#### COLUMN: RETHINKING TECHNOLOGY & CREATIVITY IN THE 21ST CENTURY





# Questioning the Myth of Ideation: Tatiana Chemi and the Hard Work of Creativity

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Professional artists, professional creators, *can't* just sit there and wait for a good idea to come.

~ Tatiana Chemi

Creativity is a by-product of hard work. If I never have another really new idea, it won't matter.

~ Andy Rooney

Inspiration exists but it has to find you working.

~ Pablo Picasso

#### Introduction

In our current series of articles we have highlighted the scholarship of various creativity experts. Most recently we shared the work of Drs. Paula Thomson and Victoria Jacque who provided insight into the relationship between creativity, movement, and the physical body, with an eye toward creativity and wellness. In this article we extend our line of inquiry via a conversation with Dr. Tatiana Chemi, an associate professor at *Aalborg University* in Denmark. Originally from Italy, Dr. Chemi first began thinking about creativity as a theatre studies student at the *University of Naples*. She considers herself fortunate as an undergraduate to have belonged

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to a group that conducted research on the newest theatre forms with international expert Franco Carmelo Greco. The questions that she began asking as a part of this group are ones that she continues to ask and answer through her research and scholarship. Dr. Chemi's interest in pedagogy, theatre, and learning led to her desire to investigate creativity and its processes. She considers many aspects of creativity to be a mystery, describing it -to some extent- as a "magic that happens" and acknowledges that we still have much to learn about creativity.

This "magic" of creativity has recently led Dr. Chemi to study the creative processes undertaken within theatre laboratory with the theatre company *Odin Teatret*. Dr. Chemi studies professional artists in order to understand their processes and to imagine how they can be applied to other fields. Through her hands-on work with *Odin Teatret*, she has identified creativity processes and ideas that are relevant to teaching and learning at all levels of education (Chemi 2018). She shared the goal of this work:

I was looking at *Odin Teatret* as the main case and I was looking at theatre laboratory, this tradition of doing theatre that is fundamentally pedagogical and research-based but still an art form. I was asking, how does it work? What are the pedagogical and educational forms that it takes?

Dr. Chemi believes that the physical and psychological spaces at the heart of theatre laboratory have consequences for the way educationists might design and use spaces, in order to create environments that support creativity among students and teachers. In this interview she shared some of the findings from her research with *Odin Teatret* as well as her work with other professional artists. She also shared her thoughts about the nature of creativity and the way it is currently viewed in education and society. In this article we delve into Dr. Chemi's beliefs about deeper understandings of creativity, nurturing creativity in teaching and learning, and creativity and technology.



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# Beyond Simple Definitions toward Deep Understandings

Dr. Chemi's definition of creativity aligns with what has been recognized as the standard definition of creativity (Runco and Jaeger 2012). She agrees that something that is creative is new and appropriate within a given context and that it is not necessarily a product but anything tangible such as an idea or a process. Dr. Chemi believes, though, that this definition merely touches the surface of describing creativity because the most important aspect of any creative undertaking is the act of creation itself. In a sense the standard definition is useful at a broad level for laying out the parameters for creative work, but it does not enter into the complex processes by which people manifest creativity.

According to Dr. Chemi, "The etymology of the word is important. Creāre is to create and generate something. It can be novel products but it can be new processes that are tangible, shared and negotiated in a group." Dr. Chemi emphasized the importance of the role of the social and cultural contexts in defining creativity. When the definition is situated within a context, it can change. If something that was considered creative in the past becomes commonplace, then our ideas about what is creative today or tomorrow will evolve. This consideration for the social dynamics of creativity is something that creativity research has gradually emphasized more and more. While much of the earlier psychological scholarship on creativity focused on individual cognition, which began in the 1950's (Guilford 1950), there has been a shift to a more socio-cultural perspective of creativity in recent decades. Sawyer's work (2011) has focused on creativity as an inherently social act, and some of our recent interviewees, such as Dr. Jonathan Plucker (Richardson et al. 2018) have also pointed to the fundamentally social construction of creativity. Dr. Chemi believes this perspective also provides a clear link to the arts:

I really believe that the arts can contribute to this field in a powerful way because within the arts it's not just permissible to create new appropriate solutions or new appropriate problems, but it's expected. This is what artists are doing all the time; challenging our definitions and our understandings of the arts and the world and creativity. That's their job, to challenge these kinds of practices and understandings. I don't believe that creativity is only for artists, I just believe that there is much to learn through artistic creativity.

Others have pointed to the fact that while most of the dominant discourses for creativity research are found in fields like psychology or education, there is much to be learned from engagement with other disciplines, such as the arts (Richards 2007). Dr. Chemi illustrated this belief in what the arts have to

offer to creativity scholarship by highlighting the research she has conducted with professional artists. She and her colleagues interviewed 22 professional artists from different art forms and traditions (writers, actors, musicians, visual artists, etc.) to learn about their creativity processes. Dr. Chemi and her colleagues were surprised that, "not one of them mentioned idea generation. Not one. Not one of them mentioned what we laypersons in education and organizations are most focused on, spend much energy on, and actually think is what creativity is all about."

Wondering why none of the artists mentioned the sources of ideas or inspiration, the researchers followed up, asking the artists explicitly where they get ideas from. Dr. Chemi shared highlights of their responses:

American writer Siri Hustvedt said "ideas are just there in my head." Theater actress, Julia Varley said "creativity is not about ideas, it's all about hard work." So, it's not about inspiration, it's what you do with the inspiration. Inspiration is to take air in – inhale – that's what inspiration means in Latin. I teach my students that you can't inhale and never exhale. If you try you will die. You can't just have inspiration. Organizations and educational institutions focus on keeping our kids inspired. We need inspiration but we also need expiration. We need to inhale and exhale. When you create something you need to make space for this inspiration to become something. I don't believe that inspiration is creativity. And indeed it was confirmed by all these narratives of different artists.

This is a vital perspective in that it points to a significant gap in how creativity is conceived of in education and psychology—with an overriding focus on the cognitive aspects of creativity, or creativity as a thinking skill. Dr. Chemi's investigations with working artists demonstrates that creativity goes well beyond the purely cognitive, or the mental processes of ideation that are so often a focus, into the more pragmatic side of craft. That is to say, artists themselves focus less on the types of ideational creativity that most non-artists commonly think of as an essential component of creativity, and instead point to a more grounded approach to hard work. Similarly, Glück, Ernst, and Unger (2002) found that there were dramatic differences between how working artists defined creativity and how most other people defined it. One of the biggest differences was in the fact that non-artists in their sample put a tremendous focus on originality in their definition, while artists themselves were more likely to describe creativity as hard work.

In terms of originating ideas to work on, Dr. Chemi and her colleagues found that the professional artists got their ideas through experiences and interactions. The artists were, in a way, collectors of experiences, storing them in what Dr.



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Chemi terms, "a warehouse in their mind, where in the future they can pull from them whenever they need to." Dr. Chemi was able to use this evidence to argue against one of the most popular creativity myths: the muse. The notion that one must first be inspired in order to create has led to a misunderstanding that creativity is for a select few or that it requires an outside stimulus.

Dr. Chemi is showing, based on the work of these professional artists, that this is not the case. She explained why:

Professional artists, professional creators, they *can't* just sit there and wait for a good idea to come. They collect ideas throughout their whole life. So when they make the life changing decision—from now on I will be a writer, an actress, a theatre director, a painter—what they do is persist in collecting and observing, like a sponge.

In a sense, creativity is an imperative for artists because it is their profession. Therefore they literally cannot afford to passively wait on the hope of inspiration. Instead they find strategies to ensure that inspiration comes to them. This type of pollination of creativity, by having an observant approach to the world, or a "prepared mind," is also vital to transdisciplinary creativity (Eckert and Stacey 1998).

Because of this constant collection of ideas and experiences, the creative process becomes more about making connections and doing the work to bring those connections to life. Dr. Chemi says that for professional artists this collection of associations leads to ideas that naturally "pop up because they are just there sleeping," waiting to be used by the artist. This is often pointed to as a kind of combinatorial creativity—in which the mind becomes fertile ground, with its collection of observations and experiences, to make connections that inspire creativity when needed (Simonton 2012).

One important aspect of the creativity process that Dr. Chemi has identified is that it starts with making the decision to do the work. She shared:

Creativity is about work. It's about getting to work and persisting and failing and getting up. And you need to know yourself. You need to know which processes are helping or stifling your creativity. Creative people persist. They know what works and doesn't work and try to minimize what doesn't work and implement what works. They sustain through difficulty and they take pleasure in frustrating long processes. They take pleasure in it and they stay there when it's hard. Where us laypeople would just drop it. Especially artists because they work with and against medium and material, something they have to shape and form. They know that you have to do it again and again.

Dr. Chemi's understanding of creative processes offers something unique to the ways in which creativity is commonly thought of in both popular culture and educational contexts. Therefore, her work has practical implications for supporting creativity in schools, and her research is providing evidence for the types of spaces that best nurture teacher and student creativity.

## **Nurturing Creativity in Teaching and Learning**

As a professor of creativity, Dr. Chemi firmly believes that creativity can be taught and cultivated. She stated, "I really believe that by shaping the environment we can nurture creativity." This is an important perspective, because even some creativity researchers are uncomfortable suggesting that creativity can be taught. However, some of our past interviews with creativity experts—such as Dr. Keith Sawyer (Henriksen et al. 2017) suggested something similar to Dr. Chemi in that creativity can be nurtured via shaping the environment. Or in an even more direct statement by Dr. Richard Buchanan (Henriksen et al. 2018), "Can you teach creativity? My belief is yes, you can. Certainly. To 95 percent of the population, you can teach it. And I get tired of the idea that creativity is something esoteric and elite. It's not."

Dr. Chemi has been studying theatre laboratory because of the importance she places on the environment. She shared her thinking:

We know at this point a lot about what nurtures creativity. For instance, critique and authoritarian behaviors kill creativity. We know that. We know that measurement and deadlines can stifle creativity. And we know that positive relationships, as well as safe and bold environments (because safety can also make you fall asleep) nurture creativity. Creativity needs the boldness, the challenge.

Dr. Chemi believes that the environmental factors that nurture creativity across fields, and especially in education, are embedded in the theatre laboratory approach. She recognizes that there is something in the way that artists collaborate that can be studied, understood, and transferred to other domains. She shared:

We can learn from these environments in order to better understand how we can teach creativity and how we can design teaching and learning environments that can make creativity flourish. I really believe that this kind of knowledge about creativity is important to expand to teachers, school principals, and politicians because we are still far from this kind of dissemination to nonspecialists in creativity. 248 TechTrends (2019) 63:245–250

Dr. Chemi believes that a lack of deep understanding of creativity and creative processes has led to a somewhat instrumental approach and shallow support of creativity in schools. She spoke about the phenomenon of creativity rooms or makerspaces:

I feel so sad because you can't lock creativity in a room. It should be in the whole school. It should be in every-day life. And you can't just teach creativity from 8-9. It's throughout the whole school day. But sometimes based on shallow ideas or assumptions of creativity, you see these creative rooms – where we have colors, we have pillows...and it's a misunderstanding about creativity. The most creative room I have seen in my life is at the film production company *Zentropa*. They have a facilitation room and it's empty.

Dr. Chemi compared this idea of an empty room to Peter Brook's notion of the "empty space" for actors. Dr. Chemi explained that Brook conceptualized the empty space to make intentional the act of creation. She said, "It's the emptiness that makes creativity flourish and it's what the actors and actresses do before entering the room. They clear out the stage in order to fill it with emerging ideas." Rather than creating certain rooms that support creativity, or teaching creativity during certain periods of the day, schools need to build environments based on a deep knowledge of creativity. According to Dr. Chemi, schools need "places where you can train ideas, where you can learn to fall and rise up again. And where students are allowed to do so."

Dr. Chemi recognizes the challenge many educators face working in a system that is limiting. She used the metaphor of a chair to explain her thinking:

For me the challenge is very much represented by this chair that we can't move because the rules are saying that we can't move the chair. And even though our creative activities need an empty room we still need approval to move the chair, and to know who is allowed to move it. It's ironic...The chair that can't be moved. If we can't move a chair how do we make bigger creative activities and genuine cultural change in a whole school or institution?

This issue of constraints or limitations in the system is one that continually plagues teachers and administrators that wish to infuse creativity throughout education. Conventional structures, particularly in the U.S., were built to reduce uncertainty and promote conformity or one-right-answer approaches (Levin 1991; Meyer et al. 1978). Thus, it becomes difficult for educators to break through structures of systems. Beghetto and Kaufman (2007) have emphasized the possibility of

implementing small steps or micro-changes that over time can add up to support creativity, thus making it more appealing to educators as they do not need to make major changes. Beyond this, there also remains the challenge that Dr. Chemi noted of common misconceptions or misperceptions of creativity as being all about ideation or purely cognitive approaches. According to Dr. Chemi if educators and administrators can deepen their understanding of creativity and creativity processes they will recognize the need to create spaces where creativity in both teachers and students is nurtured.

## **Creativity and Technology**

In terms of the effects of technology on creativity, both in general and in education, Dr. Chemi takes a nuanced and dualistic perspective that considers both sides of the coin. Essentially, she believes that technology has both positive and negative impacts on creativity, and thus we need to be mindful of context. She cited fan fiction and fan art as examples of how the internet has provided opportunities for people to share their creativity with wider audiences, and commented on the ease with which people can communicate and collaborate across distances:

It's a two-sided consideration, because from one side I can think of so many ways in which technology enhances creativity. I really believe it's wonderful what social media is doing—for instance in terms of sharing fan fiction and fan art. And there is cross collaboration where you might have someone playing guitar in Hawaii together with someone in Poland. It's amazing all these connections. And there are so many artistic tools that are becoming everyday practices for kids, like painting digitally and making films.

In this sense, she points out that digital technologies have certain affordances for creating and for sharing that can successfully pollinate creativity in ways that non-digital means may not always be able to. But, at the same time Dr. Chemi shared her concern about the "flatness" of digital screens and the potential negative impact of technologies on human interaction and understanding. She noted that:

We are human beings. That's why it's so important, when we have these [digital] conversations, to have the video on so we can see each other and look each other in the eyes. When I have Skype meetings I'll show my colleagues that from my room you can see that it's raining or sunny because we still need that environmental or bodily recognition of each other. That's the way we were built: with and within bodies. It's the way we



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have survived as human beings, through our own body and by relating to each other's bodies.

Dr. Chemi also noted a concern with this ever-presence of technology, that kids face mounting pressures and insecurities. She suggested that youth are always being confronted with role models that are photo-shopped, and thus face increasing pressure to perform and conform, commenting, "talking about environments, the pressure is killing them. Relating kids to perfect role models can shape insecurity." Stress and insecurity are well documented as being antithetical to creativity, because when anxiety rises, people are less willing to take the kinds of intellectual risks or remain open to the new, in the ways that creativity demands (Nguyen and Zeng 2012; Sarooghi et al. 2015). Dr. Chemi reflected on how these practices cut people off from themselves, and thus from their own creativity, which concerns her in the development of creativity in youth:

Being always on social media means not being present. And creativity needs presence. You can't be creative if you aren't present. If you are constantly overstimulated and busy doing something else you are not in your body and you are not with others in a deep and connected way.

This is an interesting connection in that Dr. Chemi's reference to "being present" is similar to the notion of mindfulness, or full and non-judgmental awareness of the present moment. As researchers have noted, mindfulness has unequivocal connections to creativity (Lebuda et al. 2016), as well as overall psychological wellness. It stands to reason perhaps that the sometimes unreflective or all-consuming uses of technology that we sometimes see in our digital culture could dampen creativity—and that creativity might benefit from more mindful approaches to technology.

Dr. Chemi's insights from her work with artists sheds light on the importance of human connection, collaboration, and communication. The challenge is to use technology for creativity and to help young people become *aware* of how they are using the tools.

### **Conclusion**

Our interview with Dr. Chemi concluded with a discussion of the importance of continually revisiting the question: "Why is creativity important?" Scholars and experts have provided largely instrumental or economic reasons for the need for creativity to be supported in young people. For instance, it is often noted that in order for the United States to complete globally our students must be innovative thinkers and creative problem solvers (Wagner 2010). Dr. Chemi feels that while these reasons are still prevalent and important, a more human-centered and social justice-oriented justification for creativity is at the core of the need. And with this need comes a call for educators to deeply understand creativity and how to support it:

Why creativity? I think it's important to ask this question, to *still* ask this question. The newest studies are advocating for creativity as a tool for social change. So, we are going away from political, economic discourses. We need creativity because we need to produce—which is ok, of course we need to survive and produce. But we are going towards social innovation and imagining a world that is sustainable, that is fair and democratic and peaceful.

Dr. Chemi believes that our challenge as researchers is to think critically about these questions that many take for granted. As researchers continue to answer them and share findings, our collective understanding of creativity will deepen and our ability to support it across multiple fields will increase. Dr. Chemi believes one of our most important roles as researchers is to ask questions, noting, "I really believe we need to ask critical questions even to our own discourses and findings." She encounters misunderstandings that still persist (i.e. that creativity only occurs in the arts or that only some people are born able to be creative) and believes part of her job in studying creativity is to transverse these misunderstandings in "an elegant way." She studies creativity in the arts, but knows that creativity is everywhere.

Dr. Chemi spoke about the changing view of creativity. We no longer have to try to convince people that creativity is important, she says:

Fifty years ago we still had to advocate for creativity to be an important topic. Now it's the opposite. Now creativity is on the agenda, political agenda, all political agendas, and it's still rather a challenge. The challenge is that because it's such a popular discourse it's taken for granted and is transformed into something shallow so that politicians can measure it, understand it, and put it in boxes.

Our interview with Dr. Chemi, and her perspectives on creativity, show that the more we understand creativity and creative processes, the better able we will be to communicate these understandings to impact practice and policy in education and beyond. And in this regard, our work as creativity scholars has just begun.



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