

'Intelligent memory' *Enlightened leaders leverage creativity*

I recently participated in two corporate strategic planning retreats. Both followed a conventional agenda – define the mission, vision, values, strategic goals, etc. – and each facilitator demonstrated appropriate sensitivity to our opinions, ensuring that all board members' voices were heard. Their differences emerged when roadblocks developed requiring creative-thought energy.

The first facilitator employed a traditional, five-step strategy including, 1) define the problem; 2) identify criteria; 3) gather and evaluate data; 4) list and evaluate options; and 5) select the best option. We progressed effortlessly through the first three steps and then stumbled when hitting step 4. The facilitator's response was to break us into smaller groups, charging us to brainstorm ideas and saying, "It's time to turn off your left brain and only use your right brain."

The second facilitator took a vastly different approach. We were asked more thought-provoking questions and our responses were captured in a matrix. The questions were simple:

1. What is your understanding about this situation?
2. What actions do you think are needed to succeed?
3. Who (person or company) has overcome a situation like this before?
4. What actions are needed to succeed?

Each answer was assigned a provisional meaning so that as new information surfaced, it was captured and recorded on the matrix and easily shared with the group.

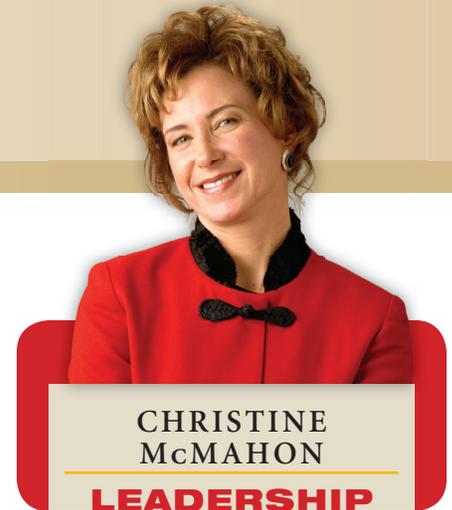
Intrigued by the second facilitator's novel (and more successful) approach, I asked for the rationale behind it, which turned out to be a technique used by a global organization to ignite, capture and

track creativity. This organization's research showed that creativity happens in a flash when two ideas collide generating a new insight or concept. The matrix is a nifty tool that facilitates and communicates any/all new information to the entire team.

Now I was curious ... how does the creative brain actually work? Do we know?

We've been taught that the right side of the brain holds the creative, artistic and intuitive capabilities, and the left side is the reservoir for the analytical, logical and rational thinking. This distinction was discovered by Nobel Prize winner Dr. Roger Sperry's innovative research in 1981. By 1998, Brenda Milner, Larry Squire and Eric Kandel published a leading edge article, "Cognitive Neuroscience and the Study of Memory," in the journal *Neuron*, describing a new model of the brain. They contended that the brain contains "intelligent memory" where the analytical and intuitive aspects work together. Eric Kandel won the Nobel Prize in 2000 for his contribution to this work. This new model negates previous thinking and shows that "there is no left brain or right brain; only learning and recall, in various combinations, throughout the entire brain."

Working with this new model, neuroscientist Barry Gordon states in his book, "Intelligent Memory: Improve the Memory That Makes You Smarter," that since birth our brains compartmentalize experiences and information akin to an elaborate closet organization system. The brain warehouses existing knowledge into separate files and, when new data is received, it searches the stored files looking for similar information. Upon finding a match, the new information is combined with the existing knowledge to create a fresh thought. This process, called intelligent memory, is the basis for producing creative ideas.



William Duggan, professor of innovation in the executive MBA program at Columbia University, suggests that, "as the intelligent memory concept has replaced the old, two-sided brain theory in neuroscience, companies need to replace brainstorming with methods that reflect more accurately how creative ideas actually form in the mind."

This further supports the second facilitator's approach to, creative thinking by challenging our brains search-and-connect processes through stimulating questions.

Questions act like power tools to spawn creativity. Have you ever been asked a question that you weren't prepared to answer? In the moment, even while you're verbalizing a response, your mind is searching for the real answer. Inevitably, the answer pops into your head like a lightning bolt when you're doing something "mindless" like taking a shower or mowing the lawn. This is exactly how the brain works. It can't be forced into finding the right answer but rather processes over time until new connections can be made or a new compartment is built into the closet.

Evidence continues to grow about how the brain actually works, challenging us, as leaders, to become more enlightened so we can leverage the creative potential of our human capital. As we learn more about how our brains are designed to function, I suspect there will be new, cutting-edge methodologies to unlock creativity. For all of us, this will mean higher levels of employee engagement and greater innovation. ■

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