



ARTICLE

# How Creativity Unlocks Innovation, Collaboration, and Mental Agility

Megan Paonessa 🕩

English Department at the Klinger College of Arts and Sciences, Marquette University, Milwaukee, WI, USA

Email: megan.paonessa@marquette.edu

(Received 07 August 2024; revised 04 September 2024; accepted 30 November 2024)

# **Abstract**

This article examines the transformative power of creative play in enhancing innovation, collaboration, and mental agility within professional and educational settings. It differentiates "creative play" from talent and leisure, arguing that creativity is an essential, learnable behavior. Drawing on personal experiences from the advertising industry and academia, as well as psychological research and case studies, the article illustrates how activities such as artist's dates, museum visits, and drawing exercises stimulate cognitive flexibility and boost productivity. By advocating for the integration of creative practices into daily routines, it highlights the importance of fostering environments that support creative thinking and adaptability to drive innovation and maintain mental agility in a rapidly evolving technological landscape.

Keywords: creative play; creative writing; drawing; museums

"The dynamic principle of fantasy is play, which belongs also to the child, and as such it appears to be inconsistent with the principle of serious work. But without this playing with fantasy no creative work has ever yet come to birth." – Carl Jung.

I used to work in a big-time advertising firm that took us on trips to the Chicago Art Institute and had monthly music concerts in the lobby – bonding experiences. Once, over 300 of us were picked up in a never-ending line of black limousines and set off on a citywide scavenger hunt. There was always someone who stayed behind in the office. Some would not participate because they had too much work to do, even though the boss lady said the outings were mandatory. Do not be that guy. There are actual, good reasons for putting your work aside and making time to hit up that old imaginary friend of yours.

## I. The definition of creative play

Let us define what I mean by creative play because, as it turns out, the meaning of "creativity," "play," and "creative play" have long and complicated histories. I think it is easiest to start with what lowercase-c creativity is NOT, including:

© The Author(s), 2025. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

- 2
- 1. **Talent.** As Alfred Balkin, professor, composer, and coordinator of the Integrated Creative Arts Program at Western Michigan, says, "True talent is a gift ephemeral, elusive, undefinable, unteachable, unlearnable....Creativity, on the other hand, is an acquired behavior learnable, teachable, tangible, and crucial to human development. The talented person may be, and often is, creative. The creative person may be, but less often is, talented....The creative person makes things happen; the talented person might." Takeaway? Anyone can be creative. You can be creative.
- 2. **Leisure.** Oftentimes, adults make time for creative play during their leisure hours. This makes sense. However, one's privilege, or one's freedom to do what they will with great swaths of time, does not necessarily account for time well spent. While you do not have to be rich to be creative, you cannot be lazy. According to Meredith Van Vleet and Brooke C. Feeney, co-authors of the article "Young at Heart: A Perspective for Advancing Research on Play in Adulthood," real play must completely absorb an individual in the activity at hand.<sup>2</sup>
- 3. **Mastery**. Adults who try to connect with their childish ideas of "play" often get swept up in the "gamification" of play, the need to be the best at some video game or athletic endeavor. Pure play, however, does not pursue mastery. Play is voluntary, not forcefully productive.<sup>3</sup> It is the difference between hitting a basket of golf balls into a lake and training for The Masters.
- 4. Work. As children, we often imitate the adults around us. We play House and Office, Doctor, Teacher, and Fireman. We pretend to shave our beards in the mirror. Ironically, while being around children reminds adults how to play, or how they used to play, sometimes playing with children, as adults, becomes a job. Forcing yourself to play like you did as a child might not be the kind of fun we are looking for.

Play, therefore, is an activity that has no other goal than to be amusing. Something that absorbs you and involves an in-the-moment, voluntary approach to doing whatever it is you want to do. The *doing* part is important though. As Melinda Wenner writes in *Scientific American Mind*, "Simply stated, to create means to do, and that is the key. Creative people do things. They make. They put together. They make connections where connections were not previously apparent."

### 2. The psychology of creative play

It is safe to say that the introduction of creativity into our daily routines can serve as small mental health breaks. As Marc Bekoff, an evolutionary biologist at the University of Colorado, says, "Without play, adults may end up getting burned out from the 'hustle-bustle busyness that we all get involved in'." Well, sure. This is why we invented happy hour, am I right? Everyone benefits from brain breaks. However, the further up the career path, the family-making path, the soccer-mom, and everything-else-on-your-plate path, the more adults have to intentionally make time for play within their daily routines.

<sup>&</sup>lt;sup>1</sup> See Balkin 1990, 29.

<sup>&</sup>lt;sup>2</sup> See Van Vleet and Feeney 2015, 641.

<sup>&</sup>lt;sup>3</sup> See Havrilesky 2014, 88, 90.

<sup>&</sup>lt;sup>4</sup> See Wenner 2009, 22.

<sup>&</sup>lt;sup>5</sup> See Wenner 2009, 27.

Rahaf Harfoush tells us in her TedTalk, "How Burnout Makes Us Less Creative," that spending time in creative pursuits flies in the face of some of our:

Most deeply rooted beliefs [that tell us] if we work hard, we will be successful. But there is a flip side. If you are not successful, it must mean that you are not working hard enough. And if you do not think you are doing enough, of course you are going to stay late, pull all-nighters and push yourself hard even when you know better.

This constant push toward the goal of productivity and attainment means we stop making time to rest our brains and allow them to wander. We need more wandering.

According to a team of researchers from the University of Southern California, "Letting our minds wander is an essential mental state that helps us develop our identity, process social interactions, and it even influences our internal moral compass." Unfortunately, when undergraduate students were asked to "delve into soft-skills such as creativity" in the classroom, they had already been brainwashed into believing it was a waste of their time.

There has been a lot of research done on what a creative genius looks like (that is, Einstein, Edison, Jobs, Marie Curie, Da Vinci), but not a whole lot is known about the human desire for lower-case-c creativity, the everyday hobbies, interests, and passions of ordinary people. What we do know is there is an awful lot of space in our brains taken up by these seemingly frivolous pursuits, making them "appear important to positive psychological development." Hence, the USC researchers conducted a study using experience sampling to track the creative processes and emotions of 79 undergraduate students over a 12-hour period. After an initial in-person interview and collection of intel, the researchers sent these college kids off about their day. At random intervals, students received and responded to surveys on their cellphones, answering questions about what activities they were doing, if they had company or were solo, and how they were feeling at the time, just before the phone call.

Here is what they found:

People who reported feeling happy and active were more likely to be doing something creative at the time....openness to experience and conscientiousness had large effects on whether people spent their time on creative pursuits. Neither negative states (e.g., momentary feelings of anger, stress, and self-consciousness) nor traits (e.g., neuroticism) significantly predicted creative activity.<sup>8</sup>

The findings ultimately supported the theory that one's openness to play positively affects psychological processes, but they also unintentionally found another outcome: young adults do not find play necessary inside the classroom and, ultimately, in their careers. In other words, our institutions of higher education are setting students up to think all-nighters are the way to go.

Linda Hill adamantly disagrees. Professor of Business Administration at Harvard University, Hill studies collective creativity in the workforce and has come to believe exemplary

<sup>&</sup>lt;sup>6</sup> See Silvia 2014, 183.

<sup>&</sup>lt;sup>7</sup> Silvia 2014, 188.

<sup>&</sup>lt;sup>8</sup> Silvia 2014, 183.

<sup>&</sup>lt;sup>9</sup> Hill 2015.

#### 4 Megan Paonessa

companies and leaders empower their employees by incorporating creative play into the workday. She says:

Individuals in innovative organizations learn how to inquire, they learn how to actively listen, but guess what? They also learn how to advocate for their point of view. They understand that innovation rarely happens unless you have both diversity and conflict. Creative agility is about being able to test and refine that portfolio of ideas through quick pursuit, reflection and adjustment.

These traits directly apply to innovative thinking that creates opportunities for companies. Psychologically speaking, the list of reasons people should make time for daily creative pursuits continues to grow. Here is one more:

According to a study out of Wesleyan University, not only is brain-wandering creativity essential for the creative class (scientists, engineers, architects, designers, educators, artists, musicians, entertainers, etc.), but creative activities also teach our brains how to meaningfully process unexpected events in our lives and successfully pivot in new directions. Emily Przysinda writes:

One model of creativity in real time comes from musical improvisation, such as in jazz music, in which individuals spontaneously create novel auditory-motor sequences that are aesthetically and emotionally rewarding. Jazz improvisers show higher divergent thinking ability and openness to experience, even when compared to musicians with other types of training. Longitudinal studies have also shown that improvisation training induces improvements in performance on divergent thinking tasks.<sup>10</sup>

As we know, improvisation often occurs during creative play. Not only in comedy shows, which often highlight improvisation, but also in other types of theater and musical composition, as well as in more ordinary creative pursuits: games like *Dungeons & Dragons*, in which players must continually redefine their missions, video game quests like *Zelda* and *Skyrim*, live-action role-playing games (commonly known as LARP), and during conventions like Comicon or a Renaissance Faire. Putting ourselves in positions where we experience uncommon or unexpected events teaches our brain flexibility, as well as how to address and incorporate differing ideas while allowing us to communicate and perform at a higher level – all amazing returns for simple moments of creativity introduced into our daily routines.

## 3. Create moments of creativity daily

Creative play includes open-ended, imaginative activities in which we are asked to explore and express our creativity, problem-solving skills, and artistic abilities without strict rules or predefined outcomes. Here are a few beneficial activities you could try to boost your daily dose of creativity:

#### 3.1. Take an artist's date

Give yourself 1 hour. Turn off your phone and put all work aside. Then, allow yourself the time to accomplish something you have been putting off for a while. Paint a wall. Visit a

<sup>&</sup>lt;sup>10</sup> Przysinda et al. 2017; Bengtsson et al. 2007; Berkowitz and Ansari 2008; Limb and Braun 2008; Liu et al. 2012; Benedek et al. 2014; Karakelle 2009; Lewis and Lovatt 2013.

museum. Walk the lakefront. Call an old friend you have lost touch with. Create a playlist and go for a drive. Shoot hoops. Nurture your soul however you wish, but make sure to take up the whole hour, stay solo, and think "strange and weird" over "productive." Then, sit down and write out what you felt like during the activity and what you think of the way you spent that time now that it is over. Seriously, write it down. Pen and paper if you have got it.

Undoubtedly, part of your reflection will say this: "I didn't want to take the time out of my busy day to do this, but I'm so glad I did." Why? Because you have not given yourself the time you need to play. The first time I took myself on an artist's date, I found a renewed sense of engagement with my work and new avenues I could take my writing. Furthermore, having done this activity with a large group of people who were equally uplifted and excited to get back to work, we created a more encouraging and inventive collective space. Take a date. Remember how you came to be who you are.

# 3.2. Visit a museum

I grew up going to art museums with my painter-mother, eventually taking up art history in college and traveling abroad to visit even more museums. I love museums and find them the perfect places for finding inspiration or providing a quiet place to sit and think. However, I have been a professor long enough to know I am clearly deranged for thinking this. According to my students, museums are inaccessible, elitist, boring, and unnecessary. So, I am a big fan of forcing them to accompany me to the free one on campus where our amazing curator constantly updates the exhibits, invites us to question everything we see (whispering is not necessary), and will even take us on a tour of the vault if we ask ahead of time. I will do anything to break down that invisible barrier that tends to surround the world of art.

So, if you have not been to a museum in a while, please go. There are no right or wrong answers to making art or viewing art, just more interesting ones. Sure, there may be vocabulary you do not know, techniques you have never heard of, names and trends you have never studied, but that is why museums exist, so you can learn about these things if you want to. If you do not care to, just sit back and give your eyes a feast. Take away what you will, in whatever way you want to.

# 3.3. Read a comic, draw a comic

We are well-versed in writing that uses images to illustrate a point, like an article on economics, say, which uses graphs to visualize the differences in spending from 1 year to the next. Typical research paper formatting uses images and text to repeat, explain, or emphasize the other. This education started early, with children's books, in which images defined words (\* = star), and helped children learn to read. As children grew older, their books grew more complicated. Pop-up books and sound books and digitally interactive books all attempted to broaden their understanding of what a book could be and what language could do. As adults, we value this kind of invention and try to foster our children's imaginations by reading these kinds of books. Yet, at some point, adults stopped thinking their imagination was important.

So, venture back in time.

Graphic novels play hard with hybridity, the crossing of the accustomed border between text and image. For example, graphic novels speak in images that appeal to senses other than

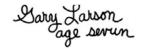
sight. Sound can be heard in the image of a crowd cheering at a football game. Aromas can be smelled in the image of a steaming cup of coffee. Touch and texture are found in a swimming pool splash and a rough piece of tree bark. While it is just fine to describe a loud crowd in words, images work well too; we just are not accustomed to thinking and creating in linked images. It takes our brain a second to change modes, but when we do, we create new pathways and see what was once familiar in a new light.

Additionally, text-image hybrids leave gaps the reader's imagination must fill in. A page might read, "Molly ran to the car, ready for her trip," beneath a picture of a suitcase sitting behind a door the character just ran through. The implication being that Molly forgot her luggage. *Implication*, you say? Yes, the gap you filled in. We encounter implied meaning in advertisements and comic strips constantly and consistently, but have you ever sat down to examine how implication is created? Try it. Here is a quick, 20-minute exercise:

Draw a line down the center of a piece of paper, turn it, and draw another line down the center so you are left with a large cross, or four squares on your paper. Use this to draw a four-image comic. But first, take a moment to plan out your story using the following sequence as guidance:

- In the first square, draw something you can hear, smell, or taste.
- *In the second square, show yourself doing something.*
- In the third square, draw something without any people in it.
- *In the fourth square, reveal something internal.*

It does not matter if you cannot draw well. There are plenty of successful stick figure cartoons out there (see image below), so knock that self-disparaging thought right out of





Wood, Robert. "10 Funniest Far Side Comices with Deliberately Terrible Art." *ScreenRant*, 1 Dec. 2023.

your mind. It is not about drawing something perfect; it is about how well you convey information (You laughed, right? Because you understood the joke.) If you follow the exercise above, you will have to plan for implication at some point. You will have to tell yourself your audience will understand what you are trying to say and make a mind leap. If your comic reads like a story with a beginning, middle, and end, then you have successfully worked with text and images in the way you may never have done before. You gave your brain a workout. How did it feel?

# 3.4. Create a self-portrait

Look yourself right in the face (in a mirror) and take note of your unique features. Ask yourself what calling attention to one feature over another means to you. Step back from the drawing and, like an artist must do with their work, ask yourself what you think of the character before you. What does the person you drew think? What does a certain-someone-else think of that person? (Hint, they probably will not agree.) Now, make a second self-portrait, but do not include any parts of your body in the work. Who are you without flesh and bones? How do you draw a portrait that truly represents yourself without explicitly visualizing yourself? Simplify, trace, cut out images from a magazine and glue them together. I am not asking you to create a masterpiece. The point is that you are considering a new perspective.

Engaging in creative play stimulates the brain to think outside predictable, traditional frameworks, thereby enhancing our problem-solving skills, encouraging innovation, and boosting productivity in whatever field we are in. This is why my former employer kept scheduling nonwork-related outings during the workday. It is also why professors in higher education should not shy away from those students who complain about wasted time and open-ended rubrics. It is why you should make, build, and put things together. By embracing creativity, we teach our minds to be flexible about how we think of solutions and more resilient about finding the *best* solution for the problem. As our working environments continue to change due to rapidly emerging technologies, we need our minds trained to adapt quickly. We need to nurture our imaginations. There is value in creativity.

Megan Paonessa (she/her) is a Professor of Creative Writing at Marquette University. Her teaching and writing focuses on cross-genre, hybrid, and fabulist works of fiction and creative nonfiction.

Supplementary material. The supplementary material for this article can be found at  $\frac{https:}{doi.org/10.1017/pub.2025.3}$ .

**Author contribution.** Conceptualization: M.P.; Data curation: M.P.; Formal analysis: M.P.; Writing – original draft: M.P.; Writing – review & editing: M.P.

Conflicts of interest. The author declares none.

#### References

Balkin, Alfed. 1990. "What is Creativity? What is it Not?" Music Educators Journal 76 (9): 29-32.

Benedek, M., Borovnjak, B., Neubauer, A. C., and Kruse-Weber, S. 2014. "Creativity and Personality in Classical, Jazz and Folk Musicians," *Personality and Individual Differences*, 63 (100): 117–21.

Bengtsson, S. L., Csikszentmihalyi, M., and Ullen, F. 2007. "Cortical Regions Involved in the Generation of Musical Structures during Improvisation in Pianists," *Journal of Cognitive Neuroscience* 19 (5): 830–42.

Berkowitz, A. L., and Daniel Ansari. 2008. "Generation of Novel Motor Sequences: The Neural Correlates of Musical Improvisation," *Neuroimage*, 41 (2): 535–43.

Havrilesky, Heather. 2014. "Play, Dammit!" The Baffler (24): 88-93.

- Hill, L. 2015. How to Manage for Collective Creativity." TED. https://www.ted.com/talks/linda\_hill\_how\_to\_manage\_for\_collective\_creativity?subtitle=en. Accessed August 28, 2024.
- Karakelle, S. 2009. "Enhancing Fluent and Flexible Thinking Through the Creative Drama Process," *Thinking Skills and Creativity* 4 (2): 124–9
- Lewis, C., and Lovatt, P. J. 2013. "Breaking Away from Set Patterns of Thinking: Improvisation and Divergent Thinking," *Thinking Skills and Creativity* 9: 46–58
- Limb, C. J., and A. R. Braun. 2008. "Neural Substrates of Spontaneous Musical Performance: An fMRI Study of Jazz Improvisation," PLoS One, 3 (2): e1679S.
- Liu, S., Chow, H. M., Xu, Y., Erkkinen, M. G., Swett, K. E., Eagle, M. W., and Braun, A. R. 2012. "Neural Correlates of Lyrical Improvisation: An FMRI Study of Freestyle Rap," *Science Reports* 2: 834S.
- Przysinda, E., et al. 2017. "Jazz Muscians Reveal Role of Expectancy in Human Creativity." *Brain and Cognition* 119 (1): 45–53.
- Silvia, P. J., R. E. Beaty, E. C. Nusbaum, K. M. Eddington, H. Levin-Aspenson, and T. R. Kwapil 2014. "Everyday Creativity in Daily Life: An Experience-Sampling Study of 'Little c' Creativity." *Psychology of Aesthetics, Creativity, and the Arts* 8 (2): 183–8.
- Van Vleet, M., and B. C. Feeney. 2015. "Young at Heart: A Perspective for Advancing Research on Play in Adulthood." *Perspectives on Psychological Science* 10 (5): 639–45.
- Wenner, Melinda 2009. "The Serious Need for Play." Scientific American Mind 20 (1): 22–9. https://www.jstor.org/stable/24940063.
- Zeki, Semir 2001. Artistic Creativity and the Brain. Science 293 (5527): 51-2.