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The Courage to be Creative: An Interview with Dr. Yong Zhao

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> Our students do not fit into a future world. They create the future world. —Yong Zhao
> Creativity takes courage. —Henri Matisse

Introduction

In our recent series of articles, we have highlighted the work of a variety of creativity scholars, providing unique perspectives into the study of creativity. From neuroscience to social creativity, Flow, and even un-creativity, we have showcased the richness of the field and the essential role creativity plays across disciplines and in our everyday lives. We continue this ongoing series by profiling Dr. Yong Zhao, *Foundation Distinguished Professor* in the *School of Education* at the *University of Kansas* and professorial fellow at the *Mitchell Institute for Health and Education Policy*, *Victoria University* in Australia.

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Dr. Zhao was born and raised in China. He received his B.A. in *English Language Education* from *Sichuan Institute of Foreign Languages* in Chongqing, China in 1986. After teaching English in China for six years, he came to the United States in 1992 as a visiting scholar at *Linfield College*. He then began his graduate studies at the *University of Illinois at Urbana-Champaign* in 1993, receiving a Masters degree in Education in 1994 and Ph.D. in 1996. He joined the faculty at *Michigan State University* in 1996 after working as the *Language Center Coordinator* at *Willamette University* and as a language specialist at *Hamilton College*. Dr. Zhao's scholarly work centers on creativity, globalization, entrepreneurship, and technology. He is internationally-recognized as a thought-leader in these areas, having published over 100 books and articles including *World Class Learners: Educating Creative and Entrepreneurial Students (2012)* and *Counting What Counts: Reframing Education Outcomes (2016).*

Dr. Zhao's perspective on creativity is firmly grounded in its relationship to thinking, teaching, and learning within educational systems. He speaks with a forward looking trajectory, focusing his attention to what creativity means to the future of schools and societies. In our conversation with him, several themes arose to characterize his perspective on creativity, and we take each in turn here. These themes included: viewing creativity as a cultural and systemic value; the psychological aspects of incorporating creativity in education; and, the sociocultural aspects of technology use and its relationship to creativity. Before delving into these themes, we begin by examining Dr. Zhao's three-fold definition of creativity.

Creativity as a Threefold Construct

Dr. Zhao argues that creativity is the key to understanding *all* human behavior and learning. In fact, he suggests that

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creativity is so essential to the human experience that it can be considered the genesis of *all* learning, *in every area and across every discipline*. As he said in the interview:

> I have come to appreciate creativity as the foundation of human behavior and human learning…So in every area, educational policy, language learning, global competency—all involve a form of creativity.

He defines creativity as a multi-faceted construct, with three key aspects that constitute the overarching construct. The first aspect of creativity revolves around *cognitive ability*—it is an ability of the mind to combine existing things and come up with something novel. At this level, creativity is about how we think in ways that lead to something new or original. That said, the ability to enact this cognitive ability in the real world requires *the courage to create,* involving having an open-minded attitude as well as a willingness to confront challenge, uncertainty and emotional vulnerability. This is the disposition that allows an individual to take risks in order to fulfill the desire to come up with novel solutions to existing problems. It is this emotional aspect of courage that drives forward the creation process. The third, and final component of creativity is its *social value*. It is not only the ability to create and the desire to create that is important, but the quality and value of the work itself. For something to be considered creative it must have value to others beyond oneself.

While the elements of novelty and usefulness are components that are central to many definitions of creativity (Runco 2003; Runco and Jaeger 2012); the second component that Dr. Zhao refers to, the courage or desire to create, is not something that is commonly found in many definitions. This component is essential to Dr. Zhao's definition of creativity, focusing as it does on the broader social context within which creative acts occur. In this layered definition, Dr. Zhao also offers a caution to the field of creativity research, in noting that any attempt at unified theory around creativity is potentially challenging or problematic:

> I think there's too much attempt to have a unifying theory of one generic construct of creativity that applies to all contexts and all people. And to measure that construct—those are futile missions. To try to come up with one definition or one theory is a noble effort, but a challenge we have set up for ourselves. Another challenge we face is that creativity researchers are often interested in students or youths' creativity. But in education, they are subjects to a system that does not necessarily value creativity.

This quote connects directly to Dr. Zhao's belief in the idea that creativity can either be supported or constrained based on systemic structures of education and classrooms. Dr. Zhao believes that we are all born with the potential for creativity, and that it can be either nurtured and supported, or suppressed and constrained.

A Cultural Lens on Creativity within Systems

Dr. Zhao looks at creativity in education from a systems perspective rather than a classroom perspective. He is not reticent in declaring that the current educational system does not value creativity. In fact, he suggests, somewhat controversially, that the *Common Core Standards* initiative is harmful and "opposes the type of preparation students need for the future." Changes due to globalization are requiring that all our students become globally-minded, creative individuals. Yet the current reality is that school systems appear to be working against that need.

Dr. Zhao believes that creativity is a systemic issue, in that how we deal with and encourage (or actively discourage) it goes beyond individual classrooms. He suggests that many education contexts reward conformity and stamp out creativity. This clearly is an issue that transcends specific classrooms or individuals within classrooms, but is constructed and defined by the kinds of broader educational policies we institute and the educational goals we, as a society and culture, value.

Thus, he argues that, educators are placed in a dilemma when they are tasked to support creativity in a system that does not make it easy, or even possible in many cases. Scholars like Kyung Hee Kim (2005, 2011), or Ken Robinson (2011, 2015), have consistently noted a steady drumbeat of diminishing creativity, that has been occurring in recent decades. As standardized or high-stakes testing and rigid curricula or policies become prevalent, there is little motivation built into the system for either teachers or students to be or promote creativity. From an early age, students learn that convergent thinking (getting the one *right answer*) is valued, while divergent thinking (coming up with multiple solutions to a given problem, or even identifying new problems) is strongly discouraged.

Dr. Zhao also has a somewhat controversial position with respect to the kinds of knowledge required to be creative. He believes that schools and educational systems, by focusing on knowledge acquisition above creativity, place the cart before the horse. He regards the idea that we need to know before we create as being a fundamental misconception that most educators hold. He suggests instead that the act of emphasizing and valuing an individual's creativity will naturally lead to learning. He noted that:

> Many educators believe that to be valuably creative one needs basic knowledge. It's the idea that you can't run

> without walking. Which to me is actually a misperception. I actually think that when a person wants to create, they will learn. Learning to create is really important.

Dr. Zhao does believe that knowledge and skills are important, but a more natural route to most learning begins with a desire to create, not with a set of skills imposed by someone in authority. It is often the case that when educators place a heightened focus and heavy concentration on basic skills, at the expense of promoting and rewarding creative engagement, it discourages students not just from being creative but even from learning. As Dr. Zhao frames it, "Creativity should be present in the beginning and drive everything else." But, he also notes that cultivating student creativity requires a paradigm shift, away from prescribing learning, and into supporting learning. Or, "from reducing human diversity to a few employable skills to enhancing individual talents." This is not to say that there are not pockets of innovative educational models in the United States. Successful models of creative education do exist, but they are on the edges of the system, not the mainstream. The mainstream and mainstays of educational policy mean that the old rules apply, in which more routinized rules and learning dominate the landscape. Dr. Zhao's framing around systemic creativity suggests that while our mindset is focused on fixing deficiencies rather than supporting unique interests, successful models of creative education will continue to stay on the fringe.

Educators need to think about the ways that students can be given opportunities to learn and be of value to others. This is a foundational piece of entrepreneurial thinking, as Dr. Zhao notes:

> We need to create opportunities for children to exercise their creativity, to refine their creativity, by creating things that matter to other people to make lives better for others, to better the world, to pursue a purpose bigger than themselves.

The how of doing this and the path to get there is the essential question that educators and schools must ask themselves. There is no one correct path, but it does begin with a paradigm shift in the types of values that schools instantiate in the structure of learning.

In order to support creativity educators must attend to the environment. The environment in which students are immersed must support and encourage individual differences. A broad range of activities and experiences, and the pursuit of novel solutions should be encouraged. School systems need to move away from homogenization through external standards that seek a single right answer for all things. In the United States and elsewhere, educational systems preselect and predetermine sets of standards about what is valuable across contexts. But being creative means being novel and coming up with novel solutions to fit unique contexts. When educational systems place value on standardized practices, knowledge, skills, facts, and outcomes, creative thinking is devalued. Over the past two decades, as the importance of educational testing has increased, creativity in students has declined (Zhao 2012).

Dr. Zhao also discussed his unique perspective of having experiences in both Asian and American educational systems. Based on his experiences Dr. Zhao states that:

> Culturally and educationally, you can negatively affect the creative population by discouraging the diversity of creative individuals. The more standardized you are, the more effective you are at the basic weeding out of creative talents and diversity on a broad scale. That's why some cultures have more creative people than others. Today in education systems we only look at a few indicators to measure the quality of our education system and in so doing we are squeezing out a huge population of creative individuals.

In this, he makes clear the systemic problem we face. The focus of education systems on standardization succeeds in reducing creativity among the population. A whole population thus becomes less creative, and many creative people are driven out.

The Psychology of Creativity for Education

A core of Dr. Zhao's overall conception of creativity, even in motivating his systemic lens, is a focus on what individually drives us to create as part of human nature. Returning to his initial threefold definition of creativity, much of the trajectory of his work has stemmed from the emotional side of creative thinking, as he noted:

> Creativity is a lot more emotional psychology (the second layer of my definition). Education discourages creativity, we tell people that it's not worthwhile to be creative and I think a lot of researchers who are trying to measure only the cognitive aspects of creativity miss that point; and educators sometimes, too. Cross culturally the constructs may seem to be similar, but they are only measuring the cognitive aspect. The psychology piece, perhaps more important, is being missed. And educators can do a lot more harm by trying to teach children not to be creative and to conform.

When it comes to supporting creativity Dr. Zhao believes that we all have a need or desire to create, an intrinsic motivational factor. This speaks to his second aspect of

creativity – the human psychology of the construct, in the driving need to make or discover things, which is found in the courage to create. This courage may be innate, but it is also something that is developed and influenced by experiences, in his view:

> Creative potential can be suppressed or amplified by our experiences. Some experiences enhance our creativity, while others suppress it. Some experiences encourage risk taking, while others make us risk aversive. Some experiences strengthen our desire to ask questions, while others instill compliance. Some experiences foster a mindset of challenging the status quo, while others teach us to follow orders. Human beings are adaptable and our nature malleable. The experiences we have play a significant role in what we become (Zhao 2012, p. 10).

This has implications for education, based on the experience we offer students and the value we place on correlates of creativity, such as openness, intellectual risk taking, and novelty. Dr. Zhao believes that people want to be of value to others and one of the most important things educators can do is "help children understand that their creativity is socially valuable." This will further encourage their natural desire to create.

Interestingly, this connects with a theoretical model suggested by John Dewey (1943), in which he suggested that there were four "natural impulses of the child," which revolved around, the impulses to inquire (to ask questions and create solutions); to communicate (to hear and share with others); to construct (to build or create things); and to express (to demonstrate views, feelings, or identity). Dewey asserted that education should build curricula around these instinctive impulses rather than separating learning around traditional disciplines and rote experiences. Within these, we see the importance of "creating" embedded across several categories. In examining this foundational paradigm, the great imperative for education is to nurture these impulses.

Drawing this into Dr. Zhao's view we might suggest that creating is a natural desire which schools could, given certain structures and philosophies, choose to systematically support—rather than squelching such instinctive learning urges. The psychological side of his paradigm for creativity focuses on the emotional innateness of creative impulse, and Dr. Zhao ties this human need for fulfillment, saying, "If you consider positive psychology, you see that everyone wants to pursue self-actualization, self-transcendence - they want to be valuable to others." In understanding this underlying motivation of human psychology, we might begin to work with it, and move people toward these psychological impulses in ways that better the creative foundations of our society.

For Better and Worse: The Sociocultural Effects of Technology

In reflecting on the impact of technology on creativity, Dr. Zhao discussed a variety of ways in which technology has aided creativity and helped ideas become a reality by providing the infrastructure for human innovation. Examples can be found in movie-making or in writing. We have devices that allow for trial and error with very minimal cost. Digital technology has also provided the means to make creative processes easier. The simple task of writing an essay is very different, if you look at the process one might take when writing using pen and paper vs. using word processing software. Creation and iteration have become more affordable and more accessible – and these are the hallmarks of what it takes to create.

Technology has also provided a space that allows people to build large social groups that can be mutually supportive by expanding connections to other people, especially those that may be similarly creative. In the past, especially in rural or isolated areas, people may have felt alone in terms of connections to other people or to the things they love. Digital and connective technologies let us reach out to others, expand creative circles, and seek support.

Technology has also provided access. Access to people, tools, and information. When people have access to creative products, as well as feedback from others; products get improved, people do not need to reinvent the wheel, and people get feedback from a diverse group. This also allows more opportunity for people to share their work broadly and connect and collaborate with others (Henriksen et al. 2016).

Dr. Zhao points out that it is important to realize there are also negative impacts of technology. Because of the affordances and accelerating rate of change offered by new technology, we live in a world filled with other people's creative products. Some might say too many products. These products can consume our energy, making it easier to be comfortable in simply consuming things. Video games are a good example relevant to the topic of education. While the population of teenage gamers is large, the population that actually spends time developing games is much smaller.

Additionally, Dr. Zhao suggests that technology has created more pressure for human beings to be creative. Everyone yearns to be the next famous YouTuber, to hit on the next hot podcast, or to create a newer and better version of an app. This has occurred, in part, because technology has replaced repetitive tasks. He says, "In this new age we can no longer try to turn children into mechanical devices, which certainly was the goal in the industrial age. We need to be creative in order to compete with machines." This need to be creative must be supported from a young age, thus the implications for school cultures and structures is significant.

Conclusion

Dr. Zhao has contributed much to the field of creativity in recent decades. He firmly believes that "what makes a nation or a community strong, is diversity of talents and creative citizens." Dr. Zhao emphasizes that society plays a role in ensuring a strong creative community, and one place this is instantiated is in how educators and schools support the creative potential of the youngest members of our society in their thinking and development.

Despite lip service given to twenty-first century education, our current system has veered more toward the past rather than giving a support to new vision and preparedness for the future. Our ability to access data and use technology has led to evidence-based teaching, which Dr. Zhao points out can be very constraining to creativity, "causing us to conform to the past rather than invent for the future." Educators have the starring role and take center stage in addressing this concern. It begins with recognizing that people have a desire to be creative and valuable, and they need structures, support, and systems that help them build on and live up to their own creative potential.

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