CHAPTER FIVE

IS CREATIVITY THE MODERN-DAY LITERACY?

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Abstract

It has been proven that creativity is no longer reserved for the high arts and the creative types (Abraham, 2019; Glaveanu, 2017; Kelley & Kelley, 2013; Michalko, 2007; Richards, 2017; Roberts, 2006; Root-Bernstein, R&M, 2013). We are all creative and we need a compelling way to communicate this fundamental knowledge to the masses. People still believe they are not creative or the creative type- and one of the biggest hurdles to being creative is the fundamental belief that one is not creative (Michalko, 2007; Reisman 2010).

Just over 100 years ago (in the year 1900), the literacy rate was less than 21.4% globally (Roser & Ortiz-Ospina, 2016). Since then, the culture of education specifically learning has sought to educate every person in the ability to read and write. Today, the literacy rate is approximately 86% (in 2019) globally and it is fundamentally accepted that anyone can learn to read and write with the proper education (O'neill, 2021). Imagine what the world would be like if every person on the planet believed they could learn to enhance and hone their creativity just as they believed they had the capacity to read and write?

This chapter is about evangelizing creativity and its fundamental and innate skill in every one of us. We need a new metaphor to break the mental blocks for teachers and institutions from believing that creativity isn't for them and to move creativity expression and cultivating creativity in our schools and boardrooms from a lower priority into one of importance if not urgency.

Come to the edge,
We can't, we're afraid.
Come to the edge,
We can't we will fall!
Come to the edge,And they came.
And he pushed them,
and they flew.

-Guillaume Apollinaire

Why Creativity? Why now?

Several ideas of what we thought were true about creativity are coming into focus and are being debunked. One of the myths is that creativity is reserved for a certain population and that creativity is not accessible by everyone. This is certainly false and more importantly we can now say each and every one of us has the innate ability to create something original or invent a new way of doing something that has never been created before (Roberts, 2006). Basically, we are all creative.

Creativity has long been considered reserved for the high arts, the musicians, the illustrators, the dancers, and the visual artists. The rest of us with our J-O-B's have been excluded and resigned to the "other" work as necessary yet lacking in the enigmatic, poetic and intentionally lively.

It's time to put an end to this creative oppressive myth because that is what it is – a myth. More than ever before we need to steal back creativity from the arts and return it to its rightful bearers. Creativity is simply defined by the ability to generate something novel or original and also useful or appropriate (Runco & Jaeger, 2012). As this definition holds true- those that have endeavored to make a career out of creating novelty and appropriate uses for things have easily been defined as inventors, designers, creators, artists, and in many respects engineers. We are all creative and the creative capacity lies in each of us (Abraham, 2019; Glaveanu, 2017; Kelley & Kelley, 2013; Michalko, 2007; Richards, 2017; Roberts, 2006; Root-Bernstein, 2013). Creativity is capable of being honed, improved, sharpened – like any ability the more we practice it the stronger it becomes (TEDxTalks, 2017). For those of us that understand its power and know how to wield it, like Captain Marvel we become unstoppable and miraculous.

How come there is a gap between those who believe they are creative and those who do not? And why does it matter?

A survey conducted by IBM of over 1500 CEOs around the world investigated the characteristics and leadership methods of future leaders. The results of this survey concluded that creativity was predicted to be at the top of the list for most sought-after skills (IBM, 2010). The IBM survey was conducted over 10 years ago and more businesses than ever before are embracing creativity, realizing the importance in staying competitive in the global market (*USD V2 Pitch Competition Featured in San Diego Business Journal*, 2020).

It seems creativity is the new superpower. Honing and sharpening our creativity may also prove to benefit our health and well-being, fight against depression and anxiety, and bring meaning to our lives (Richards, 2010). New research in mind, brain, and education (MBE) as well as studies by neuroscientists have also debunked old myths of what we believed about creativity and the hemispheres of our brain (Abraham, 2019). We now have the power to enhance our ability to come up with original ideas, improve our idea quotas, become more aware of how and where we are thinking, and embody a growth mindset all of which assist us in the human capacity to learn (Zerilli, 2021).

If creativity is innate in every human being, then developing our creative abilities and honing and sharpening our creative potential may be as

simple as practicing a musical instrument or strengthening our muscles. Ruth Richards, in her article "Everyday Creativity", answers her own question about the benefits of creativity;

"Can expressive creative writing actually improve physical health, as well as psychological well-being? Might it even boost immune function? Remarkably, the answer is 'yes'. Here is our mind-body connection shown in bold relief (Richards, 2010)."

Creativity research has exploded in the recent decade. Pioneers such as E. Paul Torrance and colleagues have paved the way for a new generation of creative researchers that are revealing even more fascinating benefits of creativity. Research in neurobiology has also found dendritic pathways in our brain that prove our brains never stop growing and learning from birth to death (Tokuhama-Espinoza, 2011). This neuroplasticity is just the beginning in what creativity can offer the human potential from the physiological to the psychological. A fascinating example of how creativity and our physiology is connected is in the simple practice of meditation. Several researchers in neuroscience and biology have focused efforts on meditation as well as mind wandering techniques; Josopovic, Lipelt, Brewer and others have identified methods to study the brain and creativity associated with meditation techniques and found possible methods to help better understand and treat ADHD (Brewer, et al, 2011; Josopovic, 2013; Lipelt, 2014; Kaufman & Gregoire, 2016). Meditation has also been shown to focus and improve convergent thinking (our ability to focus, evaluate and come to closure thereby improving decisions making) and mind wandering techniques have also been shown to improve divergent thinking (ideation or idea generating) (Colzato, et al, 2012). Creativity is truly a superpower—with so many benefits and possibilities why haven't we transformed our schools and pedagogy to cultivate these possibilities? How come creativity hasn't been made more important in our schools, businesses, and in our everyday lives? If creativity is so important to our wellness, then why aren't we spending an hour or more a week practicing creativity as often as we practice yoga, or go jogging or play a weekly racquetball game? Why has creativity taken a second seat or third seat to higher priorities in school such as math and science? If creativity is so important then why do people claim they aren't the creative type?

The field of creativity research has blossomed in the last 60 years, and yet even today organizations and institutions struggle with the term creativity, often shrouding the actual intention of studying creativity under the pretext of workplace efficacy, organizational climate, inspiration and motivation and professional development (Creativity Is Not Enough – Harvard Business Review, 2014). The studies in how important and impactful creativity is to the bottom line in the business sector, as well as to the health and wellbeing in our day-to-day lives, is well established, and yet how come it seems the layperson is left in the dark? How come schools haven't shifted their pedagogy to include creativity training if the research is irrefutable that exploring and enhancing our creativity may create huge impacts in our students, faculty, all of us?

Creativity has been waiting idle for us to shift our mindset, wake up to new possibilities, break free of old broken paradigms, and embrace a new metaphor.

What is this new metaphor?

Creativity Is the New Literacy

"If you want to change the world, change the story, change the metaphor."

-Joseph Campbell

Just under 125 years ago in 1900, less than 20% of the world was literate (Roser & Ortiz-Ospina, 2016). By the early 1990's the literacy rate had flipped on its axis with the rate being approximately 82% globally (O'neill, 2021). What changed for the global population to become proficient in reading and writing? Sociologically, there were many factors that contribute to answering this question and it is worth exploring in detail—the implications and possibility for the human species lies in unearthing the mystery of our own potential.

Even with the invention of the printing press in the 15th century (1450) which is long before the improvement of the literacy rate which didn't improve globally until the late 19th century (Naughton & Reyes, 2020). It wasn't simply accessibility to written materials, although this contributed greatly. Society and cultures shifted priority, and the world awoke to the notion that a literate species is a productive species. Several champions in our history had the brilliant insight that sounded something like this: "What would our whole world look like if we could all read and write? Together what could we accomplish?"

This is a shift in *mindset* more than a shift in technology or access. Culturally, we shifted our thinking and belief system from one in which only a few were given the opportunity and access to one in which the opportunities were available to everyone.

What would it be like if everyone on the planet not only believed creativity was as important to their wellbeing as reading and writing, but also considered it to be one of the most important priorities to education? Creativity is at the heart of creating education pedagogy; business and organizational development; employment pathways to success; and in general, the way we create and interact with each other in our personal lives. Creativity isn't just for the Mozart's, the Mark Twain's, the Maria Calais', the Bell Hooks', or the Maya Angelou's of the world? Imagine what the planet would be like, imagine what we could accomplish as a global community if each of us believed we were creative as much as we all accept that we're capable of reading and writing.

It is likely that many of us, if not all of us at some point in our lives have heard or have been told, "Your drawing is terrible? Keep practicing? You're out of tune? How come you chose brown, I prefer green? Your snow-flake looks crooked. The harmonica player is in the wrong key, or...?" This criticism and feedback are just a few examples of what triggers our heartache and the need to hide our creative expression. It may be that for some and maybe most of us, we keep our creative passions and playful desires to explore hidden for many years. For this and other reasons, there is a fundamental belief in our culture that we are not creative.

Self-made belief systems can be very difficult to change – examples that include the sociology of error are numerous from Ptolemy and the revolution of the planets and stars around the earth (Lawson, 2004) to the Miasma Theory of all smell is disease in 1854 London (Johnson, 2006). Even after years of debate and proof, the ability for a culture and society at large to change its indentured point of view is challenging at best. Creativity is another example of a society that needs a correction.

A Call to Action

It is time for creativity to be brought to the masses on a global scale. Leaders, educators, community leaders and our families more than ever need to understand the urgency and importance to shift our mindset to creativity. What would our world look like if we adopted the belief in every human person that each and every one of us is capable of creativity, of invention, innovation, creating meaning and contributing to the improvement of our planet simply because we are born with this capacity?

There is certainly a belief around the world that creativity isn't for everyone just as there are those in our recent earth's history when people believed they were not capable of reading and writing. Looking at the shift historically for literacy may be the answer to shifting the conscious and sociological importance for creativity for the masses.

By taking a look at how literacy was a catalyst for education we can make available to the layperson the possibility to make the mindset shift for creativity. This comparison can be the catalyst we need to ignite creativity and creativity education on a global scale. In the last 1500 years there were four major historical shifts that took place to bring the importance of educating the masses in reading and writing. The first took place during the Carolingian Empire and the days of Charlemagne during the 8th Century (Thomas, 2021). Charlemagne had claimed the title as the Western Holy Roman Emperor and anointed emperor by the pope (Naughton & Reyes, 2020). Charlemagne issued a royal ordinance known as the Charter of Modern Thought which stated, "Let every monastery and every abbey have its school, in which boys may be taught the Psalms, the system of musical notation, singing, arithmetic, and grammar." Charlemagne himself was not an educated man, but one of his advisors, Alcuin of York, developed the means to accomplish this goal. While education with the church was blossoming, this learning spilled into the populace at large. Theodulf, Bishop of Orleans, ordered that priests establish schools in every town and village. This was one of the first times in known history in which education was made accessible for children no matter their station or class (Thomas, 2021).

The second cultural shift occurred during the 12th century renaissance during which the first universities were founded. Romanesque and Gothic art flourished, along with the founding of parliaments and the development of civil law in government and with it the love learning evolved (Naughton & Reyes, 2020). This time of growth in the late 14th century resulted in one of the darkest in European history with the Black Plague estimating the loss of between 30 - 60% of the population.

The third cultural shift occurred after the black plague and the invention of the printing press. In 1450 Gutenberg introduced the printing press in Mainz Germany which for the first time opened the opportunities for written word to proliferate—written materials became available to a larger scale population. "It opened the floodgates of knowledge and ideas and generated a rapacious appetite for literacy" (Robinson, 2017). "An intellectual and commercial revolution ensued, as a growing urban class of educated readers devoured whatever books they could find" (Naughton & Reyes, 2020).

Finally, the most recent was the introduction of reading and writing to the masses in the mid-19th century at the beginning of the industrial revolution. Economics played a major role in determining the need to create an educated workforce. "Capitalism needed workers who possessed and could use particular kinds of knowledge; schools provided them" (Thomas, 2021). In 1870 Britain passed the Forster's Act which mandated the education of all children. Thus, a mixture of finding it important to educate the children, to broadly spread the word of religious values and to educate a labor force were all necessary cultural motives to teach reading and writing. A brief summary of the history of education, specifically reading and writing, cannot go without the most recent mandate in 2001 in which the Federal Government in the United States passed the ESEA or Elementary and Secondary Education Act – also known as the No Child Left Behind Act of 2001. The aims were to raise academic standards in all schools (Robinson, 2017).

It is 2022 and we have come to a transformative fork in the road of education. Online learning and the effects of the Covid-19 pandemic has introduced a new normal in how educators and learners are expected and committed to our education system. We no longer can afford to support a nochild left behind legislation of standardized testing and high impact assessments and the industry of standardized testing preys on our students and teachers and parents in an industry that profits every year (Robinson, n.d.).

Change doesn't happen nor do global transformations without a fundamental shift in mindset. We must shift the metaphor; we must change the story. One of the challenges isn't that we are oblivious to creativity and cultivating it in our businesses or our classrooms rather it is the notion of the challenge to understand how to operationalize creativity and therefore teach it and train it within our education systems. For example, the late Sir Ken Robinson said it poignantly in his book *Out of Our Minds*:

"They are concerned that their organizations are not equipped to cope with this complexity. They agree that the most important leadership skill for dealing with this growing complexity is creativity. Many organizations put on occasional training days to encourage their staff to think creatively; but, like the rituals of rain dancing, I believe they may misunderstand the problems they're trying to solve." (Robinson, 2017).

Cultural and sociological changes do not happen without intention and deliberate purpose. Going back over 1500 years in history, the changes in education and the call to action that were proposed came about due to a demand and a need either from religion or the purpose of labor and need to improve the status quo. Globally, creativity is the new literacy in which we need to uplevel our education to address the need for our education to transform. It is a simple prospect to change our mindset.

Education, Metacognition, and Flexibility

One of the ways we can operationalize the shift in mindset is in the way we measure transfer of learning. Standardized testing and high-impact assessment certainly is easy and cost effective. Several recent studies have indicated standardized testing may be efficient but rather ineffective in transfer of learning, albeit a simple way to measure one aspect of education, it may not be the most important or long-term (Lang, 2016).

If we suppose that creativity is to be taught in schools, what does that look like? How do we measure it and what does this mean in the classroom? Insights that come from Social Constructivists, Universal Design for Learning, and Project Based Learning have all addressed the shift from highimpact assessment to evaluating learning via other methods (Brown, 2018). Students' ability to embrace their own education via metacognition—the thinking about their own thinking—is one method to shift the impetus from the teacher to the student. Ideas such as learning how to learn; learning to assess our own limits; evaluating our gifts; designing around our limitations; teachers embracing creativity in the classroom as a method to diversify expression and methods of learning - all of which will address needs such as culturally responsive teaching, neurodiversity, social network capital, and intrinsic motivation – all necessary for education to transform. Students may learn to embrace their own desire to learn and express the transfer of learning in their own ways, valuing what they find interesting and engaging, that push their own comfort zones, all of which may be traced back to factors of creativity (Reisman, et al, 2016).

In the workforce, examples of creativity are taking shape - in fields such as technology and software development— the demand for original ways to address complex projects, high-paced schedules, and changing budgets. A perfect example of this is the car industry in which a recent shift in manufacturing framework adopting the agile and scrum framework. This car manufacturer was experiencing low sales; decrease in innovations; and turning over low productivity (TEDxTalks, 2020). They attempted to transform this process by using a shift in mindset, in which they applied methods of agile that included the following: reducing ambiguity and uncertainty through a process of visualizing workflow; managing teams and processes with an iterative approach; collaborating with stakeholders and designers at an equal level rather than through a top-down approach; increasing intrinsic motivation by giving agency and ownership of the process back to the workers (TEDxTalks, 2020).

The shift in mindset created a 180 degree change in profits—new innovations put this car manufacturer from the bottom to the top of sales and new inventions, and all with the same workforce that it had been using. Yes, the exact same workforce that produced poor quarterly sales and low innovations turned around to become the top ranked. Here is a perfect example of how implementing creativity in an organizational structure can have profound impacts to an already established system. A further study of comparing the agile and scrum framework to modern factors of creativity is worthy of a follow up study.

Conclusions

"If you want to change the world, change the metaphor, change the story."

- Joseph Campbell

This chapter is about telling a story of creativity in a way that is accessible to everyone. Academia has a wealth of creativity research and knowledge that must be communicated to the masses. But how do we do it in a way that hooks their attention? We need to communicate the benefits of creativity both psychologically (Pennebaker, 1997; Richards, 2010) and sociologically, (Kelley & Kelley, 2013) but also physiologically (Abraham, 2019)—How creativity makes learning fun and interesting and engaging. How we no longer need to seek creative employees from outside of our organizations but rather all we need to do is look under our noses, for each one of us is creative and the people we are looking for are right in front of us (Roberto, 2019; Robinson & Stern, 1998). This chapter is a call to action for a shift in mindset. Creativity research is blowing up, academic institutions are creating new teaching pedagogy and we are seeing an increase in businesses shifting their focus to cultivate creative environments (Shalley, et al, 2016) and seeking solutions to novel methods of problem solving in their own employees rather than seeking it elsewhere.

The missing piece still resides in our belief in creativity. How are teachers supposed to bring creativity into the classroom if they do not believe they are creative? If everyone from education to business could shift their point of view in a simple way—such as the shift in importance to literacy as a fundamental capacity for all humans—why not creativity?

This chapter introduced a new metaphor for conceptualizing creativity by comparing creativity to literacy as a fundamental ability in which we are all capable. It follows with a transformative shift to our innate belief that we are creative and fundamentally understand that we can improve our creativity with simple practices. Finally, the chapter exemplifies where the shift in mindset can create new opportunities and possibilities in education as well as business through examples to our students as well as our boardrooms.

"When people say they aren't the creative type – what they really mean is they don't know their purpose or they haven't identified their passion and their own gifts. For when people figure these out creativity becomes inevitable" – Pete Ophoven.

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