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Assessing for Ideators: How to Stop Solving and Start Listening

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Buffalo State College State University of New York Department of Creative Studies

Assessing for Ideators: How to Stop Solving and Start Listening

> A project in Creative Studies by Jody Fisher

Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science

Buffalo State College State University of New York Department of Creative Studies

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Abstract

This project focuses on the challenges Ideators face in developing the skills that make them effective in the Assessing the Situation stage of the Thinking Skills Model of the Creative Problem Solving process. This covers Diagnostic Thinking skills, Mindfulness skills, and the FourSight preferences—Ideation and Clarification, in particular. The finished project includes the first draft of a toolkit which will assist Ideators who wish to become more skilled at Assessing the Situation.

Date	

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- My mom, Laura Reed, the quintessential Ideator and inspiring example of how live a creative life.

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Assessing for Ideators: How to Stop Solving and Start Listening

Section One: Background to the Project

Purpose and Description

Hello. My name is Jody and I am an Ideator.

If you've got a problem, I've got an idea for you. No, five ideas. Wait—make that 10.

That's helpful, right? It's helpful if we are at the Ideation stage in the problem solving process. It might be helpful in a situation when I am not the facilitator.

Otherwise, not so much.

When it comes to Creative Problem Solving (CPS), we all have different preferences. These are identified in the FourSight thinking styles assessment as Clarifying, Ideating, Developing, Implementing, or a combination of those (Puccio, 2002b).

Why is my preference for Ideation a problem? Because it stands in the way of me being an effective facilitator. A facilitator's job is to manage the process and to stay out of the content (Miller, Vehar & Firestien, 2003, p. 9). My first inclination when presented with a problem (my own or someone else's) is to start coming up with ways to solve it. I don't ask a lot of questions: as soon as I hear the problem—or sometimes even sooner—I'm generating ideas (in my head if not out loud).

I know better: Ideating is not where you start CPS.

The first step in the CPS process is Assessing the Situation. Here, questions are asked, data is gathered, and decisions on how to proceed are made (Puccio, Mance &

Murdock, 2011). My skills in this area are underdeveloped and my practice in it is lacking as well. And my natural inclinations are not helping me at all.

I wish I could turn off—or at least turn down—my inner Ideator, that voice in my head that "can see many possible solutions to the same situation," the one that "enjoys proliferating ideas but may jump from one idea to the next, without following through" (Puccio, 2002b).

I'd like to understand how to develop and later tap into those skills that are key to Assessing the Situation as defined in the Thinking Skills Model of CPS. These include skills related to Diagnostic Thinking, such as asking questions, listening, following up, and identifying insights; and the skills that lead to Mindfulness, such as curiosity, openness and acceptance (Puccio, Mance & Murdock, 2011).

I know I can't be alone in this challenge: informal research and anecdotal accounts show that a majority of the students who enroll in the Master's of Creativity Studies program at Buffalo State are Ideators.

To help myself and my fellow Ideators overcome some of the barriers we encounter in our efforts to Assess the Situation, I will be creating a toolkit that will set the stage for us to become powerful and accomplished Assessors.

Rationale for Selection

"Assessing the Situation," "mess finding," "problem framing," "data gathering": the terminology may vary across models, but making sure you are solving the right problem is the foundation of creative problem solving. As Sir Ken Robinson stated, "The questions we ask are often more important than the answers we search for" (2011, p. 161).

Assessing the Situation is the "executive step"—the metacognitive jumping-off point that has us considering facts and feelings in an effort to determine what problem needs to be solved, and the appropriate way to do so (Puccio, Mance & Murdock, 2011). Getting this step right is a must, as "overlooking a key piece of data could spell disaster to creative problem solving efforts" (Puccio, Mance, Switalski & Reali, 2012, Chapter 11, "Diagnostic Thinking: A Closer Look" section, para. 2).

In the Thinking Skills Model of CPS, Assessing the Situation requires Diagnostic Thinking skills: examining the situation, describing the problem, and determining the appropriate next step in CPS (Puccio, Mance & Murdock, 2011, p. 71). The related affective state is Mindfulness—defined by Puccio, Mance and Murdock (2011) as "attending to thoughts, feelings, and sensations relative to the present situation" (p. 77)—the "heart" to Diagnostic Thinking's "head."

Ideators are big-picture thinkers—imaginative, abstract, fluent—not known for their attention to detail or follow-through (Puccio, 2002b). The skills required for Assessing the Situation, lean toward details, descriptors and decision-making (Puccio, Mance & Murdock, 2011). But Ideators are not completely without "Assessing" abilities: Puccio, Murdock and Mance (2005) described the Ideator as a combination of Mess-Finding and Idea-Finding.

So how might an Ideator improve her Diagnostic Thinking abilities? How might she become more Mindful? How might she stop solving and start listening? That is what this project is all about.

Section Two: Pertinent Literature

Introduction

To learn more about the skills and tools needed to be successful at Assessing the Situation, I focused on two key areas of research:

- Diagnostic Thinking (aka, facts or "head")
- Mindfulness (aka, feelings or "heart")

I looked at each of these from two points of view: theory and practice.

I also wanted to understand the strengths and challenges of different FourSight preferences—specifically the Clarifier and the Ideator—so that I could apply that knowledge to my learnings on Diagnostic Thinking and Mindfulness.

Problem-Solving Preferences

As mentioned in the previous section, we all have different thinking styles when it comes to Creative Problem Solving. Knowing your preference—Clarifier, Ideator, Developer, Implementor, or a combination of these—can help you see your strengths and also reveal "blind spots that may limit personal effectiveness" (Puccio, 2002a, p. 1).

I show a solid preference for Ideating, which means I like to come up with ideas and engage in big-picture thinking. It also means I might have tendency to overlook details and get too "out there" (Puccio, 2002b).

The thinking style that seems to align most closely with the skills needed for Assessing the Situation is the Clarifier. Clarifiers "spend time getting a clear understanding of the problem," "enjoy the details," and "move forward cautiously." They are "focused," "serious," and "deliberate" (Puccio, 2002b).

Can an Ideator with a low Clarifier preference somehow dial those skills up? Puccio and Grivas (2009) wondered:

In regard to individual creativity, is it reasonable to expect that given the very different, almost opposing, personality traits associated with these two areas of the creative process, that many people are likely to possess the personality makeup to be effective at both problem clarification and idea generation? (p. 253)

They speculated that perhaps the individual who can successfully navigate both of these stages of the process possesses "an amalgamation of...affective characteristics": the "careful, cautious, reflective and factual" approach of the Clarifier, married with the "demanding, ambitious and desirous of change" perspective of the Ideator (Puccio & Grivas, 2009, p. 253).

Could I do that? Be that?

Can I develop new strengths? Could I become "methodical," "orderly," and "organized" in my approach to creative problem solving (Puccio, 2002b)? Kashdan (2009)—while not addressing creative thinking styles preferences specifically but strengths in general—argued against it:

It's easy to underestimate strengths when they are tightly woven into our identities. Maybe we think we should add more strengths to our toolbox than work with the ones we already have. Let me be candid and tell you this is flat-out wrong. Our strengths are exactly what we should be playing with. These are the behaviors we are most comfortable with; these are the behaviors that are the most energizing; these are the behaviors that feel effortless to use. (p. 261)

So is it possible to reframe my existing strengths through a Clarifying lens?

Could adaptability, flexibility and enjoyment of "toying with possibilities" become assets in the Assessing the Situation stage (Puccio, 2002b)?

Diagnostic Thinking: Theory

Diagnostic thinking was defined as "making a careful examination of a situation and describing the nature of the problem" (Puccio, Mance, & Murdock, 2011, p. 75). What's a problem? Treffinger, Isaksen and Dorval (1994) defined it as "any important, open-ended, and ambiguous situation for which one wants and needs new options and a plan for carrying out a solution successfully" (p. 226). Or, more simply, a problem is "a gap between what you have and what you want" (Puccio, Mance, & Murdock, 2011, p. 155).

In the Thinking Skills Model of CPS, Diagnostic Thinking involves

- examining the situation;
- describing the problem; and
- deciding on process steps.

It's about facts and external data (Puccio, Mance, & Murdock, 2011). "Effective diagnosis is at the heart of good problem solving, and information is at the heart of diagnosis" (Puccio, Mance, & Murdock, 2011, p. 113).

To be a diagnostic thinker, one needs to *not* accept things at face value, but to "ask questions to illuminate reasons behind the more obvious aspects of the problem" (Basadur, 1994, p. 255). One needs to engage critical thinking skills: understanding causes, recognizing assumptions, analyzing relationships, assessing uncertainty, making

connections, and employing analogies. This requires persistence, planning, and flexibility (Halpern, 1998).

Treffinger, Isaksen and Dorval (1994) defined the critical thinking tools specifically needed for creative problem solving:

- making inferences;
- applying deductive reasoning;
- selecting relevant data;
- sequencing;
- rank ordering and setting priorities; and
- making choices and decisions (p. 233).

Diagnostic thinking gives you what you need to frame or find the problem; framing the problem is the essential first step towards a solution (Basadur, 1994; Getzels, 1985; Hurson, 2008; Puccio, Mance & Murdock, 2011; Sawyer, 2012). The terminology may vary from theory to theory (or even in progressive iterations of the same theory) (see Table 1), but the thought behind it is the same: "The way a problem is presented can influence how and whether you can solve it" (Halpern, 2003, p. 349).

Table 1 "Assessing the Situation" Stage Across Process Models

Process Model	Stage that Aligns with "Assessing the Situation"
CPS	Framing Problems, Mess Finding
Design Thinking	Inspiration Space (Insight, Observation, Empathy),
	Sense Intent
Dewey	State of Doubt, Perplexity, or Mental Difficulty in
	Which Thinking Originates
IDEAL	Identify Problems, Define Goals
Mumford	Problem Finding
Possibility Thinking	Posing Questions
Simplex	Problem Generating
Sternberg	Redefine Problems

Torrance	Sensing a Problem or Gap in Information
UK QCA	Questioning & Challenging
Wallas	Preparation

(Brown, 2009; Davis, 2004; Kumar, 2013; Sawyer, 2012)

Basadur (1994) identified the skilled problem finder as being

- a welcomer of change;
- highly tolerant of ambiguity; and
- proactive rather than reactive.

The problem finder not only senses current opportunities, but anticipates future ones and is able to make connections between changes in the environment and previously unknown problems (Basadur, 1994). These characteristics appear to align with some of the Ideator's strengths: flexibility, imagination, and big picture thinking (Puccio, 2002b).

Diagnostic Thinking: Practice

The practice of Diagnostic Thinking is about what you know, and what you think about what you know. For Assessing the Situation, Puccio, Mance and Murdock (2011) emphasized the importance of having "the ability to think about your thinking" and being "able to stand above the process to ensure you are taking the most productive path through it" (p. 121).

Diagostic thinking tools can be divergent (asking questions) or convergent (making decisions). Puccio, Mance and Murdock (2011) offered two divergent tools (5Ws and an H, Why-Why Diagram), two convergent tools (Hits, Highlighting) and three "metacognitive" tools to help determine process direction (4Is, Keyword Search, If-Then Process Analysis). Barbero-Switalski (2003) identified one additional divergent tool (Phoenix Checklist) and five more convergent tools (Fishbone Diagram, Stratification, Affinity Diagram, Is/Is Not Matrix, FCB Grid). In the "Advanced Cognitive Tools for

Creative Problem Solving" course that she teaches at Buffalo State, Barbero-Switalski (2012) included the SWOT Analysis tool for Assessing the Situation.

Other CPS-related tools for Assessing the Situation include Parnes' (1977) robust "Discovering Challenges" exercise, with its 26 question checklist; and Hurson's (2008) KnoWonder and DRIVE exercises.

The design thinking process dedicates a good deal of time to problem framing. While different design thinkers describe the stages using different terminology, all of them include what Brown (2009) calls "the inspiration space": insight, observation and empathy. Tools that support this stage include (but are not limited to) the project brief (Brown, 2009), a problem framing checklist, the Innovation Intent Statement, and POEMS (People-Objects-Environments-Messages-Services) (Paradis & McGaw, 2007).

Mindfulness: Theory

Mindfulness is an interesting concept—and a term that's open to interpretation.

Tillman (2012) identified a range of possibilities in a recent paper: cognitive mindfulness, meditative mindfulness, and meta-affective mindfulness. For this project, I'm going to stick with what Tillman calls meta-affective mindfulness, which is defined by Puccio, Mance and Murdock (2011) as "attending to thoughts, feelings, and sensations related to the present moment" (p. 77). While focusing on that definition, I may also venture into some of the practices of meditative mindfulness (which is mindfulness in the Buddhist tradition) and cognitive mindfulness (which is about not just noticing new things, but making new connections) as I try to understand how to develop mindfulness skills.

These days it seems like everyone is talking about mindfulness. My daily "mindfulness" email alert from Google has stories about the military, corporations,

schools, hospitals, and celebrities, all hopping on the mindfulness bandwagon. So why do so few of us actually practice it? Why is our default setting mind*less*ness? Citing the work of neuroscientist Marcus Raichle, Konnikova (2012) stated it's because "our minds are wired to wander" (p. 68). And if that weren't enough of a barrier, we're *taught* to be mindless: we learn in school to focus on goals and rules (mindless), not process and multiple points of view (mindful)—to ask "Can I do it?" instead of "How can I do it?" (Langer, 1989).

Langer's work on mindfulness originated with her work on mindlessness. She discovered that mindlessness comes from being trapped by what we know: in an attempt to control our circumstances, we get stuck in familiar categories, automatic behaviors, and fixed perspectives (Langer, 1989).

Langer (1989) has shown that mindlessness is a choice; Konnikova (2012) agreed:

The problem isn't a lack of attention so much as a lack of awareness and direction. In the usual course of things, our brains pick and choose where to focus without much conscious forethought on our part. What we need to learn instead is how to tell our brains what and how to filter, instead of being lazy and letting them decide for us, based on what they think would make for the path of least resistance. (p. 76)

So how do we overcome "lazy brain"? By "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 2009, p. 3). Mindfulness is a mental, physical, and emotional practice. It is characterized by curiosity, openness, and acceptance (Puccio, Mance, & Murdock, 2011). "Mindfulness,"

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Kashdan (2009) wrote, "is about being guided as opposed to controlled by planning....Mindfulness is delicate and sensitive, bringing energy, creativity, and a more expansive place to play in" (p. 28).

We need mindfulness in the Assessing the Situation stage of CPS because "diagnostic thinking without mindfulness can result in empty decisions and regret" (Puccio, Mance, & Murdock, 2011, p. 76). The "data" we seek to gather is not just "cold, hard facts": it's also what we see, what we sense, what we feel in our gut, and what our intuition tells us (Puccio, Mance, & Murdock, 2011). It takes into account sensory inputs and emotional cues.

When the Thinking Skills Model was originally introduced, the affective skill associated with the Assessing the Situation stage was Curiosity (Puccio, Murdock, & Mance, 2005). Based on research by Burnett (2010), the affective skill was amended to be Mindfulness in the most recent version of the model (Puccio, Mance, & Murdock, 2011). But still curiosity plays a key role: Puccio, Mance, & Murdock (2011) described mindfulness as a gateway to curiosity; Kashdan (2009) argued that "mindfulness cannot exist" without it (p. 27).

So when it comes to developing mindfulness skills, I take my cue from Langer and ask "How can I do it?" not "Can I do it?" The Ideator is known for openness and imagination: these seem to be characteristics that work in support of a mindful attitude. Can I consciously tap into some of my inner Clarifier's reflectiveness and attention to detail to make my mindfulness skills more effective and well-rounded? Can I take charge of my "lazy brain" and spend more time in the present moment?

Mindfulness: Practice

Being mindful is a process. First, we need to understand that it is <u>work</u>, not magic. Second, that it is accomplished in steps, not in one fell swoop. Third, that challenge and uncertainty are not just part of the process but also part of the reward (Langer, 1989).

So how do I begin the process? By taking steps to manage my mind. Konnikova (2012) offered four guidelines for this:

- Be selective—know what you want to accomplish so that you can direct your mental resources.
- Be objective—practice observing without interpreting, judging, or concluding.
- Be inclusive—use every sense, consider every perspective, assess every fact.
- Be engaged—stay aware of the process.

When it comes to specific practices, the mindfulness experts recommended:

- Mindsets
 - Analagous thinking (Langer, 1989)
 - Being an outsider (Konnikova, 2012; Langer, 1989)
 - Finding the unfamiliar in the familiar (Kashdan, 2009)
 - Being empathetic (Gino, 2013; Kashdan, 2009; Langer, 1989)
- Activities
 - Meditation (Kabat-Zinn, 2009; Konnikova, 2012)
 - Looking at scenes of nature (Konnikova, 2012)
 - Walking (Konnikova, 2012)
 - Visualizing (Konnikova, 2012; Parnes, 1977)
 - Saying it out loud (Konnikova, 2012)
 - Writing it down (Kleon, 2010; Kleon, 2012; Konnikova, 2012)

For the next phase of this project, I'll be using tools developed by these experts or creating new tools based on their writings to help me develop my mindfulness skills.

Selected Bibiolography

If I had had more time to delve into more resources on the topics of diagnostic thinking and mindfulness, I would have included the following:

- Johnson, S. (2010). Where good ideas come from: The natural history of innovation. New York: Riverhead Books.
- Kahneman, D. (2011). *Thinking, fast and slow* [Kindle version]. Retrieved from Amazon.com.
- Kelley, T. (2005). The ten faces of innovation: IDEO's strategies for beating the devil's advocate & driving creativity throughout your organization. New York:

 Currency/Doubleday.
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 *Psychological Bulletin, 116(1), 75-98. Retrieved from www.andrew.cmu.edu/user/g120/GeorgeLoewenstein/Papers_files/pdf/PsycofCuriosity.pdf
- Sawyer, R.K. (2013). *Zig zag: The surprising path to greater creativity* [Kindle version]. Retrieved from Amazon.com.
- Torrance, E. & Safter, H.T. (1999). *Making the creative leap beyond*. Buffalo, NY: Creative Education Foundation Press.

Section Three: Process Plan

Introduction

To get from my starting point (Assessing-the-Situation-challenged) to where I want to be (Assessing-the-Situation-adept), I utilized the CPS process.

Assessing the Situation

While preparing to write my concept paper, I made a careful examination of the situation using the 5Ws and an H tool so that I could better describe the nature of the problem (Puccio, Mance & Murdock, 2011). From that (and from using the 4Is and the If-Then tools), I determined that the next process step should be Exploring the Vision (Puccio, Murdock & Mance, 2011). While I had a general idea of where I thought this project may go—creating a toolkit for Ideators—I wanted to have a clearly articulated vision to guide me through the rest of the process. My tendency to jump right into ideating means I already had a lot of thoughts about what I could read, who I could talk to, and what I might create as my end product, but I believed that part of learning to turn down the Ideator involved being very deliberate in how I thought about and developed this project over time.

Clarification

In this step, I created a vision for the project and identified the challenges that needed to be addressed. In the first phase of this project, the challenges I have concentrated on relate to my personal skill development in the areas of Diagnostic Thinking and Mindfulness. I found I spent a lot more time in this phase than I originally anticipated: I needed to spend time gathering data on Diagnostic Thinking, Mindfulness, and FourSight preferences to guide me in the next phase of the process.

Transformation

As an Ideator, the Transformation stage—which starts with Exploring Ideas—is usually my favorite part of the CPS process. I got a head start on this phase early in the project. Since I didn't know how to (or if I even could) turn the ideating off, I carried a project-specific notebook to capture the ideas that come up so I could incorporate them at the appropriate time and place in the process. To my surprise, however, this stage turned out to be more about convergence (selecting ideas) than divergence (coming up with ideas).

Turning theory into practice

The first step toward turning theory into practice was to review the tools and exercises I found during my exploration of the pertinent literature. When I laid them all out, I found I had a lot of choices.



Figure 1. Diagnostic Thinking and Mindfulness Tools, Pre-Convergence

Table 2 Diagnostic Thinking and Mindfulness Tools, Pre-Convergence

D	iagnostic Thinki	ng		Mind	fulness	
Divergent	Convergent	Process Direction	Min	dset	Acti	vities
5Ws & an H	Hits	If-Then Process Analysis	Analogous Thinking		Meditation	"Die on Purpose"
Why-Why Diagram	Highlighting	Keyword Search	Be An Outsider		Look at Scenes of Nature	
SWOT Analysis	FCB Grid	4Is	Find the Unfamiliar in	3 Novel Challenge	Walk	
Problem Framing Checklist	Is/Is Not Matrix	Metacognitive Questions	the Familiar	Un-Familiar	Visualization	Visualization – Konnikova
Phoenix Checklist	Affinity Diagram	Project Brief		Practice Curiosity		Fact-Finding Visualization – Parnes
Tasks & Questions	Stratification		Be Empathetic	Capital E	Say It Out Loud	Hello, Stranger (Dear Stranger) – Konnikova
Discovering Challenges Checklist	Fishbone Diagram			2 Minutes	Write It Down	Log Book – Kleon
DRIVE	Innovation Intent Statement					
POEMS						
KnoWonder						

(Barbero-Switalski, 2003; Barbero-Switalski, 2012; Brown, 2009; Gino, 2013; Halpern, 1998; Halpern, 2003; Hurson, 2008; Kabat-Zinn, 2009; Kashdan, 2009; Kleon, 2010; Kleon, 2012; Konnikova, 2012; Kumar, 2013; Langer, 1989; Paradis & McGaw, 2007; Parnes, 1977; Puccio, Mance & Murdock, 2011; http://www.ualr.edu/colowry/assets/PDF/THEPHOENIXCHECKLIST.pdf)

Some of these were previously developed tools, some were exercises used in research studies, and some were narrative threads that I thought had the potential to become tools. Given my time constraints, my attention span, and my desire to actually practice the selected tools before the end of the project period so that I could report on the outcomes, I could see that I would need to narrow down the options.

How to choose

Before I could converge, I would need criteria by which to assess the potential tools. I thought of Konnikova's (2012) advice to "be selective": "Whatever the situation, answering the question of what, specifically, you want to accomplish will put you well on your way to knowing how to maximize your limited attentional resources" (p. 78).

What did I want to accomplish? One of the first things I did on this project was develop a vision for it: *I wish that I could manage my Ideator tendencies so that I can be more effective at Assessing the Situation*. I generated challenge statements based on that vision, and chose to focus on three:

- How to develop my diagnostic thinking skills?
- How to develop my mindfulness skills?
- How to capitalize on my strengths instead of trying to overcome weaknesses?

My review of the pertinent literature gave me many ideas on how to address the first two challenges. And while my research into the FourSight preferences helped me better understand the differences between the Ideator and the Clarifier, it was a comment from my professor, Dr. Burnett, that inspired my thinking on how I might marry the strengths of the Ideator with the skills of a Clarifier. In the Pertinent Literature section of this paper, I wrote: "Is it possible to reframe my existing strengths through a Clarifying lens? Could adaptability, flexibility and enjoyment of 'toying with possibilities' become assets in the Assessing the Situation stage (Puccio, 2002b)?" Dr. Burnett responded, "I think if you can shift toying with possibilities to toying with information—then absolutely!" (Personal correspondence, 2013)

I decided to look at the key characteristics of the Clarifier and the Ideator, and to concentrate on the ones I felt had the most potential for overlap or compatibility.

Table 3 Key Characteristics of the Clarifier

Be serious	Enjoy the details	Be methodical
Focus	Move forward cautiously	Be organized
Be deliberate	Spend time getting a clear understanding of the problem	Be orderly

(Puccio, 2002a; Puccio, 2002b)

I spent some time considering how the characteristics of the two preferences might relate to one another:

- Reframing "toying with possibilities" as "toying with information" helped me see a connection to the Clarifier trait of "enjoying the details."
- Looking at different meanings of flexibility lead me to "stretching," which felt like a necessary support skill for "spending time getting a clear understanding of the problem."
- For me, "being adaptable" is complementary to "being deliberate": in the
 process of being deliberate, one is sure to be presented with information that
 leads one in unexpected directions, so being able to shift one's thinking
 accordingly is essential.

Based on this thinking, I came up with three criteria for selecting tools for the toolkit:

• The first criterion I set was that the tool needed to help redirect the Ideator strengths into a Clarifier frame of mind: did it allow me to toy with information, stretch my exploration of the problem, and be "adaptively deliberate"?

- The second criterion I set was that the Diagnostic Thinking tool should encourage Mindfulness—that it should help me stay anchored in the moment and help me to understand the problem, not solve it.
- The third criterion was that the tool be easy to explain and intuitive to use.
 The less explanation needed, the lesser the chance that I'd get distracted from Assessing and start Ideating.

With these three criteria in mind, I reviewed the tools, exercises and random thoughts that I had generated in the divergent thinking phase. In some cases, it made sense to combine several tools into one. I settled on 10 tools: five Diagnostic Thinking tools and five Mindfulness tools.

Implementation

In the Implementation stage, I am actively applying what I've learned in the areas of Diagnostic Thinking and Mindfulness to situations in my life to strengthen my skills and to better understand how the tools and techniques I've found really work. I have also asked other Ideators and Clarifiers (who are known for their ability to ask questions) to test the tools I selected to make sure they are really useful.

When I started this project I had a goal in mind: to produce a toolkit. I didn't know what that toolkit would contain or what form it would take. In the time allotted, I've been able to develop white paper descriptions of tools and exercises. After some practice and refinement of these, I will be creating a toolkit that I can share with other Ideators.

Table 4 Project Timeline

Dates	Step	Activities	Hours Estimated
1/20 - 1/26	Assessing the	Research	15
	Situation	Examine the situation	
		Describe the problem	
		Decide process	
1/27 - 2/2	Assessing the	Research	15
	Situation	Write concept paper	
		Send to Ian for feedback	
2/3 - 2/10	Assessing the	Research	5
	Situation	Revise concept paper	
		Submit to Cyndi	
2/11 - 2/16	Assessing the	Research	10
	Situation	Revise concept paper	
2/16 - 2/23	Clarification	Research	15
		Establish vision	
		Identify challenges	
2/24 - 3/2	Clarification	Research	15
3/3 - 3/9	Clarification	Research	15
		Write	
3/10 - 3/16	Clarification	Research	15
0, 10		Write	
		Submit Sections 1 – 3 (14 th) to	
		Cyndi	
3/17 - 3/23	Transformation	Ideate	15
		Apply	
3/24 - 3/30	Transformation	Develop skills	15
		If possible, begin developing	
		product	
3/31 - 4/6	Implementation	Practice skills	15
	F	If possible, develop product	
		Write	
		Submit draft to Ian	
4/7 - 4/13	Implementation	Work on product	15
	I	Revise per Ian's feedback	
		Submit Sections 4 – 6 (11 th) to	
		Cyndi	
4/14 - 4/20	Implementation	Revise	10
.,,,		Submit final project draft (18 th)	
4/21 - 4/27	Implementation	Revise	5
4/28 - 5/4	Implementation	Submit final project revised	15
		(2 nd)	
		Develop presentation	
5/5 - 5/11		Presentation (9 th)	5
0/0 0/11		110001111111111111111111111111111111111	<i>-</i>

5/12 – 5/18	Upload project to Digit Commons (16 th)	al 2
	Total	202

Section Four: Outcomes

Introduction

My goal for this project was to create a toolkit for Ideators—me, in particular. This toolkit would help me develop the Diagnostic Thinking and Mindfulness skills that are needed in the executive step of the CPS process: Assessing the Situation. I have created a first draft of this kit, which includes five Diagnostic Thinking tools and five Mindfulness tools.

Table 5
Tools in the "Assessing for Ideators" Toolkit

Diagnostic Thinking Tools	Mindfulness Tools
Ultimate Checklist	Meditation with Visualization
POEMS	UNfamiliarize Yourself
KnoWonder	Capital E
Assessment Grid	2 Minutes
Statement of Intent	Log Book

I am using these tools in my daily life to test their effectiveness. I have also asked other Ideators for feedback on the tools. Based on my experience and the feedback I receive, I will refine the tool mix and the tools themselves, and produce a finished toolkit in a sharable format.

Diagnostic Thinking Tools

Ultimate Checklist

When I looked at the Diagnostic Thinking tools I had found while reviewing the pertinent literature, I saw that a good number of them were checklists. Research has shown that using checklists can make you more mindful, and less prone to rely on your "lazy brain" (Konnikova, 2012). Since one of the issues I am trying to overcome in

Assessing the Situation is not asking enough questions, I decided to combine all the checklists into one "ultimate checklist."

This is a divergent thinking tool.

Ultimate Checklist

Select the questions that are appropriate for the situation you are assessing. Use as many as you possibly can.

WHAT'S THE PROBLEM?

- What would you like to get out of life/this company/this brand/this project?
- What would you like to do, have, accomplish?
- What are your unfulfilled goals?
- What idea/concept/strategy would you like to move forward?
- What is a brief history of the situation?
- What is or is not happening?
- Why is the problem a problem?
- Why does or doesn't this happen?
- Where does or doesn't this occur?
- When does or doesn't this occur?
- Whose problem is it?
- Why does the problem matter for us as a company/a brand/a group?
- Why does the problem matter for the people whose problem it is?
- Why is it a concern for you?
- How long has this been a concern?
- Could you draw a diagram/figure/picture of the problem?
- Why is it necessary to solve the problem?
- What do you wish would happen?
- What benefits will you/your organization gain by solving the problem?
- What information do you have?
- Is the information sufficient? Insufficient? Redundant? Contradictory?
- What are the boundaries of the problem?
- What isn't the problem?
- What is the unknown?
- What are the constants (things that can't be changed) of the problem?
- Can the rules be changed?
- What additional information would you want before addressing the problem?
- Have you seen this problem before?
- What's been thought of or tried before?
- What successes have you achieved so far?
- Where have you found help?
- What are the things that have helped you?

- What was insufficient about previous attempts to solve this problem?
- Why is it still a problem?
- What are we going to do differently this time?
- Have you seen this problem in a slightly different form?
- Do you know a related problem?
- Can you think of a familiar problem having the same or a similar unknown?
- How has a problem related to yours already been solved? Can you use it? Can you use its method?
- Can you separate various parts of the problem? Can you write them down? What are the relationships of the parts to the problem?
- Can you restate your problem? How many different ways can you restate it? More general? More specific?
- What are the best, worst, and most probably cases you can imagine?
- What might be your ideal outcome or goal?

WHO IS AFFECTED BY THIS PROBLEM?

- What is your role in this challenge/problem?
- Why might this be an opportunity for you?
- When would you like to have action taken?
- Who is the decision maker?
- Who is involved in the situation?
- Who is or is not concerned about the outcomes?
- Who might gain if the situation is resolved?
- Who needs to be part of the solution?
- What relationships could be improved if the problem is addressed?
- Who would you like to influence and what would you like them to do?

HOW DO YOU FEEL ABOUT THIS PROBLEM?

- What are your gut feelings about this challenge?
- What excites you about this problem/situation?
- What upsets or angers you about this problem/situation? What makes you tense or anxious about this problem/situation?
- When/where do you lose energy when dealing with this problem?
- How are your feelings affecting your behavior?
- What obstacles have you encountered?
- What bottlenecks exist?
- What is wasted?
- What takes too long?
- What is too complicated?

WHAT MIGHT IMPACT OR INFLUENCE YOUR POTENTIAL SOLUTIONS?

- What do you already do well?
- What would have to change in order to address this problem?
- What do you wish you had more money for?

- What do you wish you had more time for?
- What would you like to do better?
- How might you be more efficient?
- What bothers you about this problem/situation?
- What is misunderstood about this problem?
- What assumptions have been made about this problem?
- What is the mood of the team/the group/the company regarding this problem?
- What solutions do you already have in mind?
- What has prevented you from acting on these?

WHAT DO WE REALLY NEED TO KNOW TO MOVE FORWARD?

- Which information is most important?
- Which information is least important?

(Adapted from Barbero-Switalski, 2003; Halpern, 1998; Miller, Vehar & Firestein, 2001; Paradis & McGaw, 2007; Parnes, 1977;

http://www.ualr.edu/colowry/assets/PDF/THEPHOENIXCHECKLIST.pdf)

Figure 2. Ultimate Checklist tool

POEMS

"There's a surprising amount of insight to be gained from even a brief series of field observations," wrote Paradis and McGaw (2007, p. 36). When I read about POEMS—a design thinking tool used in the "Know People" mode of the process (Kumar, 2013)—I wondered how we might use it to become "field observers" of our own problems. By helping us to consider the problem from different points of view and in different contexts, it integrates empathy and imagination to open up new perspectives.

This is a divergent thinking tool.

POEMS

Step One: Use the following categories and questions to help better understand a problem in its context.

People

- Who are you solving this problem for?
- Where are they? Why are they there?
- What is important to them?
- What are their preconceptions?
- Who do they trust? Who do they go to for advice?

- When do they hesitate?
- What scares them?
- What excites them?
- When do they have this problem?
- What do they think about this problem? Do they think about it?
- What are their unmet or underserved needs?

Objects

- What are the physical elements/aspects of this problem?
- What are the broader categories of objects/elements?
- How do the objects relate to each other?
- How do the objects relate to activities?
- How do objects contribute to this problem?
- How might objects contribute to the solution of this problem?

Environments

- Where does this problem take place? Or should be taking place, but isn't?
- What other significant activities or problems take place in this setting?
- What else is going on in the background?
- How do other activities in this environment affect the problem?
- How does the environment complicate or simplify the problem?

Messages

- What messages are being communicated about the problem?
- How are the messages communicated?
- Who is communicating? Who is receiving the messages?
- What information is being exchanged between people?
- What information is offered to people by objects or systems?

Services

- What kind of services are available related to the problem?
- What kind of services are preventing the problem from being addressed?
- Who is providing services related to this problem?
- How are current service providers helping to solve the problem? How are they preventing it from being solved?

Step Two: Using infor	mation from	each categor	y, create POI	EMS that are	different ways
to describe the problen	n(s):				

P O E M S

P		
0		
\mathbf{E}		
M		
S		
P		
0		
\mathbf{E}		
M		
S		
(Adapted from Kumar, 2013; Paradis & McGaw, 2007)		

Figure 3. POEMS tool

KnoWonder

Hurson (2008) called this tool "deceptively simple" and that's one of the reasons why I chose it. I could see it being especially useful for identifying assumptions related to a problem or when working with a client who thinks he/she already has the solution.

This is a divergent thinking tool.

KnoWonder

- Start with a large sheet of paper (flip chart or other) or a whiteboard.
- Divide it in half by drawing a vertical line down the center.
- Label the left side "Know."
- Label the right side "Wonder."

Know	Wonder

KNOW:

Use divergent thinking to list everything you know about the problem.

- What might be causing the situation?
- Why does it exist?
- What might be perpetuating it?
- What resources are involved (money, time, energy, material)?
- Who is involved?
 - What is at stake for them?
- Do other people/organizations experience similar problems?

- Who?
- Why?
- What have they done about it?
- Who *doesn't* experience this problem?
 - Why not?
- Have you tried to solve this problem before?
 - What have you tried?
 - What have others tried?
 - What worked? What didn't work?
- What obstacles are getting in the way of solving this problem?

WONDER:

List all the things you don't know but would like to know.

- What do you wonder about this problem?
- What do you wish would happen?

Look at the lists you've generated and determine what is the most important information regarding your problem.

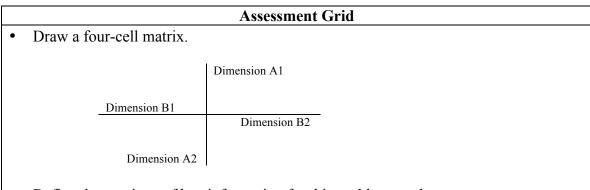
(Hurson, 2008)

Figure 4. KnoWonder tool

Assessment Grid

When looking at a lot of words on paper—or a flock of Post-It notes on the wall—it can be hard to figure out what's really important. By presenting the data in a more visual way, this tool makes the information more dynamic and easy to interpret. Determining the continua is an exercise in prioritizing as well.

This is a convergent tool.



- Define the continua of key information for this problem, such as:
 - High importance Low importance
 - Need Want

- Short-term Long-term
- Easy Difficult
- Obvious Surprising
- Low cost High cost
- Incremental Breakthrough
- Label the axes with the key dimensions you want to use to organize the information and assess the problem.
- Populate the quadrants.
- Decide which quadrant is the highest priority.
- Define the problem to be solved.

(Adapted from Barbero-Switalski, 2003)

Figure 5. Assessment Grid tool

Statement of Intent

Paradis and McGaw (2007) called this tool "a signpost to your solution" (p. 26). I see it as a way to wrangle data so it doesn't seem so overwhelming, while at the same time providing context around the problem that will influence how you proceed.

This is a convergent tool.

Statement of Intent	
THE PROBLEM WE ARE TRYING TO SOLVE	
FOR WHOM	
WHY IT MATTERS	
HOW OTHER SOLUTION ATTEMPTS HAVE FAILED	
WHAT WILL MAKE OUR SOLUTION DIFFERENT	

THE GREATEST	
OPPORTUNITIES	
THE BIGGEST RISKS	
(Paradis & McGaw, 2007)	

Figure 6. Statement of Intent tool

Mindfulness Tools

Meditation with Visualization

Kabat-Zinn (2009) wrote, "Meditation is simply about being yourself and knowing something about who that is" (Introduction, para. 8). But the idea of just sitting and breathing has always been a little intimidating to me. This exercise takes away some of that intimidation factor:

It requires the same focus as any meditation, but is in some ways more approachable. You have a concrete plan, something with which to occupy your mind and keep intrusive thoughts at bay, something that is more vibrant and multidimensional than the rise and fall of your breath. (Konnikova, 2012, p. 147)

Meditation with Visualization

- Choose a time and location where you can spend a few minutes uninterrupted.
- Pick a specific mental image you'd like to concentrate on: a place, an object, an experience.
- Close your eyes.
- Picture the mental image you've chosen.

- Spend a few minutes exploring the image.
 - € If it's a place:
 - Imagine it at different times of the day.
 - Look for details you haven't noticed before—hallways, pathways, nooks, crannies, decorative items, natural phenomena—and spend some time examining them.
 - - Look at it from different angles.
 - Imagine it in different settings.
 - € If it's an experience:
 - Place yourself outside the action; observe what's happening around you.
 - Imagine different outcomes.
- Engage your senses: what do you see, smell, taste, hear, feel in your scenario?
- While visualizing, remember to breath steadily and pay attention to how you feel.
- After a few minutes, wrap up your examination of the scene.
- Open your eyes.

(Adapted from Konnikova, 2012)

Figure 7. Meditation with Visualization tool

UNfamiliarize Yourself

There's a famous quote by Proust: "The real voyage of discovery consists not in seeking new landscapes but in having new eyes." How often do we choose not to "have new eyes"? How often do we rely on routine, on mindless acceptance, on status quo? What do we miss because of it? "One way to become more curious is to intentionally circumvent expectations, categories, and labels about 'seemingly' familiar activities and events" (Kashdan, 2009. p. 79).

UNfamiliarize Yourself

- Think of a situation that you find yourself in on a regular basis—at work, at home, during your daily routine.
- Next time you find yourself in that situation, deliberately look beyond "the usual" for what's different about it:
 - What is novel about other people's attitudes?
 - What is novel about your mood or physical experience of being there?
 - What is novel about what you're being asked to do?
 - Try to find three novel things.
- Also, look for new challenges in the situation:
 - How might you approach a "usual" request in an unusual way?
 - What kinds of opportunities are there for you to do things differently?
 - Try to find two new challenges.

(Kashdan, 2009)

Figure 8. UNfamiliarize Yourself tool

Capital E

To be mindful is to be "attuned to the present moment" (Puccio, Mance & Murdock, 2011, p. 75), which involves not only being aware of one's own feelings and thoughts but also being aware of the thoughts and feelings of those around you—in other words, being able to really understand another's perspective, building "bridges of insight" through empathy (Brown, 2009, p. 49). "Perspective taking is not a skill that switches on automatically once we turn five and remains active thereafter. Instead, it is more like a car engine that must be started every time it is needed" (Gino, 2013, p. 88). This tool restarts that engine.

Capital E

Extend your dominant forefinger.

Draw a capital **E** on your forehead with your finger.

Think about what you drew.

- Was it **E** (so that you could read it)?
- Or **3** (so that someone looking at you could read it)?

If you drew an **E**, you are not in a mindset to consider other people's points of view. If you drew an **3**, you have taken the perspective of the other person.

Before your next meeting or conversation, take a moment to draw an **3** on your forehead to remind you to be open to seeing the world from someone else's point of view.

(Adapted from Gino, 2013, p. 87)

Figure 9. Capital E tool

2 Minutes

Assessing the Situation is about gathering data; that data includes feelings, hunches, and emotions (Puccio, Mance & Murdock, 2011). Sometimes what's not being said is more important than what is. "If you want to truly connect with someone,

listening is insufficient; you must observe them," Kashdan (2009) wrote. Fortunately, "detecting emotions is a skill that can be learned" (p. 139).

2 Minutes

In your next social interaction, spend two minutes deliberately trying to detect the other person's emotions and "listening to learn."

What to Say
Ask questions: "What does that mean for you?" "How do you feel about?" "What do you think about?" "What else comes to mind?" "What else are you thinking/feeling?" "What's your take on?" "What's your perspective on?" "What was your first reaction when you heard?" "What would be the best way to build on that?" "How can you continue the momentum?"
Encourage deeper reflection: "Say more about" "Really?" or "You don't say" "And so?" ; Kashdan, 2009)
_

Figure 10. 2 Minutes tool

Log Book

I have never been someone who journals: any time I've tried to start, I've gotten overwhelmed by self-consciousness. But I understand the value of record-keeping, and was inspired when I read this:

The best writing project I took on last year was what I call my logbook....It's not a diary or journal. It's a book of lists. The lists are simple facts. Why not just keep a diary? For one thing, I'm lazy. It's easier just to list the events of the

day than to craft them into a prose narrative. Any time I've tried to keep a journal, I ran out of steam pretty quick. (Kleon, 2010, para. 6)

The benefit of "log booking" is that "the small details will help you remember the big details" (Kleon, 2012, p. 129).

Log Book

- Choose a tool for recording information: a notebook, a calendar, an app, a document on the computer—whatever works best for you.
 - It should be something that is easily accessible and requires very little extra effort on your part.
- At the end of each day, record the details of the day.
 - Make a list.
 - This is not a "journal," so a narrative isn't required.
- Include information like:
 - Who you saw or met
 - Where you went
 - What you did
- Don't worry about what is "important" or "not important."
 - Defer judgment and simply write down what happened.
- Feel free to add visuals: drawings, clippings, etc.

(Kleon, 2010; Kleon, 2012)

Figure 11. Log Book tool

This toolkit is a prototype, containing five tools for Diagnostic Thinking and five tools for Mindfulness. The plans for developing this toolkit further can be found in Section Six of this paper.

Section Five: Key Learnings

Introduction

My purpose for this project was to address one important question: how might I stop solving and start listening? The search for answers has led me to examine what it means to be an Ideator, what kind of skills are involved in Diagnostic Thinking, and how to define and develop Mindfulness.

Becoming a Questioner Instead of an Answerer

When I started this project, I understood the importance of Diagnostic Thinking. But I believed I lacked skills, practice and confidence. I can't say I've had a lot of practice yet—and with practice comes confidence—but I do have a deeper understanding of the critical thinking skills that are required to be an effective Diagnostic Thinker, such as looking beyond the obvious, making connections, and prioritizing (Basadur, 1994; Halpern, 1998; Treffinger, Isaksen & Dorval, 1994).

The research I've done on Diagnostic Thinking has provided me with a broader range of tools to employ when Assessing the Situation. Before undertaking this project, I was really only familiar with the 5Ws and an H tool; now I can choose from several tools to more specifically fit the circumstance. One thing is for certain: the tools are a work in progress.

I have been able to practice some of the Diagnostic Thinking tools; see Table 6 for my thoughts on those experiences.

Table 6
Diagnostic Thinking Tools Practice

Tool	My Experience with the Tool
Ultimate Checklist	A bit unwieldy and difficult to manage in its current "white paper"
	format. I need to figure out a way to present the tool in such a way

	that one can select a smaller, more targeted question set prior to an
	assessment situation.
POEMS	Easy to use and good for putting a problem in context. My test
	client for this tool said it helped her think about the problem from
	perspectives she had not previously considered. She also liked Step
	Two, which helped her prioritize the information.
KnoWonder	I have not had a chance to use this tool yet.
Assessment Grid	I have not had a chance to use this tool yet.
Statement of Intent	I have not had a chance to use this tool yet.

I asked other Ideators to review the tools and give me feedback on them; see Table 7 for highlights from their responses.

Table 7
Diagnostic Thinking Tools Feedback

Tool	Feedback from Reviewers
Ultimate Checklist	"Lots of questionshow might they be easier to follow?"
	"Overwhelmingtoo many questions." "Long and repetitive"
	"Could they be structured into a flowchart that could then be made
	into an app?" "You lost me about halfway through [the 'What's the
	Problem?' section]."
POEMS	"Love this." "Watch the wording." "Eloquent." "Nice
	compendium." "Needs a close."
KnoWonder	"Great way of creating delineation between those elements"
	"We use this all the time." "Need to use in conjunction with a
	convergent tool."
Assessment Grid	"Could use a little more work." "A great tool." "Great visual way
	to sort material."
Statement of Intent	"Boring." "Very good input for me—a specific format to put facts
	into."

Developing a Healthy and Productive Self-Awareness

Mindfulness was defined by Puccio, Mance & Murdock (2011) as "attending to thoughts, feelings and sensations related to the present moment" (p. 77). But it's not as simple as saying to oneself, "Be more mindful!" Mindfulness is as much about what it is as what it is *not*: mind*less*ness. For me, it's about making conscious choices to overcome

that default setting and taking control of my "lazy brain" (Konnikova, 2012; Langer, 1989).

My learning goal was to develop self-awareness, but what I've really learned is that Mindfulness is not just self-awareness, but *other*-awareness: paying attention to other people's emotional states, unexpressed needs, and fears.

And while Mindfulness is about giving emotion its due in the Assessing the Situation phase, interestingly, the more I practice Mindfulness, the less emotionally reactive I'm becoming. I find myself pausing to consider alternative points of view and trying to identify assumptions I might be making.

What became very clear to me during this project is the relationship between Diagnostic Thinking and Mindfulness: the more I raised my awareness of Mindfulness and practiced the Mindfulness tools, the easier it became to stay in a Diagnostic Thinking mode instead of rushing to ideate.

Before undertaking this project, I would have been hard-pressed to name a Mindfulness tool besides meditation. Now I know there are many ways to boost Mindfulness—more than I could possibly explore in the time I had available. Like the Diagnostic Thinking tools, these are a work in progress.

I have been able to practice the Mindfulness tools over a period of a few weeks; see Table 8 for my thoughts on those experiences.

Table 8 Mindfulness Tools Practice

Tool	My Experience with the Tool
Meditation with	This is very powerful and rewarding. In just a three-minute period,
Visualization	I'm both challenged and refreshed.
UNfamiliarize	This seems like it should be easy, but I've found it to be the hardest
Yourself	tool to practice. The more familiar the situation, the more I

	struggle to find novelty in it.
Capital E	I love this as a quick and easy reminder to be other-aware.
2 Minutes	I've used this several times, and have found if I focus on the "What to Do" side—especially "Resist the urge to solve, defend, or explain"—the "What to Say" part takes care of itself.
Log Book	Easy! I like that it eliminates the pressure of journaling but still provides many of the benefits.

I asked other Ideators to review the tools and give me feedback on them; see

Table 9 for highlights from their responses.

Table 9 Mindfulness Tools Feedback

Tool	Feedback from Reviewers
Meditation with	"Might be too deep for me." "Seems like more of just a
Visualization	visualization exercise [than meditation]." "I like this—literally,
	'look at it another way.'" "Could be useful with groups."
UNfamiliarize	"I would love to see it tied to the idea of 'reframing." "Love this.
Yourself	It might change habitual responses in any setting (home or work)."
	"Taking the time to STOP and THINK made me clarify which is
	almost impossible."
Capital E	"Nice way to reset the situation" "I doubt I'll use it." "I like this
	conceptis there research that backs it up?" "Lovecould also be
	used with groups."
2 Minutes	"Very nice." "Solid." "Almost made me cry."
Log Book	"Love it. I'm going to try it." "Great." "I like this." "Gotta love
	Kleon! I'm going to try this."

Leveraging My Strengths to Address My Weaknesses

In an earlier section of this paper, I asked a lot of questions, and my experience over the last few months has revealed some answers:

• Can an Ideator with a low Clarifier preference somehow dial up skills like "spending time getting a clear understanding of the problem," "enjoying the details," and "moving forward cautiously" (Puccio, 2002b)? Yes. It is

possible for an Ideator with a low Clarifier preference to somehow dial up Clarifying skills.

- Could I be the person that Puccio and Grivas (2009) described as possessing "an amalgamation of...affective characteristics": "careful, cautious, reflective and factual" and also "demanding, ambitious and desirous of change" (p. 253)? Maybe. I'm not sure if I've become more "careful" or "cautious" but I have been "reflective and factual" while maintaining the affective characteristics of an Ideator.
- Could I become "methodical," "orderly," and "organized" in my approach to creative problem solving (Puccio, 2002b)? Yes. This whole project has been an exercise in being methodical, orderly, and organized.
- Could I reframe my existing Ideator strengths through a Clarifying lens?

 Yes. Reframing my strengths as "toying with information," "stretching my exploration of the problem," and "being 'adaptively deliberate'" has given me a new perspective on Clarifying.

Consciously Living the CPS Process

My goal for this project was to utilize the CPS process to get me from Assessing-the-Situation-challenged to Assessing-the-Situation-adept. In some ways I have worked my way through it:

- I deliberately and carefully assessed the situation so that I was understanding the problem and starting the process at the appropriate step.
- I explored the vision and formulated challenges, spending a good deal of time gathering data so that I could conduct informed ideation.

- However, I didn't spend a lot of time ideating. When I reviewed the data I'd collected, the ideas fell naturally out of that. It was a short hop from Clarifying to Developing.
- I guess you could say I implemented, as I have a "product" to show for my
 work. But you could also make the argument that I am still in the
 Development phase.

I'm not done with this project or the process yet. But I am a lot more aware of tapping into the CPS process in my everyday life, beyond this project.

Making Others' Lives Better Through My Learnings

A secondary goal of this project was to share the toolkit with other Ideators who struggle with the same issue I do (an inability to turn off the idea generator). I've sent it out to volunteers and asked for feedback. What I've learned so far (some of which you see in the "Feedback" tables above) is that some of the tools are helpful and inspiring, and others need work. Can I make others' lives better with a toolkit? Time will tell.

On a more metacognitive level, it might be possible to for me to make others' lives better by applying my improved Diagnostic Thinking and Mindfulness skills. I think these skills help me be more empathetic and less judgmental, more curious and less solution-driven. Again, time will tell.

Section Six: Conclusion

I don't know if others can see the difference that this project has made in me, but I know it has changed how I think and how I assess the world around me. In the spirit of what I've learned, I'm going to use a checklist to help keep me from sliding back into my old solve-first-ask-questions-later-if-ever mode. This very simple list, created by Konnikova (2012), applies to both Mindfulness and Diagnostic Thinking, and could be thought of as Assessing the Situation in four easy steps:

- ☐ Be selective. (Know what you want to accomplish so that you can direct your mental resources.)
- ☐ Be objective. (Practice observing without interpreting, judging or concluding.)
- ☐ Be inclusive. (Use every sense, consider every perspective, assess every fact.)
- ☐ Be engaged. (Stay aware of the process.)

I could spend many more months—years!— working on this topic, but as so often happens in life, deadlines loom and tasks remain undone:

- Practice: I haven't had time to try out all the tools, and I haven't been able to test tools in different settings.
- Refine: based on my own experiences and the feedback from other Ideators and
 Clarifiers, the individual tools will be tweaked to make them more effective, and
 the overall tool set may be changed.
- Format: the effectiveness of some tools is impacted by how they are delivered visually or technically. This will need to be addressed. What format will the toolkit take? Cards? Booklet? App?

- Deliver: eventually, I'd like to have a visually pleasing, technically satisfying,
 theoretically grounded, practically tested version of the toolkit.
- Assess: once there is a "finished" product, I'd like to get another round of assessment from users.
- Refine again: iterate, iterate, iterate.

If I had more time, I would have tried to learn more about diagnostic thinking in other domains, and interviewing techniques, including formulating, asking and following up on questions. I would have liked to interview other CPS practitioners about how they approach Assessing the Situation, and Mindfulness experts on what kinds of tools they use.

For now, I'm happy to incubate on and apply what I've learned: to dial down the Ideator inside and turn up my inner Clarifier when I need to. After all, "The most important thing to be learned is how to ask the right question..." (Getzels, 1985, p. 60).

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