Core of Commonality. At our core, we all share common aspects of being human: creativity, learning, brain function. Neuroscientists are unlocking the brain's secrets and gaining insights that are changing the way we think about thinking. In the process of this exploration, we're finding that, as humans, we have much more in common than the great diversity of our species might seem to indicate.

Being aware of our core of commonality can have a positive impact on what goes on in the places where we work.

Amid all the talk of what differentiates us—from gender and generation to work styles and personal preferences—it's important to remember that there's plenty that unites us. "There are things that bring us together, that we share in mind, body, and spirit," says Ginny Baxter, Applied Knowledge Lead at Herman Miller. "At Herman Miller, we call this the 'core of commonality.' By recognizing our shared humanity we can better understand ourselves and others, and bridge the gaps that our differences may cause."[1]

Being aware of this core of commonality can have a positive impact on what goes on in the places where we work. It can help us find new, better ways to bring out the best in each other in terms of creativity, learning, and getting things done in an increasingly distracting and hurried world.

While this paper treats creativity, learning, and brain function each in turn, it does so acknowledging that they are aspects of an inseparable whole. The core of commonality makes each of us unique even as it binds us together as a species.

Everyone Is Creative

In a broad sense, we all use our brains to problem-solve, to devise work-arounds, to find new ways of doing things. This shared capacity is so important because in order to keep moving forward in a globally competitive world, organizations need to find ways to enable and activate the creativity of their people—not just the "big-idea" creativity that leads to major breakthroughs but also the everyday creativity that fuels positive change and continuous improvement at all levels of an enterprise.

"There's a common misconception that creativity only resides in 'creative types' like artists," says Carissa Carter, Creative Experience Designer at Herman Miller, "but the capacity for creativity exists in everyone."[2]

The challenge for organizations lies in tapping into that shared capacity. "Creativity is a learnable, rigorous process that can and should be learned," says Carter. "Organizations that make a commitment to embedding creative processes will rise to the top."

Some people have the mistaken idea that we must turn off the logical, linear left side of our brains to be creative. But engaging both sides of the brain instead of treating them as disparate halves results in what author Daniel Pink calls "whole-mind thinking."[3] "We must draw upon both the left and right sides," says Carter. "With this synergy, we have the power to create and implement new ideas." Nate Young, president of the NewNorth Center for Design in Business, calls the ability to draw upon both left- and right-brain thinking "toggling." "You need to be able to toggle between the two," he says. "That ability is one of the most undervalued business notions that I've ever run across."[4]

Just as there are two halves to the brain, there are also two halves to the creative process: one employs divergent thinking, the other convergent thinking. Divergent, generative thinking involves thinking big, coming up with lots of ideas, defining a problem. Convergent thinking complements it by finding patterns, developing frameworks, gaining buy-in, synthesizing in order to make informed decisions. In any project, says Carter, people move between the two, although some people are better than others at it and some tend to focus more on one or the other. "Both types of thinking are involved as the creative process continues toward the development of prototypes, strategies, and overall solutions," says Carter. "Both are required to generate new ideas and to make sense and meaning out of ideas, observations, and insights."

Sometimes this creative process occurs in brainstorming sessions, other times in everyday team and collaborative situations. "Brainstorming isn't the only generative creative process, but it's probably the most widely used. It's also the easiest to do poorly," says Carter. In order to be effective, she says, brainstorming sessions need a carefully scoped question to answer; without it, they're bound to fail. She also says that "a real brainstorm" has a strict set of rules for the brainstorm space, a small number of people in it, standing, with post-it-like tools to record ideas, and a facilitator. It's also important to build generative teams with a diversity of perspectives. "A group that's composed of the same type of people will almost always put forth a result that's mediocre or narrow. Different people working together create innovative ideas."

Although physical space can't make people creative, it can support creativity.

Although physical space can't make people creative, it can support creativity. "Workplace design can help release creativity by encouraging interaction and stimulating the senses," says Carter. "Providing employees with the right setting and tools helps to enhance creativity, productivity, and collaboration. A space that can adjust to changing circumstances and needs can be especially helpful."

Creativity can also be supported by providing playful distractions—games, toys, unexpected visuals—that can put people at ease and open them up to new ways of thinking. Scientists have found, for example, that looking at unusual images activates the same part of the brain that people use when they're engaged in creative problem-solving.[5]

Just as our creative ability can be boosted by understanding the ways our brains work, so, too, can our ability to learn be enhanced by recognizing our core of commonality in that endeavor.

Learning as an Emotional Experience

As do all mammals, we begin learning at birth. Unlike them, we continue to learn to an astounding degree for most of our lives. We are natural-born learners. However, discussions about how we each learn—our personal learning style—may do more to create artificial differences than it does to shed light on how we can best use the power of our minds.

The notion that some of us are “visual” learners, others of us are “auditory” learners, and still others are “kinesthetic” learners divides us into separate groups. The notion that some of us are left-brained while others are right-brained has a similar effect. One implication of these ideas is that each group—visual, auditory, kinesthetic, right-brained, left-brained—only responds to learning situations that cater to its particular predisposition. A recent review of research regarding this segregation of learning styles, however, casts doubt on its validity. Recently, a team of psychologists found practically no support for the idea. “The contrast between the enormous popularity of the learning-styles approach within education and the lack of credible evidence for its utility is, in our opinion, striking and disturbing,” they concluded.[6]

In addition to the fact that we’re all, to varying degrees, visual, auditory, and kinesthetic learners, and that we all use both sides of our brains, there’s a larger—and an obvious—thing we have in common: the brain itself. Not just a brain, but, in effect, three brains. That’s according to the triune (three-in-one) brain theory, a model of brain evolution that can help us understand how learning takes place—in all of us—in schools, the workplace, and the world. “This theory reinforces the importance of creating meaning and context in learning situations,” says Tracy Fouchea, Program Manager, Education-Pilot Research at Herman Miller. “It helps us understand why emotional involvement is essential to most learning.”[7]

The triune brain theory proposes that in the development of the human brain, three layers were established successively in response to evolutionary need: the reptilian, the limbic, and the neocortex.

Put forth by American neuroscientist Paul MacLean, the triune brain theory proposes that in the development of the human brain, three layers were established successively in response to evolutionary need: the reptilian, the limbic, and the neocortex. While each layer is geared toward separate functions, all three interact and respond to each other.[8]

The reptilian system is focused on the physical survival and overall maintenance of the body, including digestion, reproduction, circulation, and breathing. When a body is threatened, it automatically triggers the “flight or fight” response. Seeking security and comfort, it also manifests its presence in territoriality, ritualistic displays, and social hierarchies.

The limbic system houses the primary centers of emotion. It allows us to feel deeply—to have protective, loving feelings and a conscience that prevents the reptilian system from being totally dominant. It’s involved in the formation of both short- and long-term memory and it plays a significant role in remembering new information.

The neocortex is the center of creativity and language, music and art, and all the higher mental functions. Capable of complex analysis, it allows us to think abstractly and solve problems.

The three can be supportive of each other or in conflict. Each is always present; each is involved in the behavior and decisions of the other two.[9] That’s important to remember when it comes to learning and learning environments, says Fouchea. “An

environment must be supportive of the needs of all three layers," she says. "If it isn't–for example, if it ignores the needs of the reptilian or limbic parts of the brain–people's security or emotions can feel threatened or dismissed, and instead of being ready to learn, they're more likely to be ready to flee, either physically or emotionally, from the scene."

Because our emotions are integral to learning, people must have a way to relate to the subject in terms of what is personally important; this requires acknowledging people's deeply held needs, drives, and emotions. As MacLean observes, subjectively "something doesn't exist unless it's tied up with an emotion."[10] "We shouldn't ignore the emotional components of any subject," says Fouchea. "People associate events with emotion, and such contextual memories exist in both the physical and emotional space in which people experience them. It only makes sense, then, to make sure that our learning environments address people's shared need for emotional involvement by being social, experiential, and dynamic."

Social, experiential, and dynamic environments have another side we need to consider: their potential for scrambling our brains with unexpected–and often unwelcome–diversions.

Interruptions, Distractions, and Their Impact on Brain Function

Everyone needs time to concentrate–time to give their full attention to something, time to think. The problem for those who work in office environments is that frequent distractions and interruptions often subvert that basic need, with adverse effects: 53% of office workers recently polled reported that distractions affect their productivity.[11] To avoid those distractions, 42 percent are extending their workdays by coming in early or staying late.[12] Overall, according to one estimate, distractions cost American businesses $650 billion annually.[13]

A recent survey provides evidence that meeting and interacting with others is the main reason why people want to be in the office.

Some companies try to lessen the problem through direct intervention. One software company, for example, initiated a "negotiated time-allocation strategy" by establishing interruption-free hours during the morning.[14] But, in many ways, distractions are unavoidable. "The collaborative nature of knowledge work involves socializing, sharing, and connecting," says Herman Miller's Ginny Baxter, "and that in itself can be distracting. Even so, people in today's collaborative work environments need to be involved and accessible."

And, increasingly, they want to be. A recent survey provides evidence that meeting and interacting with others is the main reason why people want to be in the office.[15] They go there to be part of the in-the-moment synergy that happens when people are together. They go there to be visible. This is reflected in the decreasing amount of time that "flexible" employees (those who work at home, the office, and on the move) are choosing to spend working at home (20 percent in 2010 versus 36 percent in 2007) and the increasing amount of time they're choosing to spend working in the office (45 percent versus 18 percent).[16]

The ever-increasing presence of technology has amplified our ability to interrupt or be interrupted; it's also a main reason why the lines between work life and personal life have become so blurred.

All the interruptions at work aren't directly related to work. That's to be expected and even encouraged: People sustain themselves as a group and support the needs of individual members through social, informal, nonwork-related communication, which has been described as essential to effective work[17] and that, according to one study, accounts for almost 10 percent of interactions in the workplace.[18] A study of instant messaging in the workplace shows that a significant proportion of communication exchanges via such tools is about things other than work, including humor.[19] That's just one example of the role that technology plays in workplace distractions and interruptions. The ever-increasing presence of technology has amplified our ability to interrupt or be interrupted; it's also a main reason why the lines between work life and personal life have become so blurred.

At work, or when working at home, our ability to focus is undermined by sudden salvos of information that come to us, often uninvited, from our computers, especially from email messages. New research shows that computer users at work change windows or check email or other programs nearly 37 times an hour.[20] "People find themselves in a state of continuous partial attention," says Mollie Everett, senior program manager, Herman Miller Healthcare. "This lack of focus can be particularly troubling in healthcare settings, where distractions and interruptions from people and technology can have dire consequences." Discontinuity in work-related activities may also be the result of increased workloads that force people to leave one task pending to follow up on another.[21]

Such switching back and forth from one thing to another, performing two or more tasks simultaneously, is part of another phenomenon that threatens continuity and furthers distractions: multitasking. Enabled by technology, multitasking allows and accustoms people to move, quickly and often, to another idea, a different project, a new interest. "People are trying to do, listen, react, write, and keep track of things simultaneously," says Everett. "But people aren't as effective at multitasking as they probably think they are."

Multitaskers have more trouble tuning out distractions than people who focus on one task at a time. One study shows that they lose significant amounts of time switching between multiple tasks; they lose even more time as the tasks become more complex[22] Due to mental blocks that occur in the process of multitasking, productivity can be reduced by 40 percent, according to some researchers.[23] Technological disruptions or multiple responsibilities aren't the only causes of distraction. Some of it is self-initiated. People interrupt and distract themselves by switching their focus to other tasks. If they're doing something that's monotonous, for example, they'll switch gears to reduce their boredom.[24] It's been estimated that 25 minutes of productivity are lost with each interruption, so that nearly a third of each working day is spent recovering from them.[25]

"Never in history has the human brain been asked to track so many data points," says Dr. Edward Hallowell in describing a new condition he calls "attention deficit

trait."[26] The ultimate risk of the heavy use of technology, and the distractions and interruptions it causes, is a loss of empathy and engagement among people, even in the same room. "The way we become more human is by paying attention to each other," says Clifford Nass, communications professor at Stanford University. "It shows how much you care."[27]

Unleashing creativity. Facilitating learning. Dealing with distractions. Each of these represents a different component of our core of commonality. Appreciating how they unite us can go a long way toward helping us and our organizations be more energizing, productive, and successful.

The Role of Design: A Final Thought

Our core of commonality requires support from the work environment in terms of our expectations for comfort and choice, connection and contemplation.

Our core of commonality requires support from the work environment in terms of our expectations for comfort and choice, connection and contemplation. An environment that recognizes the social nature of work and the shared experiences that happen there can attract, develop, and engage all employees, no matter their generation or gender, their work style or personal preferences. Providing a varied working environment, one where people can choose a place that best suits their specific need at the time–be it stimulation and support from others or silence and space for oneself–is a key step in realizing such a workplace. Providing employees with the right setting and the right tools is the best policy, for them and the organization as a whole.

Notes

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