

# Imagination Man





Scott Barry Kaufman has been called “the leading empirical creativity researcher of his generation.” Now he wants to use the tools he’s developed to unleash the “quiet potential” of vulnerable people—including kids like him—and help them flourish.

By JoAnn Greco

Scott Barry Kaufman is wiped out. He’s just taught 150 students in a two-hour class, “Introduction to Positive Psychology,” and he’s about to complete his second media interview of the day. Slumped on a khaki-hued canvas sectional sofa in the hallways of the Positive Psychology Center, he nevertheless musters enough energy to greet every single person who walks by.

*SBK: Heyyyy!!!*

*SBK (acknowledging the same person a few minutes later): Hey ...*

*SBK (to me): Oh, I already said ‘Hey.’ Sorry. Am I allowed to say ‘Hey’ at both the go and the return? (laughing)*

*Me: You can never say ‘Hey’ too many times ...*

*SBK: Can I say it with the same enthusiasm?*

*Me (joshing): Well, it might start to sound fake.*

*SBK: Yeah, that’s what I was afraid of.*

To say that Kaufman, scientific director of the Positive Psychology Center’s Science of Imagination Project, is easily distracted is like saying kids don’t mind eating ice cream every now and then. “Oh my God, it’s so hard to focus,” he groans, then brightens and switches gears. “Can you tell I love teaching? It’s one of the few times in my life where I can actually concentrate.”

In class, Kaufman had delivered a virtuoso performance—equal parts free-associating comic Robin Williams and iconoclastic physicist Richard Feynman. I had watched as he variously mused on the deliciousness of the soup he was sipping, mixed up Norway with the Netherlands, praised students’ questions while slapping his thighs in excitement, coined a new term, and indulged in a series of disingenuous riffs on everything from whether *coincidence* and *coincide* shared the same root to how he hadn’t realized that Sunday was typically considered the start of the week. Somewhere in there, he offered a coherent and thought-provoking examination of research on compassion, empathy, and self-compassion, and then led a guided meditation, exhorting us to experience those feelings.

Kaufman has a baby face and a tight cap of dark curls. He speaks quietly and rapidly and is quick to giggle. He’s unafraid to appear vulnerable, a quality that makes people like him and want to protect him. During class, a teaching assistant, Taylor Kreiss, cleared his throat and raised his eyebrows in silent indication that an image that was supposed to accompany Kaufman’s lecture hadn’t appeared. As the class broke up, his research assistant, Elizabeth Hyde

C’14, took Kaufman aside to remind him that, even though a student had asked to be excused from recitation, it’s required that she attend. As we headed out of the auditorium, another TA grabbed the briefcase and leather jacket Kaufman had forgotten to collect.

Martin Seligman Gr’67, the Zellerbach Family Professor of Psychology, director of the Positive Psychology Center, and legendary founding figure in the field of positive psychology, calls Kaufman the “leading empirical creativity researcher of his generation.” He invited the 36-year-old cognitive scientist to come to Penn in April 2014 to help lead the Imagination Institute, a non-profit start-up supported by the John Templeton Fund that is housed within the Positive Psychology Center. According to its website ([imagination-institute.org](http://imagination-institute.org)), the institute is chiefly concerned with the “measurement, growth and improvement of imagination across all sectors of society.” Kaufman’s position as scientific director allows him to fully explore what it is we mean by intelligence and creativity—and to challenge those assumptions.

So far, Kaufman has authored a couple of books and many articles about creativity, for publications ranging from *Scientific American* to the *Huffington Post*. Writing appeals to him, he says,

because “I’m left alone and I can discover and be curious all in my own time.”

Earlier this year Kaufman published *Wired: Unraveling the Mysteries of the Creative Mind*, co-authored with journalist Carolyn Gregoire, in which he argues that creativity—with all of its questioning, close observation, and thinking differently—can be another (or even better) way to evaluate smarts than traditional measures. “You can have a very high IQ and still be ‘dumb’ in my opinion,” he says, “if you score low on things like intellectual curiosity and openness to experience.”

He wrote the book “to bring together the latest science on creativity and get it out there to a popular audience as a platform for talking about the importance of creativity and imagination as a way of living. A lot of it comes out of research I’ve been conducting [on ideas] like the importance of ‘openness to experience.’”

For example, he’s found that the “openness domain” encompasses at least three major forms of cognitive engagement: intellectual (searching for truth, love of problem solving), affective (using gut feeling, emotions, and compassion) and aesthetic (exploring fantasy, art and beauty). The desire to learn and discover in these ways, he writes in *Wired to Create*, “seemed to have significantly more bearing on creative accomplishments than did cognitive ability ... Intellectual engagement was sometimes even found to be a better predictor of creative achievement than IQ.”

Along with openness to experience, the book cites nine other traits that show up again and again in creative individuals: imaginative play, passion, daydreaming, solitary reflection, intuition, mindfulness, sensitivity, turning adversity into advantage, and thinking differently. Separate chapters examine each trait by looking at how a familiar writer, artist, or musician exhibited and benefitted from it. (William S. Burroughs and his fellow Beat Generation writers represent openness to experience, for example.)

The book also collects behavioral-science and neuroscience research that supports the impact of the given trait on creativity, and offers the reader prescriptive tips on fostering that trait. Still with regard to openness, for example, by “actively choosing to see things from different perspectives, we can counter the

damaging effects of familiarity and increase our cognitive flexibility,” compensating for the entrenched ways of thinking that can be the downside of expertise in a field.

That and similar advice—about tuning in to what’s going on around you and tipping those observations on their heads to make new connections—shows up elsewhere in the book, but Kaufman is also keen for people to more attentively and vigorously take advantage of what some scientists call our brain’s default network. This refers to the subjective realm of inner experience, the “noise” that cognitively takes a back seat as we, say, complete a task or reason about a physical object. Kaufman calls it the imagination network. “It’s really important for turning inward, for [accessing] things that don’t grab our attention from the outside, but grab our attention from the inside.” Laughing, he adds, “That’s the first time I’ve ever phrased it like that, I like that. Write that down!”

Activities like showering, drifting off to sleep, or taking a solitary walk can all help us reach inward—he claims we may spend half the day mind-wandering. This doesn’t necessarily mean the “Walter Mitty” variety of escapist fantasy, but rather something that happens “every time you’re not focused on the outside world,” he says. “You’re just sitting there: memories are becoming active, or you’re ruminating about the past. You’re probably not even aware that you’re thinking about these things.”

Tapping into this part of our brain directly opposes other, more outer-directed traits like openness to experience and sensitivity. That’s because creative thought doesn’t emerge solely from the imagination network as it chugs away in the background. It also requires the participation of other networks, such as the one governing executive attention, which helps with evaluation and planning.

Creativity is more than a simple case of right brain vs. left brain, Kaufman emphasizes. Instead, creatives have “messy minds” that allow them to listen to logic as easily as they succumb to emotions—and may find them retreating inward one day and emerging as the life of the party the next. “We’re talking about the contradictions of creative

people,” he says. “It’s mindfulness and daydreaming, it’s extroversion and introversion, it’s this and also that.”

**“Scott embodies a lot of the things he writes about—the messy mind, the contradictions,”** says Hyde, who double-majored in psychology and French at Penn (with a minor in anthropology) and is listed as “Chief Curiosity Rover” on the Imagination Institute’s “Who We Are” page. “He’s very playful and loves being silly—he brings stuffed animals into the office. He is the Imagination Man.

“He always sings the Gene Wilder song,” she adds, referring to “Pure Imagination,” from the 1971 film *Willy Wonka & The Chocolate Factory*.

Kaufman says he has a “much more lax definition” of creativity than the one widely used by theorists in the field—something that is “both novel and useful.” Creativity “doesn’t have to be world-changing,” he explains. “To me, it’s anything that you put into being, something that didn’t exist in the world before.”

However defined, Kaufman rates as creative. Noting that he’s “been a daydreamer my whole life,” he makes sure to add that “imagination is necessary but not sufficient for creativity.” Still, toss in his hypersensitivity to external distractions (a key indicator of being open to experience, according to *Wired to Create*) and his self-characterization as a nonconformist with a need for solitude, and you wind up with a pretty clear personality profile.

“Yeah, I guess I’m creative,” he concedes. “Somehow it sounds like you’re less of a douche bag if you say ‘I’m creative’ versus ‘I’m brilliant.’ I just thought of that. Why is that? Intelligence seems to have more of a fixed connotation, maybe that’s what it is.”

He lists his bona fides in a weary voice, as if he’s said it all before but doesn’t want to sound like a braggart. “I used to be a break dancer, I still play cello every now and then—when I’m stressed, I like to play Jewish songs like *Kol Nidre*. Can I sing it for you?” He erupts into a dolorous melody, then trails off. “I used to sing, I used to be really into musical theater, I used to act, I used to do improv,” he says. “I miss everything. The problem is that making an institute get off the ground from nothing has been a lot of work. I’ve put a lot of things on hold.”

One thing in his creative back pocket: a stand-up routine presented by an alter-native character that he's developed. "He's got an Afro, a Seventies porn mustache. He's a very dodgy fellow and very neurotic," Kaufman says, of this so far secret persona. "I have the whole bit ready to go. It's just having the cojones to do it."

**“How** can we measure what's seemingly unseen, like potential?” Kaufman asks me, rhetorically, after class. “Like, how in the world do you measure the potential of someone who doesn't do well on tests, or the introverted kid who has a rich fantasy world?”

Someone like himself, for instance.

The only child of a “full-time Jewish mother” and a dad who ran a clothing manufacturing company (“He made aprons for nuns at one point,” he says),

Kaufman doesn't hail from an especially affluent or academically inclined background. “My parents are very unassuming people, they don't have a lot of education, they're not elitist at all, they're very down to earth,” he says.

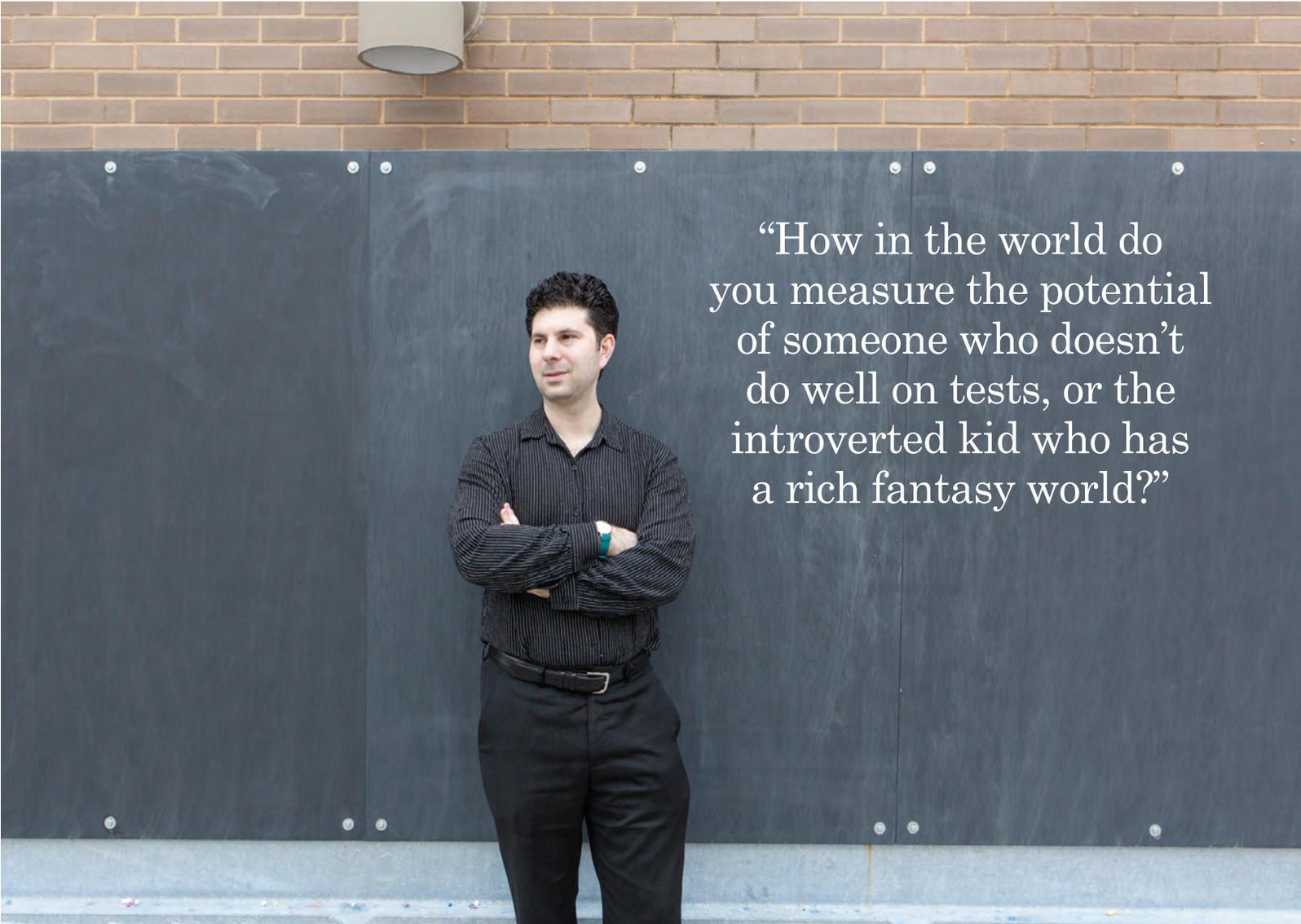
His mother's side of the family was musical. In particular, Kaufman's grandfather, Harry Gorodetzer, whom he worshipped, had played cello for the Philadelphia Orchestra for 50 seasons at the height of its fame. According to his 2002 obituary, he was the last player hired by Leopold Stokowski before he handed the baton over to Eugene Ormandy in 1938. Harry's brother Ben also played the double-bass with the “Fabulous Philadelphians” for many years. These antecedents might have marked Kaufman for an artistic career early on—except that, by the age of 3, he

had already suffered 21 ear infections, which caused him to develop a central auditory processing disorder.

“Speech entered my ears, but it took an extra step before I could process its meaning,” he explains in his 2013 book, *Ungifted: Intelligence Redefined* (Basic Books), which draws on his own experiences to look at unconventional ways to measure intelligence and define achievement.

As a result of this disorder, Kaufman was placed in special-education classes as a child—a situation to which he traces his interest in psychology. “I was particularly fascinated with individual differences,” he explains. “Who are the gifted kids—and why are we not gifted; what don't we have? And, the rest of the kids, they don't get to be special in any way. What's their deal?”

To cope with feelings of being left out, he developed a rich inner world. Practicalities—



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like mastering how to get to where you were going—suffered as a result. “I’ve never been good at spatial tasks,” he writes of his 10-year-old self in *Ungifted*. “I often get lost on the way to the bus stop at the bottom of our street.”

Some things never change. On a rainy afternoon in March, Kaufman set off from the Positive Psychology Center’s offices at 3701 Market Street for a lecture hall at the Annenberg School for Communication a few blocks away. Walking out into the downpour, he found himself wrestling with a busted golf umbrella, then barged into a deli to ask if anyone happened to have an unbroken one that he could buy or borrow. (He settled for the chicken soup instead.) Moving on to a nearby florist, he thrust open the door and treated the owner to a rousing rendition of the song “Maria” from *West Side Story*.

“He’s always so happy,” Maria, the proprietress, told me.

Leaving the store, he stopped on the corner and looked around. “I’m actually lost right now,” he said.

“Scott Kaufman is going places,” declares Seligman. “Scott’s a force of nature,” says professor of psychology Angela Duckworth G’03 Gr’06, his colleague at the Positive Psychology Center and a 2013 MacArthur Fellow who focuses on the quality of “grit” as a predictor of achievement [“Character’s Content,” May/June 2012].

“Not everyone in our field walks the talk, but the breath-of-fresh-air that is Scott certainly does,” says Louis Alloro, a friend and Philly-based positive-psychology trainer.

“I’m not socially awkward, I’m socially creative,” says Kaufman himself, via a recent tweet.

That Twitter presence is only a blip in a blur of activity. Kaufman—who says he’d like to be considered a “public intellectual”—maintains a prodigious regimen of posts, podcasts, and presentations. He’s a co-founder of The Creativity Post, an online platform that publishes original content and aggregates other articles examining the subject, and hosts The Psychology Podcast, where he interviews thinkers on a wide range of topics.

He’s quick to invite people into that milieu. “Scott has helped me realize just about every dream I could have,” Taylor Kreiss says after class, back at the Center.

He turns to address Kaufman directly. “I’m grateful, man. Good stuff.”

Kreiss, the Imagination Institute’s director of special projects, is working on his master’s degree in applied positive psychology at Penn, and says he met Kaufman not long after relocating to Philadelphia from California, where he’d studied philosophy at UCLA. “In a very short time, he had me on his podcast, he invited me to work with him at the Imagination Institute, he got me on the road to reaching so many of my goals,” he says. “He loves giving credit and opportunity.”

### Maybe it’s a case of paying it forward.

Thanks to a combination of determination and talent, Kaufman has enjoyed great success in getting what he wants—academically and professionally at least. As he tells it in *Ungifted*, it started when he managed to bust out of the special-ed box:

“They have given me as much time as I want to complete this test ... It’s the start of ninth grade ... and I yearn for more of a challenge ... I sense I am being watched ... and find today’s resource room teacher ... looking at me quizzically ... Am I in trouble? Am I not acting learning disabled enough? ‘Can we talk outside please?’ she asks ... ‘I have been watching you and I can tell you are very bored,’ she begins. ‘You don’t seem to belong in this classroom. Why are you here?’”

The question strikes the adolescent Kaufman as a good one. Later that evening, he announces to his parents that he intends to leave the special-education program and assume a regular course load. “I’ve never been so sure of anything in my entire life,” he writes. “I’m ready.”

He takes summer courses to catch up to his peers and muscles his way into the school orchestra. “Images from my early childhood flash into my head. The Philadelphia Orchestra. The Academy of Music. Loud applause. Standing ovations. The music. The rush. My grandfather smiling at me from the stage ... ‘Can I sign up for your orchestra?’ I mumble. ‘What instrument do you play?’ [the school’s conductor] asks me ... ‘I don’t play anything yet, but I will play cello in time for the start of the school year,’ I say decisively.”

Off to Grandpa he goes, and *hey presto!* by the time fall rolls around he’s earned a seat in the school orchestra.

“Time and time again, Scott has demonstrated everything I study,” observes Duckworth. “He’s the epitome of perseverance and the realization of potential.” As *Ungifted* unfolds, Kaufman illustrates many other examples of how he sought, and gained, the attention of a series of mentors. As an undergraduate at Carnegie Mellon University, he finds his calling while thumbing through a cognitive psychology textbook: “This is amazing!” he writes. “This is exactly what I want to be studying. I flip back to the inside cover and see *Robert J. Sternberg, Yale University*.” He tells his professor, Anne Fay, that he wants to go on to Yale to study with Sternberg. She helps him change his major from music performance (which becomes his minor) to psychology, and sets up a series of one-on-one reading and discussion sessions.

“Scott had, and still has, an insatiable curiosity about how people think and learn,” Fay says. “He was very interested in the whole idea of being unusual: is that valued and supported and nurtured, or does it make you feel like a dummy or a geek or an outsider? We would have these long discussions during the independent reading course. It was almost impossible to get him out of my office. He wanted to dig and dig and dig—it was always, *but, but, but*. He had all these questions about everything and that made him so exciting to work with.”

Kaufman next obtained a master’s degree in experimental psychology from the University of Cambridge, where he studied under Nicholas J. Mackintosh, an expert on IQ and human intelligence. The story of how he got there is typical Kaufman. In search of a mentor and looking for a break from America in the aftermath of 9/11, he discovered Mackintosh and his work. As “visions of spires, ivy, and stained-glass windows” danced in his ever-active head, he sent the professor a cold-call email and in turn received an invitation to come to England as an intern. After graduating from Carnegie Mellon, he was awarded a full-tuition scholarship to Cambridge after informing a panel of “three British-looking people” that he wanted to come up with a new theory of human intelligence “because I don’t think any of the current [ones] are complete.”

From there Kaufman moved on to his long-range goal, earning his doctorate from Yale in 2009; his dissertation proposed a model for how the dual processes

of cognition—slower, conscious ones (like deliberation and reasoning) and faster, unconscious ones (such as intuition and daydreaming)—work together as elements of human intelligence. As distilled in *Wired to Create*: “Spontaneous processes play the largest role during the generative phase of creative thinking, when we’re coming up with new ideas. Then, during the exploratory phase of creative cognition, we tap into the conscious, rational mind to play around with the ideas we’ve created, and to uncover their uses.”

In his dissertation, Kaufman looked beyond the traditional metrics of intelligence, such as standard IQ tests, and instead “shifted the focus of analysis to the individual by measuring their intelligence relative to their own personal growths and goals.” By the time he wrote *Ungifted* in 2013, he had refashioned his argument into a theory of “personal intelligence,” emphasizing flexible cognition and the ability to switch back and forth between the controlled and spontaneous processes, depending on the task. (Creatives are adroit at this skill, hence their “messier” minds.)

Analyzing his own personal intelligence, Kaufman says he could stand to hone his “logical capability—it’s something I’m missing, but I don’t even know if I want to develop it more.” He pauses, then adds. “Maybe more self-control. I would say that hinders me, though I’ve been very good about career goals, I’ve been very *gritty*.”

Until he wrote *Ungifted* while working as an adjunct assistant professor in the psychology department at New York University, Kaufman mostly kept his past a secret. “That was such a meaningful book for me to write,” he says. “It was the end of a chapter. I honestly never thought I’d live beyond that book: that was my purpose in life, and I was gonna get hit by a bus right after. Then it was, like, ‘Oh my God, here I am, life goes on.’”

One day he found himself in Martin Seligman’s office. “I didn’t know I was coming for a job, I came to meet him, gave him a copy of my book and ...” he trails off, then resumes. “By the way, I was a lot more cocky then. I had a much bigger ego. He said, ‘Tell me your story,’ and apparently I was dropping a lot of F-bombs, and he just looked at me and said, ‘We’re starting this thing called the Imagination Institute, and we’re going to try and measure imagination and do these retreats,

and we need someone to run it, and would you like to do that?’ I was, like, *Whaaaaa-?* It seemed like an absolute dream job.”

Two years after accepting Seligman’s offer, he says he still has “to pinch myself to make sure this isn’t a dream—I feel very grateful to work in the same space with amazing people like Martin Seligman.”

The retreats involve gathering top minds from a variety of domains—mathematicians and physicists, video game designers and comedians—and collecting information on everything from their childhoods to why they entered their field. (Participants’ actual brains are also being scanned in an attempt to understand their imaginations at work.) Three have occurred so far; these have featured psychologists, educators, and, most recently, a gathering of futurists in San Francisco.

Last summer, the Institute awarded its first round of grants to 16 research teams that are attempting to create different measures of imagination.

“From a policy perspective, it’s important to measure something if you want to argue that it [has] value: what we count, gets counted,” Kaufman says. “But I don’t want to use these tests for the same purpose as the original IQ test—as a sorting mechanism to limit potential. They are a way for people to understand themselves, for us to understand our students, and to see if the things we do in the classroom to increase creativity and imagination are actually doing so.”

**A**fter Kaufman devoted the penultimate chapter in *Ungifted* to creativity, Gregoire used him as a primary source for a *Huffington Post* article headlined “18 Things Highly Creative People Do Differently.” It went viral, as they say, scoring five million views and half a million Facebook “likes,” and the two teamed up to expand the listicle into *Wired to Create*.

The book is an attempt to help readers learn to be creative as a habitual way of engaging with the world. We are all “wired to create,” the authors argue, we just have to learn to recognize the myriad opportunities that are presented for us to express that creativity. Why? According to Kaufman, because creativity is “the height” of living a more fulfilling and meaningful life—a central tenet of the positive psychology movement and, more recently, for him, a personal quest.

“I used to have a very high drive to succeed,” Kaufman says. “But I don’t really feel like I have that anymore. I think after I got into Yale, I got over those superficial markers. I’m much more interested in self-actualization. I feel like I’m held back, and I want to overcome that block. I’m actually thinking about writing my next book on self-actualization, and maybe it will help me. I think part of it could be a life-stage thing, a maturity thing. I’m impatient, I want to be there already.”

Anxiety, however, plagues Kaufman. “Every time I hear the murmur of 150 people [before class], it makes me nervous,” he says. “This has been an ongoing battle for me. I refuse to stay home and not give talks around the world because I’m scared of flying, I’m scared of this, I’m scared of that. I think to myself, as corny as it sounds, that I’m helping the world, I’m doing good. What, am I not going to do this because I’m scared? That’s no way to live. I wish I knew why my heart rate increases. But I cognitively view it non-judgmentally and mindfully, and I think, ‘Oh that’s interesting.’ I can separate it, I can give the lecture and seem smooth.”

**While his work is just getting started at the Imagination Institute,** he’s ready to move beyond creativity. “A major mission of mine is to help vulnerable people flourish,” he says. “That’s my thing. Kids with learning disabilities, all the kids that are falling through the cracks in some way. It’s always been about helping the underdogs, [and] now I have more tools for that mission. A lot of people in positive psychology focus on helping flourishing people flourish more, as opposed to helping vulnerable people flourish.

“To me, that’s the most exciting future, how can we capture all that quiet potential?”

*SBK (to passerby): Goodnight, Laura...*

*SBK (to me): Well, this was pretty comprehensive... You got a little personal...*

*Me: I didn’t make you cry, like Barbara Walters...*

*SBK: Did you make Barbara Walters cry?*

*Me: No! Barbara Walters was always trying to make people cry.*

*SBK: Oh. Can you explain why I all of a sudden have an intense head cold? ♦*

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