people want to come back to and that have great potential to transform the future of a community.

Good innovation spaces are unique and user-driven. They have started to define companies, schools, and neighborhoods. In a most natural way during this era of "alone together," they manage to reconnect individuals to their own curiosity and to each other. Designing a space which can harness and promote this activity is a tremendous tool for any community's intellectual advancement, social progress, and shared commitment to the future.

CBT THANKS THE FOLLOWING INNOVATIVE LEADERS WHO PARTICIPATED IN THIS ROUNDTABLE DISCUSSION:

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CBT Studies is an ongoing research project that examines the ways design can impact life on campus, at work, and in the other communities to which we belong.

