



AGENDA

- **I** ABOUT THIS STUDY
- ² KEY FINDINGS
- **3** RESEARCH HIGHLIGHTS
- 4 IMPLICATIONS
- **5** REPORT OUT

Melissa

We will talk about

- 1. Background
- 2. The Salient themes
- 3. Dive into the research draw further connections to the themes
- 4. Work as a group considering application
- 5. Sharing those ideas

About This Study

Melissa HGA + ICHW @ UCB partnership

Why this is relevant National Workplace Forecast Knowledge transference #1 Gen Z Research Enterprise wide connection and continuous learning Shifting learning paradigms

Melissa

Why continuous learning

Speed of **change** - **outpacing** current **learning** paradigms Need to evolve

Capacity to **learn = creative** and innovative capacity **HGA Research**

Knowledge Transference - **#1** – nationally The ability to **develop new skills and**

competencies #2

Gen Z – our youngest generation in the workforce already understands this

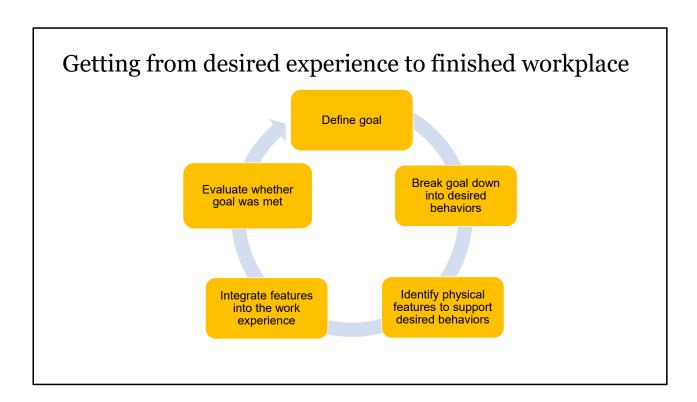
Self curated learning is the expected norm

Access is enterprise wide

Curiosity validated- 4 global partners

A necessary but daunting topic

How do you approach it?



Cristina

What promotes learning?

- · Motivation to learn
- Participating in something new
- Information presented in "meaningful chunks"
- Understanding the "whole" in order to grasp new information
- Making connections to what is familiar/part of your reality



Cristina: We know a lot about learning:

- We can't learn very well if we aren't motivated. So, providing motivation to learn helps.
- Exposure to new things and situations increases the chance of expanding one's horizons.
- We can't learn very well if we are just told stuff. It has to make sense in some way.
 One way to help people take in new information is to bundle information together in a meaningful chunk—that is, bundling it around a specific concept or idea or thing.
- We also need to know the whole picture—a framework to which we can attach new information—or else it is lost from short term memory.
- Giving people a way of thinking about something (the framework) is helpful, but it is even more helpful if that new framework is familiar to us or is part of our everyday living—something we can build upon. Information that doesn't attach to anything familiar or in our daily lives is hard to hold on to.

What behaviors promote learning from others

Expanding Social Networks

Observation

Reflection

Casual Social Interaction

Psychological Safety



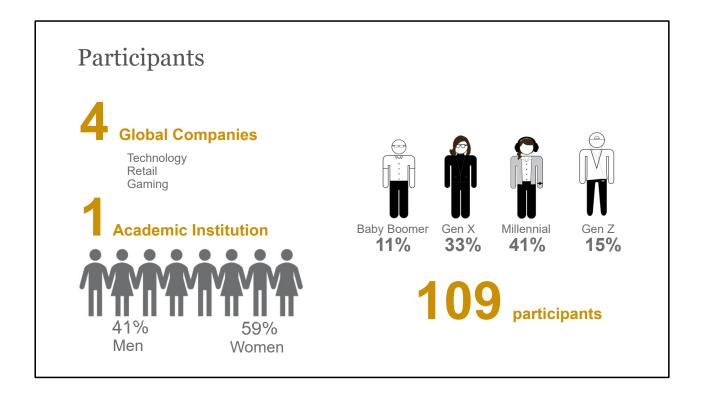
Cristina

Feel like the culture support the expansion of knowledge and ones individual interests (customization)

Diverse experiences and points of view including casual social interaction

Watching others

Taking time to process a learning



Cristina

So, whose joined us thus far?

- 3 Fortune 500 Companies (2 Fortune 100)
 - Dell (vmware)34
 - HP 55
 - Levi 500
 - EA 533
- Diverse industries
 - Like everyone- reliant on creativity and innovation
- Learning paradigms are shifting in higher ed as well
 - UC Berkeley provided additional perspective



Cristina transfers to MelLet start with the headlines



Melissa

4 interconnected ideas

- 1. Cultures of continuous learning that drive creativity an innovation begin with belonging
- **2. Promoting belonging** = clearly **promoting** the desired **behaviors** make it easy
- 3. The reflective and restorative impacts of nature are indisputable
- Future creative and innovation capacity realizes on people,
 technology role in connecting people to ideas and opportunity establishing a culture of belonging



Melissa

Organizations that **succeed** in embedding **continuous learning** into their cultures **prioritize belonging**.

1st focus group – **Permission and psychological safety Begins with belonging**

- Feel a part of a larger conversation
- Able and **encouraged** to reach **beyond** our **current focus**
- About creating trust
 - Cristina pointed to the critical role of social networks
 - Core to that is trust

Support diverse learning and learners

77% CHOICE AND PROXIMITY MATTERED MOST



Melissa

Promote the **expansion** of social networks = **support diverse** learners, methods and needs

- 77% Choice & proximity = feeling of flexibility (debrief)
- In **VR Commons** (pictured here)
 - A space for social collision
 - Requires attraction of a diverse group meet primary needs
 - Privacy individual work 56% sought enclosed spaces
 - Observation activities a birds eye 81% top or midway down the stairs
 - Meet someone new? path of travel 85% lounge

seating or midway down the stair

COMMUNITY



A place for everyone

DEMOCRATIZATION



Avoid extremes

TRANSPARENCY



Physical and digital

Melissa

- In addition to a place for everyone
- The democratization of the classroom
 - Not too much or little choice learning environments
 - 72% sought spaces
 - flexible configuration
 - support of group work
- Promote physical and digital transparency
 - 69% openness and transparency in the(VR)
 - greatest impact in portraying opportunity for continuous learning (debrief)
 - supported by technology and other forms of display



Melissa

Continuous learning cultures require the integration of visual and behavioral cues (what happens when we don't do this?)

SET THE TONE FOR LEARNING



#1 Inspiration of learning

Seeing opportunities for casual social interaction

CREATE SOCIAL COHESION



Mitigate social awkwardness!

Nearly 2/3 (59%)

Prefer spaces clearly designed for community use or adjacent an activity / game

Melissa

- Set the tone for learning
 - Charrette Entry Conversation
 - 61% Open space to the buzz of the lobby
 - Seeing opportunities for casual social interaction #1 inspiration / stimulant
 - Personal greeter / helper 2nd
 - It **starts with people** (not screens)
- Creating social cohesion scale, height and adjacent matter
 - Nearly 2/3 (59%) gravitated toward spaces
 - clearly designed for community use (scale)
 - adjacent an activity / game

Digital vs Analog Tools



6% digital Individual creativity



13% digital
Sharing early ideas
with others



31% digital Innovation as a group



69% digital Learning from others

Needs shift as ideas and groups expand

Melissa

Notable progression in digital versus analog tools

- Digital verses analog tools
 - Analog sharing early ideas w/ others and creativity
 - Balance of digital and analog Innovation (in a group)
 - Digital learning from others (69% preferred digital)
- These activities often happen within the same spaces throughout the day
 - Suggests that
 - Ability to access and adapt collaborative tools positive impacts utilization

Communal / casual seating has limited perceived use

LESS THAN 20% MOST PHASES

- Highest value individual creative process (30%)
- Considered buffers to team / heads down spaces
- 76% prefer mobile furniture



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So, does the **'resimmercial' trend** have a place in learning? Kind of....

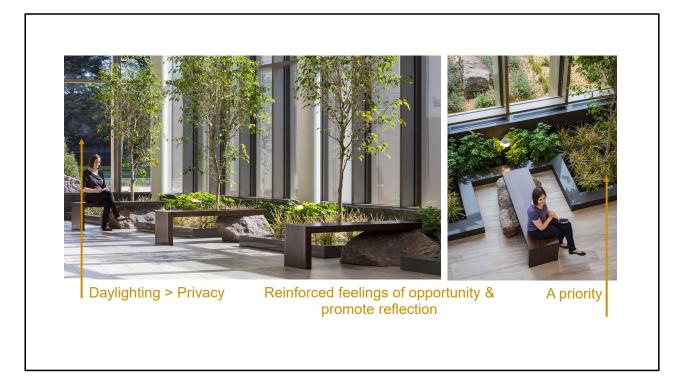
- Communal / casual seating- limited perceived use (less than 20% most phases).
 - Most valuable individual creative process
 (30%)–
 - consider buffers to team spaces?
- Like tools, needs shift strong preference for mobile furniture
 - Think micro-lab

So, If we are not trying to feel at home then what?



Cristina

Nature plays an integral role in continuous learning, creativity and innovation.



Cristina

- Daylighting is more valued than privacy for reflection and rejuvenation
 - Table by a window in a café #1 choice (over more private options)
- 67% of respondents Connections with nature reinforced feelings of opportunity and promoted meaningful reflection (debrief)
 - 40% reflection
 - 27% connection
 - 2 critical aspects of continuous learning!
- Everyone needs a little sunshine in their lives!
 - 81% visit immersive nature experience a priority

Individual focus



Cristina

- Opportunity to immerse in nature (green walls, natural light and material...)
 - 78% would use the space for individual purpose (refresh, inspire, work)
 - #1 use a place to think and work

The science behind connections with nature





<u>Daylighting</u>: Improves mood, enhances morale, lowers fatigue, reduces eye strain, reduces stress, enhances well-

<u>Biophilia</u>: Enhances healing, improves immunity, increases motivation, improves performance, lowers stress, improves cognitive functioning.

Cristina

Daylighting:

- Body uses light as a nutrient for metabolic processes like food and water.
- Need full-spectrum of light; indoor lighting often missing blue light critical for circadian rhythm and proper functioning of the eye.
- Controls nervous system, circadian system, pituitary gland, endocrine system and pineal gland.
- When full-spectrum light, you have better health, better mood, more energy, improved concentration, lower stress, and emotional stability.

Biophilia

- Biophilic design: maintaining, enhancing and restoring the beneficial experience of nature in the built environment.
- Acknowledgement that human mind and body evolved in a sensorialy rich world, one that continues to be important for health,

- productivity emotional, intellectual and spiritual well-being.
- Most consistent with our evolution, and our body is most enhanced by biophilic exposure: enhances healing, improves immunity, improved performance, lower stress, greater motivation, greater cognitive functioning when concentration needed.
- Looking at nature views restores the brain when breaks are taken from high concentration work, relaxes the part of the brain that is overused by using a different part of the brain.
- Nature can be real or artificial with the same effect.

 I have provided a few references in case anyone is interested in diving into the science!



Melissa

We've established that **people create the invitation** to learn through

our actions and the built environment supports this through transparency, choice, what we curate.

Technology has a role of **connecting** or making **learning opportunities accessible and equitable**.

Technology is the platform of empowering equal access

CONNECTION TO PEOPLE AND RESOURCES #1 ROLE OF TECHNOLOGY



Melissa

- Connection to people and resources #1 role of technology
 - 83% valued the ability of technology to
 - blur boundaries promoting engagement through enterprise wide sharing

Concern about Information Clutter

57% WOULD LIKE TO SEE CONTENT CURATED | 33% COMPLETELY OPEN TO ALL EMPLOYEES



Melissa

So what should we keep or weed out?

Information perceived as a good fit for tech

- #1 A shared idea or new discovery
- #2 Opportunities for learning
- #3 A need to help or a question
- **Low priority** = Employee communication status

The pattern – information that is action oriented

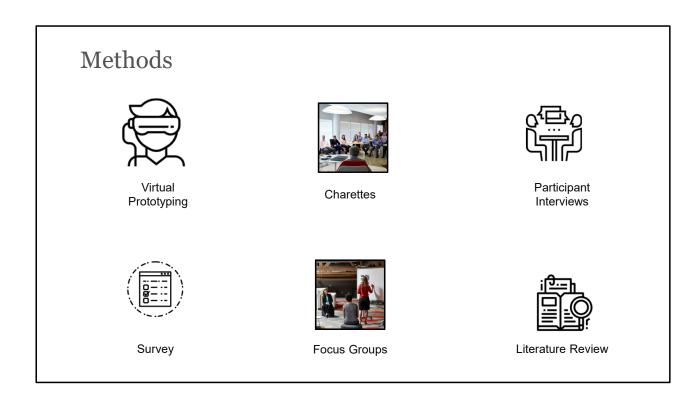
Prioritize information that is action oriented what creates a sense of connection?		
	It Matters	Not so much
Amongst employees	61% Learning what others are working on	4% A unifying message from leadership
	22% Socializing at work	
To the workplace	39% Descriptions interesting work being done	6% Organizational values 9% Pictures of employees & their expertise
	26% Relevant information about the organization	
	20% Questions teams are thinking about	

Melissa

- Prioritize information that is action oriented
- Some examples note the extremes

Research Highlights

Melissa pass to Cristina



Cristina

Why diverse methods for data gathering

- No one method tells you the whole story, and each method is designed to further refine the features of the workplace that are needed.
- Different methods providing consistent information from different sets of people is critical for validating the results.

Focus Group 1

HIGHLIGHTS

Format: Exercises built around well-being attributes

Psychological safety

- 1. 'Permission' to learn Consistently encouraged
- 2. Shared purpose
- 3. Desire for exposure to new or different experiences / perspectives
- 4. Feel creative confidence
- 5. Autonomy

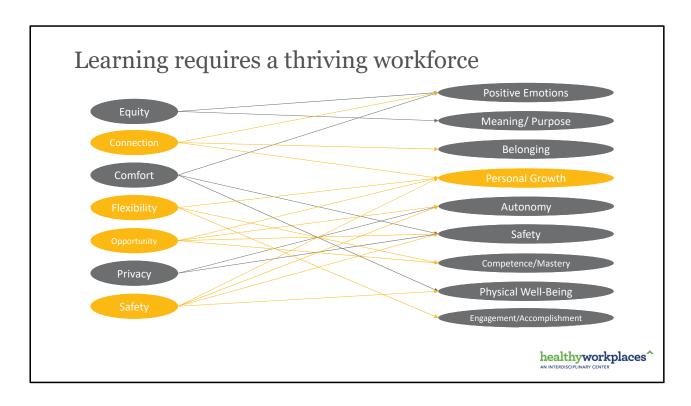


Cristina

Note:

Highlights - signaled some of the broader themes

- We asked very broad questions like "what does continuous learning mean to you?" and "what would continuous learning look like in your organization?"
- This gave us a view of how employees in general thought about this concept—what do they think they need to support continuous learning.
- This is what they said.
 - Having consistent permission from leadership to engage in self-initiated learning
 - Feeling that one is aligned with the vision, feeling a part of it
 - A desire for being exposed to new or different experiences and opportunities, and the desire realized.
 - Feeling confident bringing forward new and creative ideas
 - Feeling autonomous is seeking learning opportunities and connections with others
- This told us that they thought about continuous learning in the same way as us, and we could take those general ideas and give it to designers to start formulating ways the physical space could manifest these ideas.



Cristina

How do you design for continuous learning?

- First, what basic need is continuous learning? The need for personal growth.
- Second, how do you satisfy the need for personal growth? Identify built environment features that support personal growth.
- This was based on a framework of well-being. The features most directly related to personal growth:
 - Connection
 - Flexibility
 - Opportunity
 - Safety
- Employees in the Focus Group generated ideas for how these features might support personal growth, and these were passed on to the HGA designers in the Charrette.

Charrette

HIGHLIGHTS

- 1. Curated experience: clear direction, hierarchy
- 2. Accessible & flexible
- 3. Behavioral Cueing
- Needs evolve requiring a seamless mix of digital and analog tools
- 5. Outside in and inside out



Cristina

This is the most critical step of the process because it is where employee needs are translated into design features.

Without guidance from employees, designers may miss the mark, and employees may end up occupying spaces that don't meet their needs.

What did the designers understand from the Focus Group ideas, and what workplace features did they think were the most promising?

- A curated experience—an environment that nudged desired behaviors, spaces where exploration was explicitly intended, absence of hierarchy implied in the way space was used.
- Curation had two negative aspects to each end of the continuum: Too much curation and too little curation was perceived as undesirable.
- Feeling that spaces are accessible and that they could be modified easily to match purpose and need.
- Behavioral cueing from others where their actions within the space signal desired behavior.
- A seamless mix of digital and analog tools to support learning activity as it evolves.

Technology as facilitator, not medium.

• Bringing nature into the workplace and more people outside.

Focus Group 2 (VR based)

HIGHLIGHTS

- 1. Arrival | Set the right tone
- Community spaces for learning | A place for everyone
- Biophilic / bright spaces favored for individual activity
- 4. Choice and proximity matter
- Technology promotes equal access while people remain at the core of the creativity and innovation derived from learning



Cristina

Designer ideas were translated into a workplace model. Digital experts created a VR version of the model incorporating the features selected by the designers based on their understanding of what the employees needed.

Employees from the same 4 organizations explored the workplace model through a series of scenarios where the features were displayed and answered questions using a virtual tablet to indicate their responses to the design. Based on their VR responses, a follow-up survey, and an in-depth interview for each participant in this Focus Group, we learned the following:

- The arrival space was critical for setting the right tone—"come and get involved—this is a place where you can explore and grow"
- Community spaces for learning and where everyone was welcome (see belonging section)
- Central importance of daylight and natural elements incorporated into the workplace and views of nature
- Nature is both something people say they need and is connected to reflection.
- Having right choices within the same proximity—diversity of spaces within reach.

• Technology was a facilitator by providing access to resources and people, and was the core of creativity and innovation are people.

All of these findings generated the four themes we talked about at the beginning of this presentation. Now we would like you to engage in an exercise where you consider one of these themes and redesign a space.



Implications Group Exercise

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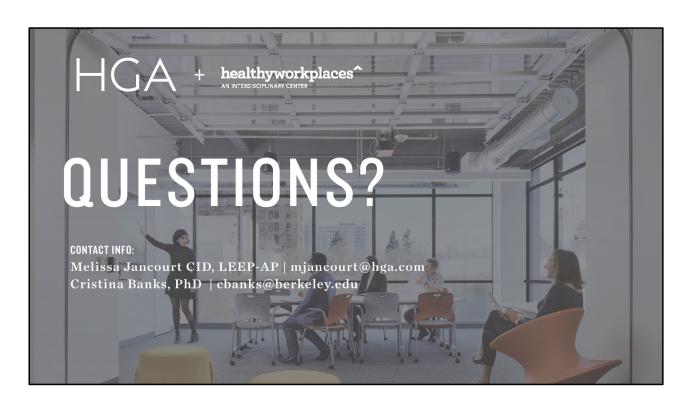
Group exercise (by table)

STEPS

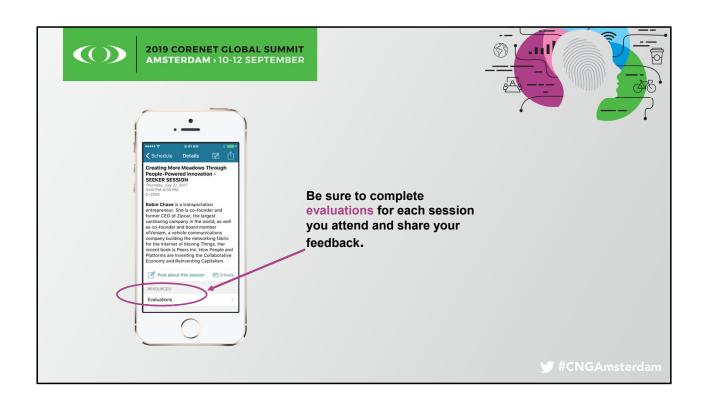
- 1. As a table, select a theme that resonated with you
- 2. Share your thoughts about the potential implications and opportunities for CRE
- 3. Select one of the two floor plans on your table to modify consistent with your selected theme
- 4. What insight did you get from this exercise?



Melissa



RUN!



Key References

- Edwards, L. and Torecellini, P. (2002) *Literature Review of the Effects of Natural Light on Building Occupants*. United States, doi:10.2172/15000841.
- Bedrosian, T.A. and Nelson, R.J. (2017) Timing of light exposure affects mood and brain circuits. *Translational Psychiatry*, <u>7</u>, pp, 1-9. doi: 10.1038/tp.2016.262.
- Kellert, S.R., Heerwagen, J.H., and Mador, M.L. (2008) *Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life.* Hoboken, New Jersey: Wiley.