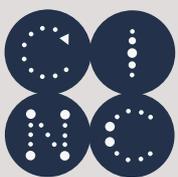# CREATIVITY **IN DANISH BUSINESSES–**

WHAT'S THE STATUS?

**COPENHAGEN
INSTITUTE of
NEUROCREATIVITY**

Creativity in Danish Businesses –
What's the status?

Authors:
Frederikke Knop
Jacob Lennheden
Copenhagen Institute of NeuroCreativity
www.neurocreativity.dk

Contact us:
info@neurocreativity.dk

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Creativity in Danish Businesses – What's the status?

Foreword

Creativity as a skill has become more important than ever, and its significance is increasing rapidly. In what has been coined the 4th industrial revolution, new production methods and industries are emerging at an unprecedented speed and technologies such as autonomous vehicles, 3D printing, artificial intelligence and advanced industrial robotics all have a tremendous impact on business. In this fast-paced revolution, the phrase "business as usual" could swiftly become synonymous with companies that are too slow to change, resulting in their eminent decline. Yet, these developments also have huge implications for the type of skills employees need in order to stay relevant.

Last year, the BBC launched a website called "Will a Robot take your job?" where visitors can browse over 100 job titles and see the likelihood of those jobs being automated by the year of 2020. Not only will jobs disappear, but many skills that are valuable in today's world will increasingly become obsolete. The striking thing is not that robots and machines are replacing people, as this has been the case for centuries. The difference this time around is the society-wide impact. In the past, industrialization mainly caused unemployment amongst unskilled workers; this time around white-collar professions such as legal assistants and financial officers are also at risk.

Consequently, jobs in the future will be pegged on having alternate skills; such as creativity. The World Economic Forum recently released a list of the 10 most valuable skills employees should have to match job requirements in 2020. The top 3 skills are "Complex Problem Solving," "Critical Thinking," and "Creativity". In 2015 Creativity barely made it to the top 10. In other words, in an increasingly automated world, the ability to solve complex problems and think out of the box are going to be the key skills employees need to stay relevant in their jobs, and help their firms move ahead of the traditional "business as usual."

The increasing appreciation of creativity as one the most important skills of the future is not surprising. Creativity can play a vital role in enhancing all aspects of business performance and is in many ways considered the raw material of innovation. Take sales for instance: many of our big clients are moving away from "just" selling a product, to helping their customers deliver results through a process of co-creation instead. In this new role of co-creation sales, creative thinking is essential. Thus, even in departments such as sales, accounting, and customer service not normally associated with innovation, creative skills will play a key role in the years to come. Hence, the firms that will thrive in the long run are likely the ones that

appreciate the fundamentals of creative thinking and understand how to nurture creativity to the benefit of the firm.

These skills are likely to be even more important for Denmark and Danish Companies. Since Denmark is a relatively small, open economy with high labor costs and few natural resources, Danish companies can rarely compete on price alone. Thus, as a survival strategy in the global market they have to compete on quality and constant innovation.

Thus, there is little doubt that creativity will be a key skill in the future job market and business environment. But, what about the present? What are companies' attitudes now? Have they already aligned themselves to address the needs of the future or are they sailing straight towards an iceberg without a captain at the helm? That is what we wanted to find out.

We were particularly interested in gaining an understanding of how Danish companies perceive "creativity." We wanted to know how important they perceive this skill to be amongst their employees and whom they think should be creative. To investigate this, we conducted a wide number of interviews with HR executives and senior managers from more than twenty of Denmark's biggest companies spanning a broad range of industries. We wanted to establish a baseline of the general state of creativity in Danish companies in order to uncover how creativity is perceived in their respective organizations today. The following report contains some of the key findings from our interviews.

Copenhagen Institute of NeuroCreativity,
September 2016

Chapter 1

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Creativity:
a value-adding activity

Creativity has long been a buzzword in Denmark and from our recently conducted interviews, it is clear that companies recognize its strategic and managerial potential in creating sustainable businesses. A staggering 95% of all the companies interviewed believe that creativity is important for the company's future. Moreover, 75% of the companies actively strive to establish a culture of creativity and regard it as a value addition to the company that can increase business profitability. The phraseology companies generally connect creativity with, is '*to think outside the box.*'

However, we found an interesting dissonance when scrutinizing the responses on how companies implement creativity, and *who* they see as being creative. Although creativity as a discourse has moved away from being considered innate magical attribute that only few possess, creativity is still primarily identified as a skill possessed by an elite group of professionals within the so-called 'creative' industries.

The appointed winners of creativity:
Designers and Artists!

Designers and artists are predominantly perceived as being most creative, as 70% of companies identify these professions as the creative people. In comparison, only 10% rated academic employees or managers to be most the creative.

Which of the following do you think is the most creative?

Musicians

Artists

Academic employees

Managers

Designers

Consultants

Other

🔴 **35%**   🔵 **10%**   🔵 **5%**   ⚪ **0%**
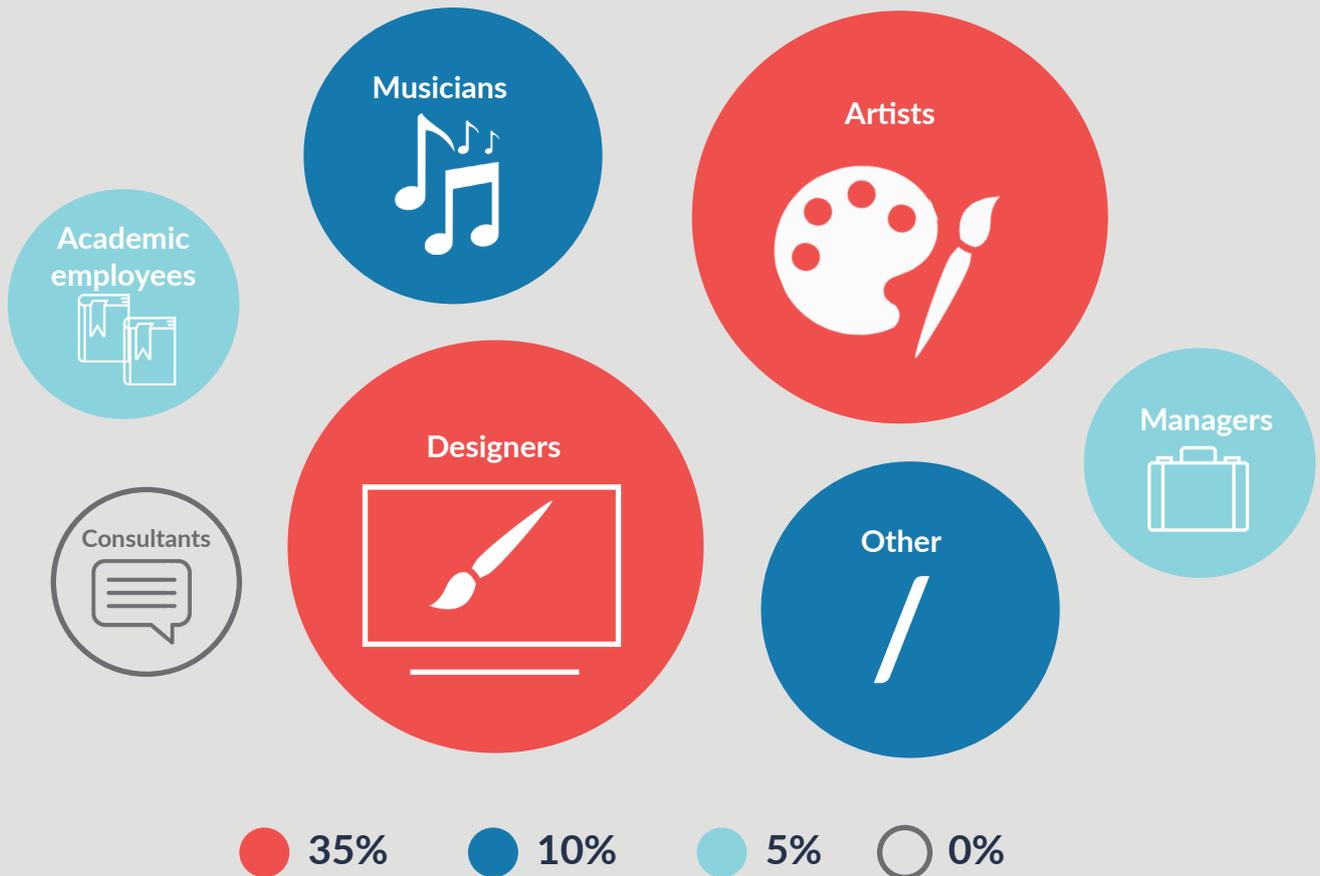
During the last decades many academics and practitioners (ourselves included) have worked hard to dispel the creativity myth, that creativity as a skill is confined to a narrow group of people in certain industries. Taking these findings into consideration, it is clear that there is still some way to go in respect to changing beliefs and attitudes about creativity. Designers and artists might be more creative in their daily work, but for one reason only: they have occupied themselves with creative work much more than senior managers—they are trained to be creative. Creativity is a skill that can be trained, practiced, and honed. While there might be cultural or workplace related barriers, there is nothing that prevents senior managers from being more creative. If given the right type of training on how to incorporate creative thinking processes into their work, there is no evidence to show that senior managers could not become the most creative kids on the block [1].

[1] *(Amabile, 1998)*

Chapter 2

Methods and
techniques for creativity

Learning how to be creative does not mean starting from scratch. Instead it means unearthing and enhancing the creative thinking skills that already exists within each of us. Creativity can be boosted through various techniques aimed at enabling individuals or groups to make "remote associations" of already known concept[2].

The palette of methods and techniques used by companies to support creativity ranges across different disciplines. The companies in our study that employ creative methods in their work generally use several of the examples listed below.

Some companies have even rooted their entire work structure on creative concepts such as design thinking. The most common methods of enhancing creativity emanates from external input such as conferences and talks to increase creativity in the company. The second most common technique used amongst the
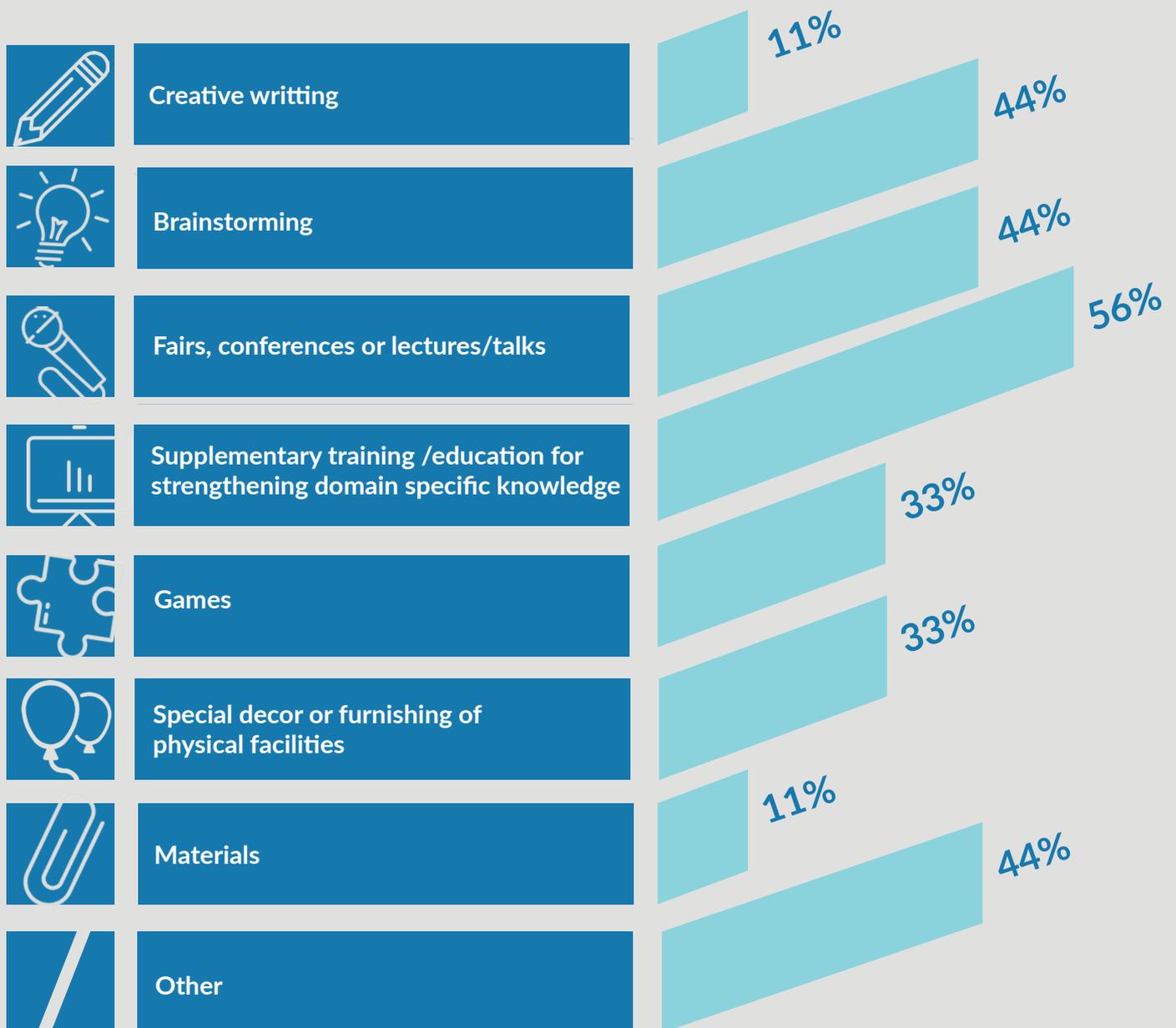
companies is brainstorming. There is nothing wrong with using these creativity methods. External input will, however, mostly account for motivational support on a group level instead of enhancing or improving the organizational creativity with concrete methods.

Brainstorming is a great tool to employ to come up with new ideas or when reviewing old ones, and it can be a very effective tool for creativity if practiced correctly. Creativity research suggests that individuals are better at generating ideas rather than groups, but that groups are better at selecting the best ideas from a group.

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2 *(Onarheim & Friis-Olivarious, 2014)*
3 *(Giotra et al., 2009; Faure, 2004, Rietzschel, Nijstad, & Stroebe, 2006)*

Which methods for creativity are you using?

Method	Percentage
Creative writting	11%
	44%
Brainstorming	44%
Fairs, conferences or lectures/talks	56%
Supplementary training /education for strengthening domain specific knowledge	33%
Games	33%
Special decor or furnishing of physical facilities	11%
Materials	44%
Other	

Chapter 3

Creativity at your company

Despite the general impression that many big companies are not creative, almost all the companies we surveyed (95%) were citing creativity as a decisive factor for ensuring a sustainable business. Yet, at the same time 75% stated that there is significant room for improvement when it comes to creativity at their workplace. Additionally, despite being aware of the perks of creativity and acknowledging creativity as an important future element for competitiveness, 55% of the companies do not currently use creative methods or techniques when problem-solving within the company.

It appears that there is a gap between the perception of creativity and the reality in which creativity is employed. Suggesting that there is a significant potential and need for creativity-improvement in companies.

To what degree do you think there is room for improvement of creativity at your work place?

0%
Not at all

25%
To lesser degree

60%
To some degree

15%
To very large degree

The creative potential

A solution to this apparent gap between creativity as an idealistic thought and its concrete implementation into daily work life might have something to do with the considerations of the creative persona and the perception of who are regarded as creative individuals.

Chapter 4

Are you creative?

To learn more about the respondent's' perception of creativity, we tried to figure out in what situations they consider themselves to be creative. Half the survey respondents see themselves as having been creative in less than 10% of their work time, and only a quarter see themselves as being creative for over 30% of the time. If the companies indeed find creativity to be as important to their business as expressed, the amount of creativity put into tasks and the knowledge of what creativity is must be changed. According to the companies, an explanation to this can be found in *company structures, time, and job function*, which they claim to be the biggest challenges to creativity.

While it is not necessary to assign 20% of a day's work to '*own creative projects*' in order to be creative, the company does need to make room for creativity and integrate it within the business structure, if they want to increase the overall creativity.
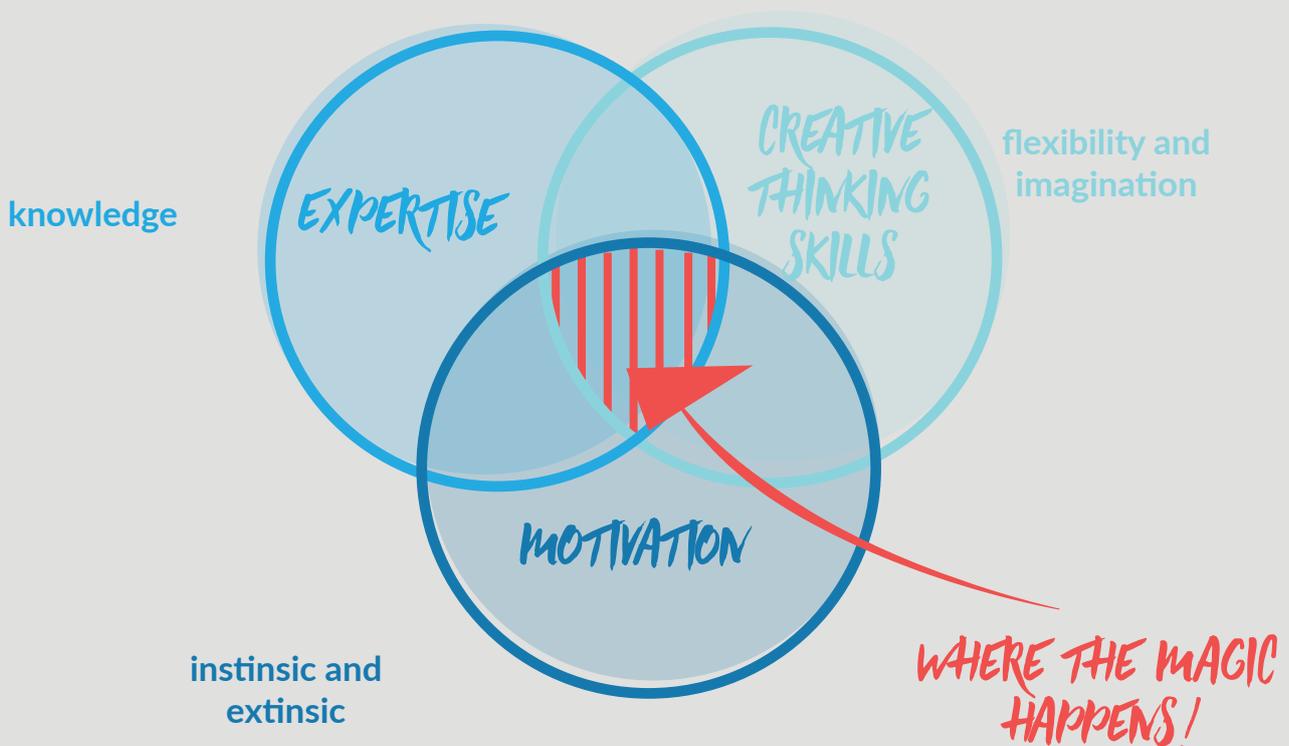
This leads to a rather ironic situation in which 75% of the companies strive for creativity, yet at the same time claim that company structure, time, and job functions are the biggest challenges in enhancing corporate creativity.

Creativity can be taught

Despite knowing the business-related benefits of creativity and the perks of thinking creatively, it seems many Danish companies lack the knowledge of how to implement it into work structures and set down concrete tools to accommodate creative thinking. And perhaps most importantly, companies need to adjust their way of thinking. Creativity is not for the selected few, but can be of value to any division in any company ready to take on the challenge.

To the question on whether the companies thought creativity can be taught, 80% believe it could. They agree that creativity is a skill that can be honed and a process that can be managed. It can be learned by experimenting, exploring, questioning assumptions, and using our imagination. It begins with a foundation of knowledge, learning a new discipline, and mastering a combination of lateral and vertical thinking.

The three components of Creativity!

knowledge

EXPERTISE

CREATIVE THINKING SKILLS

flexibility and imagination

MOTIVATION

instinsic and extinsic

WHERE THE MAGIC HAPPENS!

Conclusion

This study has investigated the attitudes, beliefs, and implementation of creativity in Danish companies, in order to uncover what the current state of creativity is. Key findings are:

1 **Creativity is important**: There is no doubt that creativity is perceived to be important in Danish Companies A whopping 95% of the companies interviewed believe that creativity is important for the company's future, while an entire 75% claim they actively strive to establish a culture of creativity because they regard it as a value addition to the company, which in turn can *increase business profitability*

2 **- but there is space for improvement:** There is however a gap between how companies perceive creativity, and how they implement it. While almost all agreed that creativity is key to meeting the challenges of the future, a large majority of respondents also stressed that they saw tremendous space for improvements in their respective firms.

3 **Organisational culture seems to be a barrier:** Obstacles or barriers cited as reasons include cultural or workplace related barriers. This notion was also reflected by the fact that less than half of the firms employ any kind of creative tools in their organizations, despite claiming to wanting to establish a creative culture.

4 **- but creativity can be taught:** While many still primarily associate creativity with artistry, there was also a wide recognition that creativity can be taught and that directed training could increase the level of creativity in their respected firms.

About Copenhagen Institute of NeuroCreativity

Copenhagen Institute of NeuroCreativity is an organization devoted to creativity research and training. We have spent more than a decade researching how the brain works when we are creative and our researchers have to date published over fifteen academic articles in respected journals on the topic of creativity. We are particularly interested in the neurobiological context in which creativity occurs, thus the name of "NeuroCreativity".

Our goal is to bridge the gap between academia and the real world, by using cutting-edge neurological research in creativity as a foundation for teaching and training organizations and individuals how to effectively increase their creative capabilities in practice.

More info can be found on:
www.neurocreativity.dk

About This Report

The findings in this study report are based on a large number of interviews with senior and HR managers from within several industries in Denmark. The aim of this report was to establish a preliminary baseline of creativity in Danish Companies and look at the state of creativity in businesses in Denmark today. While giving a snapshot of the current state, the aim is also for this report to work as a foundation for future studies. The interviews were conducted over a two-month period in June and July 2016, with a mixture of qualitative and quantitative questions. All companies were asked the same quantitative questions in the same order. Quantitative questions were subsequently asked in a semi-structured format to increase comprehension and understanding. To decrease bias and ease communication, all respondents were promised anonymity with both name and company. That is why no specific companies are listed in this report. All respondents were also told about the goal and aim of the report prior to the interviews.

Definition of Creativity

This report uses the definition of Mednick (1962) to explain the creativity process:

The forming of associative elements into new combinations which either meets specific requirements or are in some way useful. The more mutually remote the elements of the new combination, the more creative the process or solution" Mednick (1962).
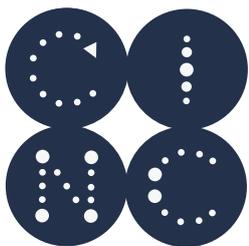
At CINC, we take on an associative interpretation of the process of creative thinking—as this is closely linked to how we use creativity—as a neuroscientific concept called Neuro- Creativity. NeuroCreativity is a word we coined here at CINC that is short for the "Neuroscience of Creativity" or namely, "how the brain works when we are creative."

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