



# Creativity, Mindfulness and High-Quality States of Attention at Work with Dr. Erik Dane

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Accepted: 16 July 2022  
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**Keywords** Creativity · Intuition · Attention · Mindfulness · Technology · Education · Organizations · Professional work

*Simply pushing harder within the old boundaries will not do.* ~ Karl Weick

*It's sort of unsettling to me just how set in their ways many people are much of the time, and to be creative is at some level to part ways with how we've been behaving or what we've been thinking or what we've been producing up until this particular point in time.*  
~ Erik Dane

## Introduction

In this article, we pick up where we left off with themes closely connected to our prior article, which featured Dr. Jonathan Schooler's work on individual mindfulness and mind wandering. Here, we scale up, viewing mindfulness and mind wandering from the view of the collective: specifically, we explore what these ideas mean and how they play out in organizational contexts. In keeping with our tradition of speaking with renowned creativity scholars about their areas of expertise, in this piece we speak to Dr. Erik Dane, whose work centers on how to enhance decision making and creative contributions in the workplace. Mindfulness and mind wandering become a starting point for covering an entirely new set of related concepts, including intuition and epiphanies, as well as flow and novelty, which all have an intrinsic connection to creativity.

Dr. Dane is an Associate Professor of Organizational Behavior in the *Olin Business School* at *Washington University* in *St. Louis*, where he studies issues related to mindfulness, mind wandering, and creativity as they pertain to managerial decision making in organizational settings. In particular, he focuses on decision making in organizations in the knowledge sector, including consulting and higher education. His scholarship allows him to “play around with concepts that would seem kind of slippery, or even almost mystical at times, and try to pin them down and make them more amenable to actual systematic exploration and scientific study.” Specifically, he is interested in how to push people out of habitual tendencies and encourage the role that epiphanies can play in decision making. In this he looks at specific states of attention, such as productive mind wandering as well as open and focused attention via mindfulness, to promote awareness, intuition and creativity. These practices, processes, and the ideas they help generate have elements of spontaneity and synchronicity. As Dr. Dane shared: “I'm interested in the production of novelty in seeing the world through novel lenses and breaking out of the force of autopilot that we're so often bound up in.”

## Measuring and Promoting High Quality States of Attention at Work

Dr. Dane mentioned that, in his field, a number of scholars approach mindfulness somewhat differently than the mainstream definition that has increasingly become a part of popular culture and scholarship. This difference emerges from the granularity with which scholars approach the phenomena itself—whether they conceptualize it at the individual or at the organizational level.

For instance, mindfulness, when practiced at the individual level, is typically viewed as engaging in a specific form of present-moment oriented attention (e.g., focused, open) with a particular attitude (e.g., open, kind, curious,

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non-judgmental). That is, mindfulness, at the individual level, can be defined as “moment to moment non-judgmental awareness” (Kabat-Zinn, 2013, p. *xlix*). In contrast, management scholars, who are focused on the organizational level (i.e., how organizations function) often build on the work of Ellen Langer who defined mindfulness as “the process of drawing novel distinctions” (Langer & Moldoveanu, p. 1, 2000). Langer and Moldoveanu (2000) suggest that mindfulness, practiced in this manner, leads to a number of diverse consequences, including: a greater sensitivity to one’s environment; increased openness to new information; the creation of new categories for structuring perception; and an enhanced awareness of multiple perspectives in problem solving. (p. 2). Langer’s work has been widely applied across multiple contexts, including education and management.

Dr. Dane, in his work, provides an illustration of how this might look in action and why it could be useful for breaking away from traditional mindsets into a space that might increase the likelihood of creative breakthroughs and the injection of novelty into the familiar:

How can I break through from my autopilot of labeling things, and think of other possible applications or other possible lenses that I could cast? It turns out when organizations think mindfully, this is essentially what they’re doing. Teams are resisting the temptation to simplify the world around them. They are continually asking themselves what is this event? Is there danger here? What’s another way to categorize and label it? That would have different sorts of behavioral consequences and implications associated with it. Ellen Langer’s form of mindfulness actually takes us even closer to creativity...we’re breaking through the categories themselves and trying to come up with novelty. I see even closer ties between her work and creativity than I do with defining mindfulness based on just present-moment attention.

This perspective on mindfulness and the resulting shift is an example of Dr. Dane’s interest in helping managers, students, and himself move out of habitual ways of functioning into a more open and receptive state. This directly aligns with most creativity research, which has consistently demonstrated that one of the qualities most reliably correlated with creativity involves openness to experience (Prabhu et al., 2008). This idea of openness plays out differently, Dr. Dane argues, when we shift from the individual to the organization—which in turn influences how constructs like mindfulness are conceptualized and measured. As Dane points out, mindfulness in organizational literature, heavily focused on Langer’s work, departs from Eastern philosophical traditions and Buddhist psychology that hone in on one aspect of mindfulness: noticing (i.e., attention). On an individual level, Dane defines mindfulness as “being attentive

to what’s unfolding in the present in the here and now, paying attention nonjudgmentally with an attitude of openness, or acceptance to what’s happening.” He illustrates how this might look in the workplace, in a hypothetical instance of walking to a strategic planning meeting, saying:

I might start with taking a few breaths here in my office, and then, as I’m walking down the hallway, instead of just again jumping onto email on my phone I’m going to pay attention to some aspect of my surroundings in the hallway. How is the light streaming in here in the morning, or in the afternoon or how did they design these light fixtures? Again, I’m bringing myself into the present somehow. And, as I walk into the meeting I’ll try to cultivate some degree of curiosity. Who’s in here? What sort of body posture they do have? Are they staring at their smartphones? What’s on the agenda? Is there an agenda displayed and what does it say? In what ways do I want to contribute? In what ways do I want to be a thoughtful listener? This is a chance to work on mindful listening. These seemingly straightforward little tips or tools or tricks actually turn out potentially to be pivotal right because not everyone is this thoughtful about what they’re doing much of the time.

This attunement to direct experience, which runs counter to auto-pilot modes people are often engaged in, helps us open up to new ways of experiencing the surrounding world. This allows for new insight to emerge, including new ways of solving problems—a conceptual factor that we have previously described as being key to creativity involving the transdisciplinary skill of perceiving, which involves careful observation and attention (Henriksen et al., 2014).

It is not, however, the only way to encourage creativity through openness and generation of novelty. Dr. Dane’s research also considers mind wandering, with a particular focus on a productive, generative form of mind wandering that arises within the mind’s “imaginative realm.” He delineates different forms of mind wandering based on whether they are “functional or generative” or “dysfunctional”. Differentiating types of wandering is critical, since dysfunctional mind wandering is often the source of “undue suffering” or less productive states, such as rumination. The importance of drilling down to consider the effects of different forms of mind wandering also emerged in our two prior creativity scholar interviews about mindfulness (with Viviana Capurso and Jonathan Schooler) (Mehta et al., 2022; Richardson et al., 2022). Mind wandering is, as Dane notes, the default state of our minds—occurring “when the mind disconnects from the task at hand, and the surrounding environment.”

Much of Dr. Dane’s work looks at the content and function of mind wandering, including, “Where exactly is (the) mind when it adventures off, where does it go? Are those

generally functional destinations? Are those problematic destinations?” In his work on the imaginative side of mind wandering, he and his colleagues have looked at how creative people in the workplace operate in relation to this particular form of mind wandering. They discovered a moderating variable, an individual’s level of identification with their profession. The more that a worker’s identities were connected with their profession (e.g., defining oneself in terms of one’s job as a consultant), the more invested and curious they were about their own mind states pertaining to their work, which meant the more likely they were to generate creative ideas through imaginative mind wandering. Workers who identify with their profession are:

...especially intrigued and fascinated by where their mind ventures around to when it's related to work. They can be especially playful or sort of intrigued by the content of their mind wandering and therefore very apt to connect to these ideas that bubble up back to the workplace, so of course it depends a bit on who the individual is, so we have this moderating role of professional identification in the model.

In researching mindfulness and imaginative mind wandering, Dr. Dane is interested in the conditions under which managers tend to have light bulb “aha” moments of creativity as they are solving problems. He notes that such insights tend to occur when you suddenly notice something that sparks an idea. For example, when you

...suddenly notice the design of a building or have a conversation with somebody, which in turn, informs whatever (you’ve) been wrestling with in current projects. There's an element of the spontaneous. There's an element of serendipity associated with creativity. You can work long and hard, but you also need to have points where the mind itself sort of unconsciously delivers an answer or you stumble across something that's truly useful that you could have never predicted.

According to Dane’s work, engaging the conscious mind through mindfulness, the unconscious mind through imaginative mind wandering, and connecting with the surrounding environment appears to maximize creativity. This is consistent with findings which suggest that 47% of the time the mind is wandering (Killingsworth & Gilbert, 2010, as cited by Sofer & Brensilver, 2019) and when it is, the default mode network in the brain is activated, which is associated with “self-referential” monitoring (Beer, 2007; Sofer & Brensilver, 2019). Meaning that being “lost in thought” usually means focusing on oneself, one’s inner narrative of the past or forecasting into the future (Sofer & Brensilver, 2019), as opposed to coming up with new ideas or solving problems. As an individual learns to practice mindfulness, the resting state of the brain moves away from the default mode

network; and with that, self-referential thought turns to more present-moment-centered attention, including awareness of the body and the surrounding world (Farb et al., 2007, as cited by Sofer & Brensilver, 2019). This is also consistent with Siegel’s (2020) definition of the mind as an embedded (brain) and embodied (enacted) process that includes the flow of energy and information within oneself, through exchanges with others, and interactions with the surrounding environment. When a person’s mind is in a harmonious state, they are experiencing integration—which means both feeling differentiated as a distinct individual and also linked to others and the surrounding environment (Siegel, 2020). Integration is an ideal state that allows for creativity to emerge, or “a way of being in which life emerges in new and fresh combinations of inner experience and outer explorations” (Siegel, 2012, p. 17-1). In this state, consciousness expands, and therefore, so does awareness of the possibilities. This can allow new ideas and potential solutions to problems (Siegel, 2018, p. 283). It opens the door for creativity, new ideas, and experiences.

### **Creativity in its Starring and Supportive Role through Process and Delivery of Scholarship**

The “mystical” and “hard to pin down” variables that are the focus of Dr. Dane’s research are intrinsically linked to creativity. Although Dane does not see himself as a creativity researcher in “big bold shiny letters,” he describes creativity as “a dependent variable of interest” in several lines of inquiry related to his research.

Creativity also informs Dane’s interdisciplinary work in methodological design, his areas of interest, and the delivery and dissemination of his scholarship. Dr. Dane “walks his own talk,” engaging in organizational management scholar Karl Weick’s “sensemaking recipe” (1969), essentially: “how do I know what I know until I see what I say?” Dane himself aims to apply mind wandering as a generative process, allowing free flow of thinking in conversation. He spoke about how he frequently takes walks around campus or engages in a conversation as a source of inspiration and in order to counter habit and allow for novelty in experience.

Dr. Dane is also a proponent of creativity in academic spaces and communications. For example, as an associate editor of the empirical, exploratory *Academy of Management Discoveries* journal, Dr. Dane has introduced a new forum for management scholars to share their work, called *Discoveries-through-Prose*, using creative nonfiction to share scholarly ideas. This forum is an opportunity to support the writing and dissemination of engaging scholarship. It is essentially “creative writing meets rigorous empirical scholarship.” This approach allows academics to share their

ideas in a way that “doesn’t follow the traditional academic boilerplate.” As he describes:

It is written more like engaging essays with a lot of the methodological details moved to the appendix; we put a limit of under 20 references, so we really put the onus on the author to write in a way that would speak for itself without just relying on one citation after another.

Through this forum, Dane and others are encouraging academics to “simplify the way the work is presented (and) infuse it with creativity so it’s sort of an innovative space for people to write in a way that they just haven’t had the opportunity in their academic career.” This potentially can lead to new insights and discoveries.

Dane and Rockmann (2021, p. 160) have also put out a call in the journal for their colleagues to submit scholarship that is “*flat-out engaging*—to the point that we would be keen to share them with academics, students, managers, policy-makers, family, and friends.” Along related lines, in an essay detailing the use of a concept called Traveler’s Mind, Dane and Rockmann demonstrate how one can bring elements of awareness and curiosity to direct experience as one would when everything is new in an environment, as when one travels to an entirely new destination (Dane & Rockmann, 2020). Similarly, Dr. Dane sees opportunities for scholars to increase their spheres of influence via dissemination of knowledge through different outlets, including podcasts, op-eds, or acting as a sounding board for think tanks or policy makers. Since the concepts Dr. Dane is interested in are often difficult to measure themselves, he believes “academic research itself is one venture in creativity” and that research methods themselves can be creative and working with and developing theory is critically important, as measures can and often do “lag behind theory.”

### Implications for Education

Dr. Dane aims to embody the practices he studies to support his creative process through his scholarship, but he also engages in creative writing as a hobby and feels it is vitally important to bring these concepts into the classroom for students to experience for themselves. A proponent of experiential learning, Dr. Dane believes students and instructors alike can benefit from learning to practice mindfulness in the classroom to:

Put their rumination, catastrophizing, and anxieties on hold and consume the information in a thoughtful vivid way...(which) could conceivably do wonders in terms of enhancing attention spans and active rich engagement with course material. And really ditto

for instructors themselves, for college professors there's just so many different parts of the job. We have meetings and research projects, working with doctoral students, but then you've got to jump into the classroom and “bring the show.”

Dr. Dane brings his students around campus for walks in order to have them experience engaging with their environment in high-quality states of attention, providing opportunities for self-reflection, and putting learning into practice. For example, he regularly asks MBA students to practice giving speeches in class and then debrief and receive feedback. He points out that leaders rarely have these kinds of opportunities. This is “skills-based learning” beyond “just textbook knowledge.”

### Technology & States of Attention (or Inattention)

On the topic of technology, Dr. Dane points out that “all technological products are themselves brain children of the creative process.” And yet, being at the mercy of technology, which is designed to capture our attention, leads to “the haunting possibility that we don’t really know what boredom is anymore (and) boredom has value it’s a stimulant for creativity.” Constant exposure to technology and social media is what Dane characterizes as “a grand experiment in a way... we don’t know how this is all going to end,” and it is one that “we haven’t really signed up for.”

Technology can be concerning in terms of how it interrupts or reduces the likelihood of engaging in high quality states of attention, such as mindfulness, or getting into a state of flow. Beyond this, Dane is also worried about how technology may encourage people to veer off into “autopilot, habitually opening up certain apps...grabbing the phone whenever they see it. This is taking away from mindfulness or flow.” In this sense, Dane suggests that, “there can be a lot of value in keeping the phone tucked away in a drawer in your office.” He marvels at how it is possible to unplug from technology and the low-quality states of attention it can generate, pointing out that it is “amazing in today’s society to experience the joy and the enlightenment that can come from just going for a mindful walk. Again, it’s both mindfulness and mind wandering. But I think it helps to have some strategy.”

Yet, just as technology products are innovations and products of creative thinking, Dane thinks technology can be leveraged productively in the interest of promoting high-quality states of attention. He suggests that technology could be produced in an effort to expand what individuals are conscious of, including their thought patterns. It may offer a means to measure “cognition in real time and perhaps create some really elegant but user-friendly graphs, about how I was today inter-psychically and my



room for improvement.” He notes that even with the attentional concerns around technology, we should not lose sight of the marvel that is modern technology:

It's magnificent where we stand technologically, we're living in the science fiction age. I remember saying as a kid, 'someday we might be able to see the person that we're talking to as we're talking with them on the phone and wow how would that work?' The pace of technology change has been exponential and it's truly remarkable what's unfolded. We're always up against the challenge of taking things for granted—the normalization of technology. It's important for us to step back and remind ourselves it's an incredible era to be living in technologically, but we need to be very wary about liabilities in addition to the benefits.

As Dr. Dane suggests, we can remain in awe of the wonders of technology, while not losing sight either that we are “bombarded 24/7 by things beeping or flashing at us.” And although he acknowledges that the reasons behind increased rates of anxiety are complex, he speculates that overstimulation as a result of constant exposure to technology appears to play a role. Utilizing practices to retrain attention, such as mindfulness and imaginative mind wandering, may be needed more than ever to increase generalized wellbeing and decrease self-focused monitoring, which has implications connected to mood and anxiety disorders (Farb et al., 2007, as cited by Sofer & Bressilver, 2019).

## Conclusion

In modern culture, it's important to understand the importance of engagement with others and one's environment, to move out of self-focused mind wandering into a more expansive and connected state of mind. Knowing that the potential benefits could include increased creativity, use of intuition, and epiphanies at work offers further affirmation and validation for bringing attention to bear in specific ways, beyond previously established connections to mental and physical wellbeing garnered by these practices. Dr. Dane's work, measuring the at-times “mystical,” can promote better understanding of how to leverage success and wellbeing at work and in one's own personal life, without losing any of the magic of the mystery of the dynamics of human consciousness and flourishing. As he notes:

Sometimes people say, ‘you are kind of squashing some of the magic out of these concepts by trying to pin them down scientifically. Isn't there a joy in keeping the mystery alive?’ I don't think we're at risk yet of solving all the mysteries.

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