Learning for Innovation: Cultivating Insightful Practice in Organizations

Contemporary organizations face an ever more complex, interconnected and changeable environment, in which effectiveness relies on developing insight into the true nature of challenges that are equally complex and interconnected, and responding with timely and lasting impact to those challenges.

The increasing ambiguity and open-endedness of today's innovation challenges means that effective responses involve more than simply fixing or improving something that is already familiar. Indeed, the application of existing mental frameworks, practices, and tools can both mislead and miss their mark when applied to such challenges. Moreover, the structure of many such problems or challenges makes them inherently difficult to resolve in that they cannot be "reasoned out step by step to home in on the solutions" (Perkins, 2000 p22). As such they are not malleable to purely analytical approaches. Instead, problems and challenges like these need to be approached with different assumptions, perspectives, and techniques – i.e. they need insight.

But what does it mean to have insight and how can we understand its practice and relevance in organizations? This paper explores that question, drawing from different perspectives to unpack the notion of insight and examine the organizational environment for insightful practice. It is framed around the following questions:

- What do we mean when we talk about "insight"? Why is the notion of insight compelling in organizational settings right now?
- Can we characterize insight and insightful practice in meaningful ways that enable us to analyze, evaluate and perhaps promote its occurrence?
- Are there prevailing norms and attitudes that challenge or undermine the emergence of insight and insightful behavior in organizations?
- What general principles and specific approaches might promote and enhance opportunities for insightful activity?

The term "insight" suggests "seeing into" or seeing beyond the obvious or surface features of a situation. Most centrally, this "seeing into" involves some kind of pattern recognition regarding a field of diverse and seemingly unrelated sources of information – facts, ideas, actions, images, objects or phenomena. Insight is thought to arise when a solver breaks free of unwarranted assumptions to recognize essential relationships or connections among these elements in a way that clarifies the inner character, true nature, or underlying truth of the situation at hand. Often these non-obvious connections are realized in a sudden experience of comprehension and clarity—known as an "Aha! moment" or a "Eureka moment" (Kounios and Beeman, 2009; Perkins, 2000).

While insight is in play, for instance, when people solve word puzzles, reinterpret situations or images, resolve ambiguous percepts, or "get" the joke, historical experience reveals that many breakthrough solutions to significant intractable problems were reached through insight. For example, Archimedes was able to calculate the volume of an irregular-shaped solid object through suddenly recognizing the implications of water displacement as he lay

in his bath (Perkins, 2000). Moreover, insights often seed novel perspectives of extraordinary generative power and practical impact. Darwin's notion of "survival of the fittest" transformed our view of the world with evolution. The Wright brothers' insights about propeller design solve a major obstacle to powered flight. And when Alexander Fleming found *Penicillium* mold on his lab's bacterial cultures, his reinterpretation of that mold as a "growth inhibitor" instead of a "contaminant" ultimately led to the development of antibiotics for treating infections—a breakthrough that saved and continues to save countless lives.

We draw on a variety of perspectives to consider the phenomenon of insight in an organizational context. From a *cognitive psychological* perspective, insight is contrasted with analytical or stepwise problem solving and involves different processes. This perspective highlights the psychological experience of reaching an insight, particular noting the presence of a long, apparently unsuccessful, search process and the sensation of impasse, before a precipitating event suddenly reveals information in a new light leading to a "cognitive snap" (Perkins, 2000). As such, it suggests techniques and practices that help to advance this experience from its search and impasse stages towards subsequent stages and the ultimate insightful solution.

From a very different vantage point, *cognitive neuroscience* explores what takes place in the brain before and at those moments of revelation that are experienced as "insight," – as revealed through the use of increasingly sophisticated tools such as electroencephalography (EEG) and functional magnetic resonance imaging (fMRI) (e.g. Kounios & Beeman 2009). This literature also shows how emotional states influence brain functioning needed for insight solutions, and thus suggests how organizational contexts might be managed to support insightful thinking.

A *sociological perspective* on the phenomenon of insight reveals how particular social processes have the capacity to trigger collective insight. In particular, we examine patterns of human engagement that yield conceptual reorganization of a group's collective knowledge of a quality able to generate radical innovations (e.g. Suri, 2008; Hargadon, 2003, Cross et al, 2007, Weick & Sutcliffe, 2007).

With a more multifaceted understanding of insight, we then explore whether elements of organizational life adequately support individuals' and groups' abilities to act insightfully. Specifically, we examine four elements: the role of attention and focus; the role of time and efficiency; the role of standards; and the role of expertise. We note that many cherished organizational values have the potential to impede rather than invigorate insightful practice, and consider ways to reconcile apparent contradictions.

References:

Cross, R., Hargadon, A., Parise, S. and Thomas, R.J. (2007). Together we innovate. MIT Sloan Management Review

Hargadon, A. (2003) <u>How Breakthroughs Happen: The Surprising Truth About How Companies Innovate</u> Harvard Business School Press.

Kounios, J. and Beeman, M (2009). The Aha! Moment: The Cognitive Neuroscience of Insight. <u>Current Directions in Psychological Science</u> **18**(4): 210-216.

Perkins, D.N. (2000). <u>The Eureka Effect: The Art and Logic of Breakthrough Thinking</u>. New York & London, W.W. Norton & Company.

Suri, J. F. (2008). Informing our Intuition: Design Research for Radical Innovation. Rotman Magazine **Winter**: 53-57.

Weick, K.E. and Sutcliffe, K.M. (2007) <u>Managing the Unexpected: Resilient Performance in an Age of Uncertainty</u>. Jossey-Bass.